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A sufficiency approach to reducing consumption: An exploration of minimalism, wellbeing, ecological footprint, and social influence

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Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university. To the best of the author's knowledge, it contains no material previously published or written by another person, except where due reference is made in the text.

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Abstract

Technological advances are promoted as a solution to climate change but will be insufficient. Demand-side solutions, such as reducing consumption, will be necessary for cutting carbon emissions, although structural and social forces make this challenging. Over half the global emissions are due to the wealthy, and while they could reduce their consumption, this is typically viewed as a sacrifice. Yet one group of people, minimalists, practise a lifestyle involving voluntarily reducing material consumption. This thesis investigates how minimalists limit consumption despite the challenges, if they offer insights into reducing consumption, and how they influence others to adopt the lifestyle.

The thesis has five broad aims. First, identify the research gap and define the research agenda. Second, determine the environmental and wellbeing impacts of minimalism. Third, discover the motivations, challenges, and practices of minimalism, and fourth, understand the social influence of minimalism. The research is underpinned by self-determination theory, which identifies three basic psychological needs required for motivation. I explore if minimalism meets these psychological needs and its relationship with wellbeing.

Chapter 1 outlines the rationale, research agenda, and methodological and theoretical approach. Chapter 2 defines the research agenda via a systematic review, investigating if minimalism can deliver the dual benefit of reduced ecological footprint and increased wellbeing. While research on minimalism was limited, three low-consumption lifestyles offered some support for this hypothesis. A positive association between wellbeing and minimalism was found, although the relationship between minimalism and carbon emissions is unexplored in the literature.

Chapter 3 investigates the environmental impact of minimalism on both ecological footprint and wellbeing via an online survey (N=444). Minimalism was negatively associated with ecological footprint and negative affect, positively associated with

positive affect, but not associated with life satisfaction. Minimalism exhibited potential advantages for both the environment and wellbeing.

Chapter 4 outlines an exploratory qualitative investigation into the motivations, practices, challenges, and social influence of self-identified minimalists (N=15). Environmental practices identified included giving possessions away, repair, reuse, and minimising disposal. Participants seemed to influence via modelling and social norms, potentially inspiring others to adopt the lifestyle. The study suggested minimalism may enable participants to have their basic psychological needs met.

Chapter 5 investigates the role of social influence, and mediators between minimalism and wellbeing via an online survey (N=359). Minimalism was positively associated with wellbeing. Basic psychological needs mediated between minimalism and wellbeing. Those higher in minimalism were not influenced by social norms but tried to influence others via exemplifying minimalist practices. Minimalism was associated with collective actions: voting, using online awareness raising tools, talking about minimalism, and making changes at work.

To conclude, this thesis demonstrates for the first-time that minimalism offers the dual benefit of a lower ecological footprint and greater wellbeing. The lifestyle seems to support the satisfaction of basic psychological needs, conferring wellbeing benefits. Those higher in minimalism appear to influence others. Minimalism is a lifestyle freely available to the wealthy and could be a scalable approach for reducing over-consumption and carbon emissions.

List of Abbreviations

CFI	Comparative Fit Index
FB minimalism	Few belongings minimalism
FIML	Full information maximum likelihood
GFI	Goodness of fit index
ML	Maximum likelihood
NAM	Norm Activation Model
NEP	New environmental paradigm
PANAS	Positive and Negative Affect Schedule
PEB	Pro-environmental behaviour
RMSEA	Root Mean Square Error
SDT	Self-determination theory
SRMR	Standardised Root Mean Square
TPB	Theory of Planned Behaviour
TLI	Tucker-Lewis Index
VBN	Value Norm Belief Theory
VS	Voluntary simplicity
WEIRD	Western, educated, industrialised, rich, and democratic

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Chapter 1

1.1 Introduction

Technological innovation will not be sufficient to limit the effects of climate change (Parrique et al., 2019; Wiedmann et al., 2020). Increased consumption by the wealthy has negated environmental benefits from efficiency gains (Dyrstad et al., 2019). Two-thirds of greenhouse gas emissions are due to households, and these emissions are strongly linked to income. The world's most affluent 10%, whose average income is greater than $USD122,100 per year, are responsible for around half the global emissions (Chancel et al., 2022). This disparity becomes even more extreme for the top 1% of earners, who produce 17% of the emissions, which is more than the entire bottom 50% who contribute only 12% of emissions (Chancel et al., 2022). There is even inequality within regions; the carbon footprint of the top 1% of earners in the European Union is ten times that of the bottom half (Capstick et al., 2020). Given how much the wealthy contribute to emissions, there is a moral imperative for the wealthy to reduce their consumption and take responsibility for their contribution to climate change (Castro & Bleys, 2023; Gore, 2021). However it is estimated that household carbon footprints in advanced economies will need to drop by 69-82% by 2030 in order to meet the Paris targets (Akenji et al., 2021), requiring radical changes to lifestyles of the affluent (Wiedmann et al., 2020), however, many among the rich believe this will impinge on their lifestyle and reduce wellbeing (Moorcroft et al., 2025). Reducing absolute consumption rather than just increasing greener consumption will be necessary, given that the "least impactful production and consumption is the one that does not occur" (Parrique et al., 2019, p. 59).

To better understand how the wealthy might reduce their consumption, in this thesis I seek to understand people who have voluntarily reduced their consumption – minimalists - yet appear to flourish despite the structural and social forces that encourage the reverse. I use psychological theories such as self-determination theory to see if they can improve our understanding of why minimalists flourish. I also explore the potential of mainstreaming minimalism.

In this chapter I outline the rationale for the thesis, the research aims, theoretical and methodological approach, and provide a summary of the thesis structure.

1.1.1 Sufficiency– a framework for reducing over-consumption

To date, efforts to reduce emissions have focused on efficiency, which is the ratio of resource use per unit of product, such as the energy required to make an item. Increasingly though, sufficiency, which is a reduction in the total amount of resources consumed, is considered necessary to reduce emissions (Parrique et al., 2019; Spangenberg & Lorek, 2019). This recognition by some that technological efficiency is not going to be enough to reduce carbon emissions, is in part because efficiency is prone to rebound effects. Increased efficiency saves resources, which in turn can increase consumption, such as when better fuel efficiency means it is cheaper to drive further, leading people to drive more (Parrique et al., 2019). Another concern with efficiency is problem shifting, where a new technology that fixes a problem creates new problems, such as EV adoption increasing demand for lithium (Parrique et al., 2019).

Sufficiency is a framework for addressing over-consumption at both the micro and macro-economic scales, aiming to keep consumption and production within planetary boundaries (Jungell-Michelsson & Heikkurinen, 2022). In response to the dominant paradigm of capitalism - which presumes consumption equals happiness - sufficiency shifts the focus to balancing needs and wants without limiting wellbeing (Jungell-Michelsson et al., 2022). The concept of sufficiency is closely linked with ideas on consumption corridors (Di Giulio & Fuchs, 2014) and Doughnut Economics (Raworth, 2017). Consumption corridors refer to the idea that consumption needs to occur within environmental limits. The corridor occurs between the minimum boundary necessary to meet basic human needs and a maximum boundary that protects ecological limits. Another closely related concept is Doughnut Economics, which not only considers environmental limits, but includes social needs (Raworth, 2017). Strategies for achieving sufficiency outlined by the degrowth and post growth literature include the provision of a basic income, carbon taxes, free basic services such as health care and education, redistribution of wealth via taxes and incorporating wellbeing into national accounts

(Akenji et al., 2021; Raworth, 2017). Critically, equally important are lifestyle changes, especially for the wealthy, including grassroots bottom-up change such as Transition Towns (Akenji, 2014; Akenji et al., 2021). Minimalism, which will be examined in this thesis, may be an example of this type of bottom-up change.

1.1.2 Cultural transformation towards sustainability

A key challenge to reducing consumption is the consumptogenic system, which refers to interconnected commercial practices, social norms, and political and economic systems that promote high consumption levels (Friel, 2022). Overconsumption is not necessarily intentional, but can happen due to the influence of factors such as advertising, cultural norms, policies, and infrastructure (Akenji & Bengtsson, 2014). People consume to meet their needs, but also to be part of society (Akenji et al., 2016). The success of any government policy or improved infrastructure ultimately depends on the users; however, some criticise a focus on individual behaviour as "scapegoatism", meaning individuals are lumbered with the responsibility for over-consumption without governments taking responsibility for addressing structural issues (Akenji, 2014). Others recognise the importance of individuals by "neither neglecting consumer involvement nor delegating responsibility" (Lorek & Spangenberg, 2019, p. 287), or arguing that structural change and behaviour change must go hand in hand as they are "two sides of the same coin" (Capstick et al., 2021, p. 75). An important consideration is understanding what individuals can realistically achieve and what is outside their control (Akenji et al., 2016; Walker, 2014). While structural concerns affect individual behaviour, we also need to understand the influence of culture and social norms. As a result it will not be possible to change current consumption patterns without a significant reorganisation of society and sociotechnical regimes (Speck & Hasselkuss, 2015).

To reduce excess consumption the wellbeing-consumption link will need to be challenged. A dominant view in society is that wealth accumulation and consumption lead to happiness (Moldes & Ku, 2020). Research has found that wellbeing does increase with income, but only to a point (Kahneman & Deaton, 2010; Morris et al., 2021). Everyone needs the basics of food, water, shelter, clothing, and safety; however, the wealthier a

society becomes, the less closely money is correlated with wellbeing (Diener & Seligman, 2004). In fact one systematic review found that reduced consumption will result in either no change in wellbeing or actually improve wellbeing (Vollebregt et al., 2024). This combination of greater wellbeing plus the environmental benefit of reduced consumption constitutes what Jackson (2008) calls the 'double dividend', which could make reduced consumption more palatable. However, the challenge lies in shifting current social norms that encourage overconsumption. Minimalism might offer insights into how to do this, given preliminary research suggests the lifestyle is linked with greater wellbeing (Kang et al., 2021), and potentially may result in a lower environmental impact given its main goal is to reduce material consumption.

To reduce emissions at the individual level, Sandberg (2021) propose four types of consumption: absolute reduction; modal shift such as buying second-hand instead of new; product longevity, such as repair and reuse; and sharing practices such as using libraries and clothes swapping. The focus of much research into pro-environmental behaviour and of government programs has been green consumption, which is a modal shift e.g., buying a more efficient appliance. There has been considerably less research on individual absolute reduction (Kropfeld, 2022). In this thesis primarily focus on absolute reduction, although I also refer to modal shifts, product longevity, and sharing practices, which often occur alongside absolute reduction.

Behaviour change refers not just to individual behaviour but includes how individuals influence others via social norms (K. S. Nielsen et al., 2021; Whitmarsh et al., 2024; Whitmarsh et al., 2021). Individuals influence others via their roles as community members, in the workplace, members of sports clubs and hobby groups, as owners of investments, and by voting and protesting (Hampton & Whitmarsh, 2023; Stern, 2000). An example of this is the neighbourhood effect seen with solar panels where initial installation of solar panels leads to subsequent installs nearby (Inhoffen et al., 2019). In this thesis I investigate how minimalists might influence others to adopt the lifestyle.

1.2 Research gap

Despite the imperative to move beyond efficiency and consider absolute reduction, there has been little research on how to achieve this. In particular, there is a lack of quantitative research in sufficiency practices, especially in the area of household goods (Jungell-Michelsson et al., 2022; Kropfeld, 2022). While top-down policy interventions are necessary for implementing sufficiency approaches, the success of these policies will depend on "bottom up cooperation from communities and individuals" (Castro et al., 2023, p. 2). It is therefore important to research and understand people who may be flourishing when they consume less; this thesis focuses on a group of people that appear to be doing this - minimalists.

1.2.1 Why research minimalism

Minimalism is a lifestyle that focuses on three elements: "number of possessions (reflecting the ownership of few possessions), sparse aesthetics (reflecting a preference for simple and uncomplicated designs) and mindfully curated consumption (reflecting the thoughtful selection of possessions)" (Wilson et al., 2022, p. 1). Minimalists have managed to deal with the extensive structural and cultural challenges that encourage consumption and changed their behaviour voluntarily. They have done this by identifying their own 'sense of enough' (Blackburn et al., under review). This is a radical proposition in a society that promotes the idea that greater consumption equals happiness. This thesis explores how minimalists are able to reject consumptogenic forces and why they adopted the lifestyle. Preliminary research has found minimalism is associated with greater wellbeing (Kang et al., 2021), but more research is required to understand the motivations of minimalists. An underexamined element of minimalism is whether it is motivated by environmental concern. Even if minimalism is not environmentally motivated, one hypothesis is that minimalists might have a lower carbon footprint because a central element to the lifestyle involves consuming fewer material goods. However, the converse might also be true; decluttering might result in churn, resulting in material goods going to landfill (Sandlin et al., 2022). These competing possibilities will be investigated in this thesis. Other potential benefits of minimalism are that, unlike

many pro-environmental behaviours, minimalism presumably costs nothing to implement unlike installing solar panels or buying an electric vehicle, nor is expensive government infrastructure such as public transport networks required. Another appeal of minimalism is that the concept appears to have gained a degree of popularity - an American study of 8148 participants found 26% of survey participants practised minimalism, and another 36% were interested in adopting minimalism (YouGov, 2023).

In this thesis, I investigate one small piece of the puzzle of changing consumption patterns. Instead of seeking to change the behaviour of a mainstream population, I take a different approach and consider those who have already modified their behaviour (Cooke et al., 2015). Understanding minimalism could give crucial insights into what prompts people to adopt a lower impact lifestyle. It is therefore important to identify the psychological and behavioural factors that influence people to adopt minimalism. This investigation also considers the potential of minimalists to influence others to adopt the lifestyle.

1.3 Research aims and questions

This thesis has five broad aims. First, to synthesise existing research on minimalism to identify gaps in the literature and define the research agenda. Second, to examine any environmental and/or wellbeing benefits of minimalism. Third, to discover the motivations and practices of minimalists, and the challenges of adopting minimalism. Fourth, to investigate the potential social influence exerted on and by minimalists. Fifth, to examine whether psychological theory – specifically, self-determination theory - can aid understanding of why minimalists may flourish in a consumptogenic society. These research aims will be answered via the following research questions:

RA 1. Conduct a literature synthesis to define the research agenda for the thesis

RQ1.1 What is the state of the literature on minimalism?

RQ1.2. Do minimalists have a lower impact on the environment?

RQ1.3. Could minimalism deliver the dual benefit of reduced carbon emissions and increased wellbeing?

RA 2. Ascertain the environmental impact and wellbeing benefits of minimalism

RQ 2.1 Do minimalists actually have a lower impact on the environment?

RS 2.2 Do minimalists have greater wellbeing?

RA 3. Investigate the motivations, challenges, enablers and practices of minimalists

RQ 3.1. What motivates people to adopt minimalism?

RQ 3.2 What are the barriers and enablers to becoming a minimalist?

RQ 3.3 What environmental behaviours define minimalism?

RA 4. Determine how minimalists might influence others and how minimalists are influenced

RQ 4.1 How do minimalists influence others to adopt minimalism?

RQ 4.2 How were minimalists influenced to adopt minimalism?

RA 5. Explain minimalist motivations

RQ 5.1 Can the three basic psychological needs of autonomy, competence, and relatedness outlined by self-determination theory, help explain why minimalism is associated with greater wellbeing outcomes?

1.4 Theoretical approach

Over the past forty years of research in environmental psychology, numerous theories have been developed to explain pro-environmental behaviour. A review paper by Jackson (2005) identified over 20 theories relating to motivating sustainable consumption. More recently, Davis et al. (2015) identified 83 theories used in social and behavioural sciences. A recent study by Brick et al. (2024) identified the most commonly used theories in environmental psychology based on a non-systematic study which involved asking 225 researchers about their most recent research paper. Surprisingly, nearly half did not use a theory in their last paper (Brick et al., 2024). Among those who did use a theory, the most common were the theory of planned behaviour, the value-belief-norm theory, the norm activation model, social identity theory, and self-determination theory.

The theory of planned behaviour is one of the most widely used theories of behaviour (Yuriev et al., 2020). It is a general model of behaviour that assumes intention drives behaviour and that individuals will take a rational approach given the available information. The theory states that behaviour is due to strength of intention and this in turn is due to three predictors: attitude, subjective norms, and perceived behavioural control (Ajzen, 1991). Attitude depends on a person's beliefs about outcomes and how they evaluate the outcomes of the behaviour – whether they think the outcome will be positive or negative. Subjective norms are based on what a person believes others think - whether they approve or disapprove of the behaviour. Perceived behavioural control is based on beliefs about a person's ability to implement the behaviour (Azjen 1991). Despite its popularity, criticisms of the theory include a lack of experimental evidence, being a poorer predictor of long-term behaviour change, and that much of the variability in behaviour is left unexplained (Sniehotta et al., 2014). Another criticism is that environmental attitudes have been found to have a rather modest impact on pro-environmental behaviour , commonly known as the attitude-behaviour gap (Kollmuss & Agyeman, 2002).

Other popular theories include the norm activation model (Schwartz, 1977) and the value-belief-norm theory (Stern et al., 1999), which concern moral motivations for

implementing pro-environmental behaviour. The norm activation model was developed to explain what motivates people to invest in moral behaviour such as recycling or donating blood. The model assumes that pro-environmental behaviour depends on the activation of personal norms which are experienced as a moral obligation to act in a prosocial way (Schwartz 1977). Personal norms are activated when a person is aware of the consequences of acting or not acting (problem awareness), and they believe they have responsibility to act pro-socially (ascription of responsibility) (Schwartz 1977). The value-belief-norm theory is an extension of the norm activation model developed by Stern et al. (1999) who incorporated values into the theory. Stern proposed that support for the new environmental paradigm (which is a belief that humans are responsible for damaging the natural environment) was the antecedent to awareness of consequences. The level of support for the new environmental paradigm depends on three key value orientations: altruistic, biospheric, and egoistic values. Strong altruistic and biospheric values result in greater acceptance of the new environmental paradigm, while strong egoistic values result in low acceptance (Stern et al., 1999). A preliminary literature search at the start of this thesis identified that minimalism was associated with greater wellbeing (Kang et al., 2021; Lloyd & Pennington, 2020), which may be the source of motivation, but it was unclear if minimalism was associated with environmental concern. Hence, it did not seem appropriate to use morally based theories[1].

The social identity approach is another theory increasingly used in pro-environmental behaviour research (Fielding & Hornsey, 2016). It states that part of our identity depends on group memberships, which in turn influence our behaviour. Belonging to groups can influence environmental behaviour positively or negatively depending on the level of identification with group members, and group norms (Fielding et al., 2016). For example, identifying strongly with a motor sports group who enjoy racing petrol cars is likely to have a negative influence on environmental behaviour, while belonging to and strongly identifying with an environmental group like Greenpeace, is likely to positively influence

[1] This assumption is later supported by the findings in Chapter 4, which outlines a qualitative investigation of minimalists. Interview data indicated that while environmental concern was a motivation for adopting minimalism, it was only one of several motivations of which greater wellbeing was the most significant.

environmental behaviour. While the social identity approach is promising, the limited extant research on minimalists means it is unclear whether minimalists have a shared, meaningful social identity, or whether environmental behaviours are part of this identity or not.

For this thesis I wanted a theory that would help explain why there appears to be a link between minimalism and wellbeing, so I chose to use self-determination theory as the primary theoretical approach. While perhaps less commonly used in environmental psychology, it is a well-validated theory that has been used for decades for studying motivations in health, work, and learning (Ntoumanis et al., 2021; Ryan et al., 2022). Self-determination theory has also been used over the past 25 years to study environmental behaviour (Baxter & Pelletier, 2020; Bradshaw et al., 2023; Cooke et al., 2015; Osbaldiston & Sheldon, 2003; Yip et al., 2024).

1.4.1 Self-determination theory

A primary goal of this thesis is to better understand the motivations of people who adopt minimalism (Research Aims 3 and 5). Self-determination theory is a comprehensive framework for understanding motivation and wellbeing. It posits that the more self-determined an individual's motivation is, the greater the psychological benefits accrued (Ryan & Deci, 2017). Self-determination theory considers the basic psychological needs of individuals – autonomy, competence, and relatedness. Autonomy refers to feelings of choice and being able to act on one's own volition rather than feeling coerced. Competence refers to feeling capable, and relatedness refers to feeling connected (Ryan et al., 2017). When the three basic psychological needs are met, individuals experience greater self-determination, meaning they are more intrinsically motivated, feel more engaged, and have greater wellbeing.

According to Ryan and Deci (2000), there are six types of motivation, ranging from amotivation (apathetic) through extrinsic motivation (motivated from the outside, e.g. status or rewards, values and identity) to intrinsic motivation (self-motivated). In between are varying types of motivation which begin as extrinsic and move towards intrinsic

motivation. *Amotivation* refers to no motivation or volition to undertake an activity. The next four types of motivation, external regulation, introjected regulation, identified regulation, and integrated regulation are extrinsically motivated. *External regulation* refers to being motivated by external demand such as punishment and rewards. *Introjected motivation* is being motivated by a need to avoid guilt or anxiety or boost the ego; ultimately they want acceptance (Ryan et al., 2000). *Identified regulation* reflects behaviours freely chosen and is motivated by personally important values such as health. *Integrated motivation* is the most determined extrinsic motivation and reflect which behaviours are important for one's identity and are congruent with one's values. While similar to intrinsic motivation, integrated motivation is still considered to be extrinsically motivated, as the activity is not undertaken because it is inherently satisfying (Ryan et al., 2000). The final level is *self-determined motivation* which is intrinsically motivated and comes because the activity is enjoyed for its own sake (Ryan et al., 2000). Need satisfaction and self-determined motivation are mutually reinforcing when the basic psychological needs of autonomy, competence and relatedness are met, individuals are more self-determined. Greater need satisfaction occurs in those who are more intrinsically motivated compared to those who are more extrinsically motivated. Self-determined behaviours are more likely to be maintained over time (Vallerand et al., 1997).

Research into wellbeing in 27 European countries found that autonomy, competence, and relatedness significantly predict wellbeing even when accounting for sociodemographic indicators (Martela et al., 2022). While autonomy was most strongly associated with happiness and life satisfaction, all three needs were positively associated. Competence was the only need positively associated with finding meaning in life.

Basic need satisfaction has been found to be associated with both easy and difficult pro-environmental behaviours and lower self-reported environmental impact (Cooke et al., 2015). Two studies have investigated basic need satisfaction and voluntary simplicity, which is a lifestyle closely related to minimalism. One study investigated basic need satisfaction and self-determined motivation to adopt voluntary simplicity clothing

practices such as buying clothes made from organic cotton (Taljaard & Sonnenberg, 2019). They found competence was the strongest predictor of clothing choices, followed by relatedness and autonomy. They also found that intrinsic motivation was the strongest predictor of the voluntary simplicity clothing practices. Another study found that the relationship between voluntary simplicity and life satisfaction was mediated by psychological need satisfaction (Rich et al., 2016). Only one study has investigated the relationship of minimalism and wellbeing with psychological need satisfaction, finding that minimalism offers increased autonomy and competence, although relatedness was not mentioned by the authors (Lloyd et al., 2020). Together these studies suggest that psychological need satisfaction is a potential meditator between minimalism and wellbeing benefits. In this thesis I investigate this both qualitatively and quantitatively (Chapters 4 and 5)[2].

1.5 Research paradigm and discipline perspective

The research paradigm for this thesis is post-positivism, which consists of the ontological belief that there is only one true answer, the epistemological belief that everything is knowable, and the axiological belief that research is influenced by researcher values (Pretorius, 2024). Unlike positivism, post-positivism assumes that reality can be only known imperfectly, and it is important to acknowledge researcher bias and assumes that these are reflected in decisions about what to study, methods used, and interpretation of results (Pretorius, 2024). In this framework, it is important to reduce researcher bias and be reflexive. For example, researcher bias might arise from research being conducted in a WEIRD (western, educated, industrialised, rich, and democratic) country. In the case of this thesis, it is acknowledged that the studies were conducted within Australia, and that different results might occur if the research was conducted in other countries.

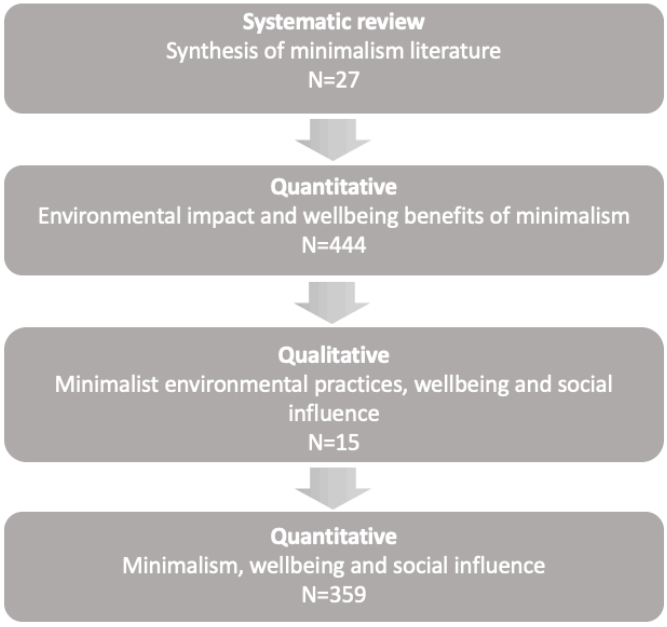
[2] In self-determination research motivation of specific behaviours is sometimes measured along the continuum from amotivation to intrinsic motivation, but here, I directly measure need satisfaction of autonomy, competence, and relatedness, as my focus is on what mediates the wellbeing outcomes of minimalism.

The thesis builds on and contributes to work primarily in the field of environmental psychology, specifically research on low consumption lifestyles. However, low consumption lifestyle research sits at the junction of several disciplines. As a result, this thesis considers disciplines adjacent to environmental psychology including ecological economics, sustainable development, sociology, sustainability, marketing, and consumer research.

1.6 Methodology

I use a mixed methods research design incorporating both quantitative and qualitative approaches. I use an explanatory sequential design, starting with a systematic review of minimalism literature, which informs a quantitative cross-sectional study of the environmental and wellbeing benefits of minimalism, in turn informing a qualitative study exploring minimalist motivations, practices, and social influence (Figure 1.1). Based on the outcomes of the qualitative study, the final quantitative study measures the social influence of minimalism and explores whether the basic needs articulated in self-determination theory mediates wellbeing.

Figure 1.1 Explanatory sequential design



1.6.1 Overview of methods used to collect data

As outlined in Figure 1.1, the thesis consists of four studies: a systematic review (N=27), two quantitative studies (N=444; N=359) and a qualitative study (N=15).

Table 1.1 Summary of methods and studies in this thesis

Study	Research aim	Method	Ethics	Published status
Study 1: Could a minimalist lifestyle reduce carbon emissions and improve wellbeing? A review of minimalism and other low consumption lifestyles	Research Aim 1: Could a minimalist lifestyle reduce carbon emissions while increasing wellbeing?	*Systematic Review* The initial search found N=3139 papers. Final number of papers N=27 papers.	NA	Blackburn, R., Leviston, Z., Walker, I., & Schram, A. (2023). Could a minimalist lifestyle reduce carbon emissions and improve wellbeing? A review of minimalism and other low consumption lifestyles, WIREs Climate Change,15(2), e865. https://doi.org/10.1002/wcc.865
Study 2: The environmental impact and wellbeing benefits of minimalism	Research Aim 2: What are the environmental and wellbeing benefits of minimalism?	*Quantitative study* involving an online survey of adult Australian's, N=444	Ethics was granted by the ANU Human Ethics Committee (protocol 2021/289).	Blackburn, R., Leviston, Z., & Walker, I. (*2025*). The Environmental and wellbeing benefits of minimalism, *Journal of Environmental Psychology,* 104(4),102618. https://doi.org/10.1016/j.jenvp.2025.102618
Study 3: Calm, mindful and generous: minimalist environmental practices, wellbeing, and potential for social influence	Research Aim 3: What are the motivations, challenges, enablers, and practices of minimalists? Also, Research Aims 4 and 5 (see below)	*Qualitative study*, adult Australian self-identified minimalists were interviewed for approximately 1 hour via Zoom, N=15	Ethics was granted by the ANU Human Ethics Committee (protocol 2023/249).	Submitted to *Journal of Environmental Psychology*.
Study 4: Minimalist lifestyles, wellbeing, and potential for social influence	Research Aim 4: Do minimalists influence and how are minimalists influenced? Research Aim 5: Could self-determination theory explain the motivation to become a minimalist?	*Quantitative study* involving an online survey of adult Australian's, N=359	Ethics was granted by the ANU Human Ethics Committee (protocol H/2024/1136).	Submitted to the *Journal of Happiness Studies*.

Table 1.1 summarises the methods, research aims, ethics, and publication status of the four studies that contribute to this thesis. Below the table is a brief outline of the methods used in each of the studies. Detailed descriptions of the methods used for each study are presented within Chapters 2-5.

1.6.2 Study 1 Systematic literature review

To develop an understanding of the state of minimalism research (Research Aim 1), I conducted a systematic review of the literature on the minimalist lifestyle, based on the research question: "Could a minimalist lifestyle reduce carbon emissions while increasing wellbeing?". Journal articles were found by searching Scopus and Web of Science using search terms which combined minimalism terms with carbon emission variants. An initial 3139 peer reviewed papers were found. A final set of 27 papers were identified. A table summarising the output of the systematic review is found in Chapter 2. Search terms used are in Appendix A. (See Chapter 2 for a detailed description of the method).

1.6.3 Study 2 Quantitative study of minimalism, and its relationship with environmental impact and wellbeing

The systematic review identified that the ecological footprint of minimalism had not yet been researched, and this was a necessary first step before conducting further research into minimalism. As a result, the second study aimed to determine if minimalism indeed has a lower ecological footprint and to test potential wellbeing benefits (Research Aim 2). This involved a quantitative study involving 444 Australians. Survey questions covered the following topics: low consumption lifestyles, environmental behaviours, wellbeing, materialism, subjective social status, environmental concern, and demographics. A full list of survey questions is found in Appendix B. SPSS Version 29.0.0.0 was used for the statistical analysis except for the confirmatory factor analysis of minimalism subdimensions, which was conducted in JASP Version 0.17.2.1. (See Chapter 3 for a detailed description of the method).

1.6.4 Study 3 Qualitative study of minimalist motivations, practices, and social influence

A qualitative study was considered the most appropriate method for obtaining an in-depth understanding of motivations, practices, wellbeing, challenges, and the possible social influence of minimalists (Research Aim 3). This involved interviewing 15 Australian minimalists. Participants were recruited by directly emailing Australian minimalist bloggers, posting on Buy Nothing groups and snowballing. The interview guide is in Appendix B. The interviews were analysed using the six-step thematic analysis approach described by (Braun & Clarke, 2006). Codes and themes were analysed using NVIVO 14.23.4 (see Chapter 4, for a detailed description of the method).

1.6.5 Study 4 Quantitative study of minimalism, wellbeing, and social influence

The above qualitative study found that participants appeared to demonstrate social influence via gift norms, modelling minimalism behaviours, and making changes in their workplace. The qualitative study also found evidence that minimalism results in increased competence, autonomy and relatedness potentially explaining increased levels of wellbeing. Therefore, the final study for the thesis ascertained the role of social influence in adopting and spreading minimalism (Research Aim 4), and to determine if autonomy, competence, and relatedness are mediators between minimalism and wellbeing (Research Aim 5). To do this I conducted a quantitative cross-sectional study involving 359 Australians. Participants were asked questions relating to wellbeing, minimalism, self-determination theory, collective action, social influence, social norms, and demographics. A complete list of survey questions is found in Appendix G. The analysis was conducted in SPSS Version 29.0.0.0 except for the mediation analysis and confirmatory factor analysis of minimalism which were conducted in JASP Version 0.19.2 (see Chapter 5, for a detailed description of the method).

1.7 Thesis structure

The thesis is divided into six chapters: Chapter 1 (this chapter) introduces the thesis, Chapter 2 provides a systematic review of the literature, Chapters 3 to 5 outline the empirical studies, and Chapter 6 concludes the thesis with a discussion and conclusion.

Chapters 2 and 3 have been published in peer reviewed publications and Chapters 4 and 5 have been submitted to journals for publication. Chapters 2-5 present the papers as they were published (or submitted as a manuscript), with a foreword indicating how the chapter address the research aims and questions and contributes to the thesis.

References for all chapters have been combined into a single list. The appendices contain the research strategy and search terms for the systematic review (Appendix A), the survey and interview questions used in the empirical studies, and the supplementary analyses (Appendices B-D).

Chapter 2 presents a systematic literature review of minimalist lifestyles and their potential to reduce carbon emissions and offer wellbeing benefits (Research Aim 1). Chapter 2 has been published as:

> Blackburn, R., Leviston, Z., Walker, I., & Schram, A. (2024). Could a minimalist lifestyle reduce carbon emissions and improve wellbeing? A review of minimalism and other low consumption lifestyles, WIREs Climate Change, 15, (2), e865. https://doi.org/10.1002/wcc.865

Chapter 3 outlines a qualitative study which ascertains the environmental and wellbeing benefits of minimalism (Research Aim 2). Chapter 3 has been published as:

> Blackburn, R., Leviston, Z., & Walker, I. (*2025*). The environmental and wellbeing benefits of minimalism, *Journal of Environmental Psychology,* 104 (4),102618.https://doi.org/10.1016/j.jenvp.2025.102618

Chapter 4 presents an exploratory qualitative investigation of 15 Australian minimalists. It investigates minimalist motivations, practices, wellbeing, and social influence, (Research Aims 3, 4 and 5). This paper has been submitted to *Journal of Environmental Psychology*.

Chapter 5 outlines the final study which is a quantitative analysis of how minimalists are influenced and their potential to influence others (Research Aim 4). It also assesses three

measures of wellbeing and their relationship with minimalism and how this might be explained by self-determination theory (Research Aim 5). This paper has been submitted to the *Journal of Happiness Studies*.

Chapter 6 synthesises the results from the systematic review and the three empirical studies and how they addressed each of the research aims. This chapter also addresses limitations, implications, and contributions of the thesis.

Pertaining to the whole thesis

Published papers (Chapters 2 and 3) use 'we' not 'I' when referring to authors, and may reflect different spelling, use of acronyms and formatting as required by the respective journals. As the four papers (Chapters 2-5) have been or will be published, there is some repetition in the introductory sections of those chapters.

Chapter 2: A systematic review of minimalism and other low consumption lifestyles

The place of Chapter 2 in the thesis

Chapter 2 aims to address:

Research Aim 1: Conduct a literature synthesis to define the research agenda for the thesis

RQ 1.1 What is the state of the literature on minimalism?
RQ1.2 Do minimalists have a lower impact on the environment?
RQ1.3 Could minimalism deliver the dual benefit of reduced carbon emissions and increased wellbeing?

A systematic review was a necessary initial step of the thesis to develop an understanding of the state of the literature on minimalism. The main aim of the review was to explore whether minimalism could deliver the dual benefit of lower carbon emissions and greater wellbeing. In particular, it was important to ascertain if minimalism did in fact result in a lower footprint, before further exploring the topic of minimalism. While it might appear obvious that minimalism might result in a lower environmental impact, because presumably fewer material goods are consumed, it is also possible the reverse is true. For example, one researcher proposes that the Marie Kondo decluttering phenomenon might result in churning through material goods because every item needs to 'spark joy', thus minimalism might result in more goods going to landfill (Sandlin et al., 2022). If minimalism does not result in a lower footprint, it would not be an appropriate focus for this thesis, which seeks to find insights on sufficiency lifestyles with the potential to reduce carbon emissions. This systematic review has been published in *WIREs Climate Change*, and is presented as it was submitted to the journal.

Abstract

Everyone must consume, but the wealthy consume more than most. Half of global household emissions come from the world's top 10% of income earners. In this review we investigate the minimalist lifestyle to find out if minimalism could deliver the dual benefit of reduced carbon emissions and increased wellbeing. Minimalists have

voluntarily chosen to have few possessions, despite economic and social structures that encourage consumption. Having fewer possessions suggests they might have a lower carbon emissions. A review of three other low-consumption lifestyles: frugalism, tightwadism and voluntary simplicity, offers some support for this hypothesis, but empirical evidence regarding minimalism is scant. We also review minimalist motivations, finding some support for a positive association between wellbeing and minimalism. We conclude that while minimalism might offer wellbeing benefits, research on carbon emissions is inconclusive. Furthermore, even if minimalism did result in reduced emissions, the minimalist lifestyle maybe too individualistic to create social change.

2.1 Introduction

Overconsumption by the wealthy is the biggest cause and accelerator of global environmental destruction (Wiedmann et al., 2020) and has negated environmental gains from recent growth in renewables (Dyrstad et al., 2019). Unabated, technological improvements will be insufficient to prevent climate change, making it imperative to reduce consumption (Parrique et al., 2019).

Using a consumption accounting approach[3], households generate up to 65% of global carbon emissions, of which 20% are direct emissions (electricity and fuel consumption), and 45% are indirect emissions embedded in consumer products and food (Ivanova et al., 2016). While everyone must consume, the wealthy consume disproportionally more, with half of all emissions due to the world's top 10% of income earners, who earn on average USD122,100 per year (Chancel et al., 2022).

[3] Traditional carbon-accounting is based on country borders (production-based) but doesn't recognise the impact of importing embodied emissions. An alternative, consumption-based carbon accounting, allocates all direct and indirect emissions to the final user Wiedmann, T. (2009). A review of recent multi-region input–output models used for consumption-based emission and resource accounting. *Ecological Economics*, *69*(2), 211-222. https://doi.org/10.1016/j.ecolecon.2009.08.026 Other methods for allocating carbon impacts include income based and value-added based. All methods direct responsibility to one actor, but many actors are responsible (producers, extractors, consumers and income earners). Thus some recommend using a mixture of the above methods Tukker, A., Pollitt, H., & Henkemans, M. (2020). Consumption-based carbon accounting: sense and sensibility. *Climate Policy*, *20*(sup1), S1-S13. https://doi.org/10.1080/14693062.2020.1728208

To reduce carbon inequality, the world's wealthy must radically reduce their emissions (Gore, 2021). The challenge is how to reduce consumption to within 'planetary boundaries' while still satisfying universal human needs such as adequate food, security, clean water and air (Brand-Correa & Steinberger, 2017). To achieve this Di Giulio et al. (2014) have proposed the concept of 'consumption corridors', defined as the space between the minimum consumption standards for meeting basic needs and the upper boundary of environmental limits.

To bring us within environmental limits, Sandberg (2021) proposes four ways for individuals to reduce consumption: "absolute reduction", "modal shift" such as switching from cars to walking, "product longevity" and "sharing practices" such as libraries. These strategies are limited by individual attitudes and behaviour, going against cultural norms (such as becoming vegan), economics, policy, politics and infrastructure such as housing stock (Sandberg, 2021). Despite these challenges a new lifestyle movement *minimalism*, promotes absolute reductions which we review here.

Minimalism is a lifestyle characterised by few possessions and mindful acquisition (Kang et al., 2021; Wilson et al., 2021). Minimalists chose this lifestyle despite the consumptogenic forces (Friel, 2018) of capitalism such as advertising, fast fashion and social media. Neither aesthetes nor poor, they practice sufficiency (Jungell-Michelsson et al., 2022), which makes them an interesting outlier. Minimalism is a choice for those who have the resources to consume but choose not to, it is distinct from material deprivation due to poverty. Unlike voluntary simplicity (VS) - a related but more environmentally, ethically focused construct - minimalism is a recent phenomenon and less researched (Kang et al., 2021).

Minimalism is defined as "a value that embraces mindful acquisition and ownership of few, curated possessions, with a preference for a sparse aesthetic" (Wilson et al., 2021, p. 7). Kang et al. (2021) conclude it is a sustainable lifestyle involving: eliminating clutter, cautious shopping, using items for as long as possible and practicing self-sufficiency.

Minimalism may include vegetarianism, spirituality, environmentalism and zero waste, but these practices are not core components of minimalism (Dopierala, 2017).

Since minimalism may result in lower material consumption one potential outcome is a reduced environmental footprint. Consuming fewer goods may have additional flow-on environmental benefits such as requiring a smaller home, which in turn needs fewer furnishings and electrical goods. Research examining carbon emissions of low-consumption lifestyles offers initial support for this possibility (Brown & Kasser, 2005; Kropfeld et al., 2018; Touchette & Nepomuceno, 2020). It is also possible though, that minimalists may increase their non-material but more carbon-intensive consumption, such as more frequent overseas travel.

Minimalism is adopted voluntarily possibly because it results in increased wellbeing due to more time and less stress. This might be because enormous household inventories create challenges with managing and storing possessions (Cwerner & Metcalfe, 2003), while clutter can promote procrastination and increase cortisol levels (Ferrari et al., 2017; D. E. Saxbe & R. Repetti, 2010). Preliminary evidence suggests that minimalism is positively associated with wellbeing (Kang et al., 2021; Lloyd et al., 2020; Shafqat et al., 2023).

Minimalism therefore has the potential to offer a ‘double dividend’ (Jackson, 2004) by reducing carbon emissions *and* increasing wellbeing. If true, it might be an avenue through which the world’s top 10% of income earners could reduce their carbon emissions. Building on earlier work by Kasser (2017) which focused on VS, this review investigates minimalism and considers the available evidence for whether minimalism could deliver this dual outcome. We focus on the minimalist lifestyle, examining research from several disciplines, with reference to research on other low-consumption lifestyles including voluntary simplicity, frugalism, and tightwadism but excluding anti-consumption (Makri et al., 2020) and sufficiency (Sandberg, 2021) given recent reviews. Since minimalism’s focus is reduced material consumption we focus on manufactured goods and clothes rather than consumption embedded in transport, or energy to power homes.

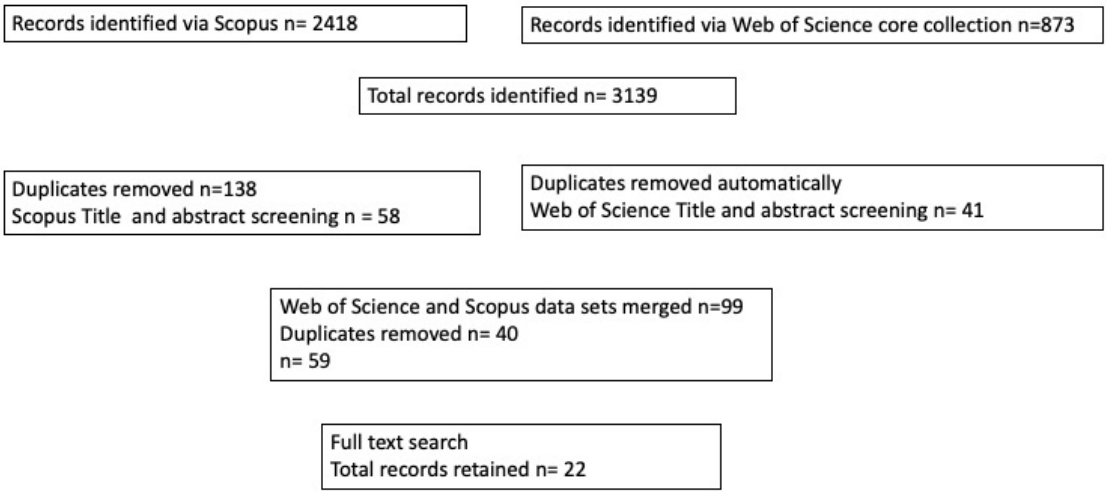
We begin by outlining the origins of minimalism and what distinguishes it from other low consumption lifestyles. Next, we investigate the potential for minimalism to have a low carbon impact and the possible motivational underpinnings for adopting minimalism. We then explore possible explanations for adopting minimalism including self-determination theory (SDT) and conclude with directions for future research.

2.2 Method

The literature search was conducted between May 2021 and February 2023. The search question was "Could a minimalist lifestyle reduce carbon emissions while increasing wellbeing". We identified journal papers by searching Scopus and Web of Science Search terms combined "minimalism" or "minimalist lifestyle" with 8 carbon emission variants ("environmental impact", "carbon footprint" "footprint" "ecological footprint", "emissions", "sustainable", "carbon emissions", "GHG emissions") using Boolean operator AND. The terms "minimalism and "minimalist lifestyle" were combined with five variants of wellbeing ("wellbeing", "well-being" and "well being" "happiness", "life satisfaction"). "Minimalism" and "minimalist lifestyle" were also searched on their own (see Appendix A)

Connected Papers (www.connectedpapers.com/) was used to find related papers not identified in the initial search. Reference sections of identified papers were also searched. To be included in the review, papers had to be about the minimalism lifestyle, be conceptual or empirical, peer reviewed and published in English. Grey literature, books, dissertations, and papers about hoarding and managing digital clutter were excluded. The initial search found 3139 papers. After removing duplicates, and title, abstract and publication screening we identified 22 relevant papers. An additional five papers were found via Connected Papers and searching reference sections of the initial 22 papers.

Figure 2.1 Search process for literature review



To better understand the potential for reduced carbon emissions and increased wellbeing, the review was broadened to include the carbon emissions and wellbeing benefits of three reified low-consumption lifestyles (voluntary simplicity, frugalism, tightwadism).The search combined “voluntary simplicity”, “frugalism” and “tightwadism” with the 8 carbon emission variants and five wellbeing variants described above. An additional paper on grassroot initiatives such as ecovillages, and Transition Towns was also found as part of the search process (Vita et al., 2020).

We found 27 journal papers, were found on the topic of minimalism (Table 1) from psychology, consumer research, economics, sociology, and sustainability. Most studies (22) were qualitative, and five were quantitative. Most studies were conducted in Western Europe, North America, or Australia, although two studies addressed post-socialist societies (Dopierala, 2017; Zalewska & Cobel-Tokarska, 2016), one was from Brazil (Mendonça et al., 2021) and another from Pakistan (Shafqat et al., 2023). Another 16 papers were found on the broader topic of VS, frugalism and tightwadism, and their relationship to wellbeing and carbon emissions (Table 3).

Table 2.1 Summary of published minimalism research 2016-2023

Author	Location of study participants	Research question	Method	Key findings
Zalewska et al. (2016)	Poland	What consumption practices exist in post-socialist countries?	Qualitative analysis of 16 Polish blogs.	Morality is not a motive nor is saving the world or anticonsumption. Ethical consumption is a post-industrial society paradox. Minimalism is about gaining control but rarely acknowledges bigger picture impacts.
Rodriguez (2017)	United States	Can minimalism foster radical change in society?	Qualitative review of the writings of: Babauta, Becker, Dominguez, and Robin.	Minimalists are not creating radical change because it is not collective action, but they are rejecting consumer capitalism. Minimalists have brought the lifestyle to a wide audience.
Dopierala (2017)	Poland	What are minimalist practices? How does it relate to consumerism? What is the social and political potential of minimalism?	Qualitative review of academic and popular literature.	Minimalism is a reaction to excessive consumption and challenges the idea that material goods are important for identity.
Hausen (2019)	United States	Explores decision-making process underlying the transition to minimalism.	Qualitative review of minimalist writers (Fields-Milburn and Nicodemus) to explain the transition from materialist to minimalist.	Five transition stages from materialist to minimalist were identified: Discontent with life Decision to change Introspection Solidification Final identity
Khamis (2019)	Global	Understanding the discourse of restraint that underpins alternative consumption	Review of popular texts and literature.	There are five types of alternative consumption: voluntary simplicity, sustainable consumption, frugality, occupy wall street, restraint as an aesthetic (Marie Kondo). Minimalism does not challenge capitalism.
Mathras and Hayes (2019)	Not specified	What is the process for becoming more minimalist?	Qualitative interviews (N=30), plus data collection from websites, books, and blogs.	Adopting minimalism is an identity curation process involving acquiring, retaining, and disposing of goods.
Meissner (2019)	Japan, France, United	Questions the narrative of minimalism	Reviews five minimalism writers: Kondo, Sasaki, Loreau, Knight, Crabbe,	Minimalism does not contest capitalist growth despite critiquing consumption

	States, United Kingdom		and excerpts from The Minimalists blog (Fields-Milburn and Nicodemus).	because it encourages new consumption and does not explain how to discard. Argues that the narrative of minimalism is paradoxical.
Uggla (2019)	United States	Minimalism as a reaction to high speed and overload	Reviews the writing of minimalist authors: Babauta, and The Minimalists (Fields-Milburn and Nicodemus).	Minimalism is a response to the norms of consumption. Minimalists resist consumerism by individual behaviour which inspires others, but they do not ask for collective action.
Mendonça et al. (2021)	Brazil	How does a consumer become a minimalist?	Qualitative review, using netography, cultural text analysis participating in a minimalism conference and interviews (N=7).	The process for becoming a minimalist consists of: Triggers: financial problems, hoarding parents, change of job Learning via social media Transformation via do-it-yourself projects and craft. Adaptation to the new lifestyle
Lloyd et al. (2020)	UK, Canada, Australia, Germany, and United States	Does minimalism improve wellbeing?	Qualitative semi-structured interviews (N=10) with self-identified minimalists.	Found minimalism increased eudemonic wellbeing: provided more autonomy, competence, more mental space, and increased positive emotions.
Herziger et al. (2020)	Majority were from Europe and North America, the rest were unspecified.	What are the drivers of minimalism?	Quantitative study (N=265) of self-described minimalists. Study 2 involved a weeklong intervention (N=102). Post intervention survey at the end. One month follow up.	Biospheric appeals for consumption curtailment appear to not work, while egoistic appeals might encourage some consumers to reduce their consumption.
Eckmann and Landwehr (2020)	Not specified	How can minimalism be measured?	Three quantitative studies: N=100, N=400, N=400, and one qualitative review involving eight people.	Developed a 9-item minimalism in material possessions (MMP) scale.
Atanasova and Eckhardt (2021)	Global	Can materialism be found in the absence of ownership?	Qualitative semi-structured interviews (n=16) with digital nomads.	Argues that digital nomads are materialistic because they are concerned with strategic curation, prioritise experiences over ownership, and purchase across consumption types such as budget/luxury, and access/ownership
Boutroy (2020)	France and global	Examines a singular case of minimalism – ultralightweight backpacking	Qualitative interviews (n=41), and netography of community web practices	Ultralightweight backpacking aims to radically reduce the weight of equipment. It involves

				material detachment, discarding items and replacing with lighter ones
Derwanz (2021)	Germany, Austria, and Switzerland	Do minimalists disseminate information about sustainable clothing?	Qualitative interviews of households (N=45) in Germany, Austria, and Switzerland.	Concludes that minimalists are important for disseminating sustainable change.
Hook et al. (2021)	Global	Do low-consumption lifestyles result in greater wellbeing?	Meta-analysis of low-consumption lifestyles (VS and minimalism) and wellbeing.	There is a positive association between wellbeing and low-consumption lifestyles (wellbeing was measured using Deiner's Flourishing or Life Satisfaction scale)
Kang et al. (2021)	United States	What is the l definition of minimalism and its contribution to wellbeing? How can minimalism be measured?	Quantitative survey (N=1050) Created a 22-item minimalism scale.	Minimalism is its own lifestyle, not a variant of VS, involving: Clutter removal Cautious shopping Longevity of goods Self sufficiency Minimalism contributed to emotional wellbeing (Deiner's Flourishing scale) enhanced flourishing and alleviate depression.
(Kasperek, 2021)	United States	How does minimalism relate to the model of religion?	Qualitative review of minimalist writer Leo Babauta's blog and books. Key words search for include: simplicity, mindfulness, peace, meditation, Dalai Lama, Henry David Thoreau, and Thich Nhat Hanh	Babauta's writing focuses on peacefulness and mindfulness and references Thoreau and Zen Buddhism.
(Pangarkar et al., 2021)	NA	How to create a typology for minimalism	A theoretical paper from a marketing perspective based on previous research.	Theorises four types of minimalistic consumption (untested): voluntary simplicity, anticonsumption, inconspicuous minimalism and reduced consumption.
Wilson et al. (2021)		What is the definition of minimalism? How can minimalism be measured?	Quantitative and qualitative studies. N=3735 in total (there were several individual studies).	Minimalism is a unique and novel construct. Minimalism has three dimensions: few possessions, mindful curation, and sparse aesthetic. Created a 12-item minimalist consumer scale.
Vladimirova (2021)	United States, Canada	What are the motivations and benefits of adopting minimalist wardrobes?	Qualitative review of three minimalist fashion blogs (Project 333, Unfancy, and 10x10), using grounded theory.	Motivations: frustrated with style, spending too much, and unhappy about life. Benefits: focused on mental and emotional benefits.

				Environmental benefits were not explicitly mentioned.
Bardey et al. (2022)	Not specified	What is the impact of a minimalist wardrobe on consumers?	Qualitative interviews (N=10) of people who adopted a capsule wardrobe for the study.	Three weeks after adopting a capsule wardrobe, participants were unstressed, less interested in fashion trends, aware of their consumption and able to enjoy their own style.
Martin-Woodhead (2022)	United Kingdom	What are minimalist practices and motivations? What is the pathway to minimalism?	Qualitative interviews (N=15) of UK minimalists, ranging in age and degree of minimalism.	Practices: buy less, use things up, maintain existing items, practise intentional and sometimes ethical consumption. Processes: born minimalist, moved home or travelled a lot, 2016 Netflix minimalism movie, and books. Motivations: wellbeing, ethical and environmental.
Martin-Woodhead (2023)	United Kingdom, Australia, New Zealand, Denmark, Netherlands and not specified	What is the potential for minimalist fashion challenges to encourage sustainable fashion?	Qualitative review of 20 blogs posts and an auto-ethnography. Participants were predominantly female.	Benefits included saving money, less cluttered wardrobe, easier pack for travel, simpler decision making and fashion creativity. Eleven of the 20 participants mentioned sustainability benefits.
Sandlin et al. (2022)	NA	What is the relationship between minimalism and waste?	Reviews the Marie Kondo phenomenon.	Speculates that Marie Kondo inspired increased donations to charity, much of which can't be sold and ends up in landfill.
Zavestoski and DeLaure (2022)	NA	"What happens to consumer resistance when it becomes commodified by the system it resists?"	Reviews the evolution of voluntary simplicity.	Argues that VS evolved into minimalism but there is evidence of anti-consumption being commodified by capitalism. Proposes the "disillusionment-resistance-commodification cycle".
Shafqat et al. (2023)	Pakistan	Does minimalism increase wellbeing and social connectedness?	Quantitative survey (N=436)	Minimalism has a positive association with wellbeing (measured using Flourishing and Life satisfaction scales).

2.3 Overview of Minimalism

Moderating consumption to live the good life is not new. It was espoused by the Ancient Greeks, and is a feature of most of the world's major religions (Belk, 1983; Shi, 2007), and has been discussed by more modern writers such as Thoreau (1854) and Veblen (1899). The term 'voluntary simplicity' (VS) was introduced and defined by Gregg (1936) as "discarding possessions and activities irrelevant to the main purpose" (p.2). He thought that, like eating too much food, there might be a limit to the number of possessions one could own while remaining 'psychologically healthy'. Gregg was clear that VS was not ascetism; it had to be voluntary and therefore did not apply to those in poverty. In the 1970s Elgin and Mitchell (1977) popularised these ideas but by 2005 interest in simplicity had evolved into minimalism, a new 'cooler' lifestyle without the hippie or environmental overtones.

Lifestyle minimalism became popular after 2008, possibly in response to the Global Financial Crisis (Dopierala, 2017). This new lifestyle focused on 'enoughness' and co-opted the term 'minimalism' which was originally used in the 1950s to describe a sparse style of art, music, and architecture. Writers such as Becker and Carver popularised minimalism via blogs and books (Becker, 2018; Carver, 2020). Other influential books include: *The Life-Changing Magic of Tidying Up* and *Goodbye, Things* (Kondo, 2014; Sasaki, 2017). Bloggers also wrote about zero waste, formulas for reducing possessions such as *100 Thing Challenge,* and Buy Nothing groups (Bruno, 2010; Johnson, 2013; Wahlquist, 2021). These ideas have now moved into mainstream culture – according to one survey, 17% of Americans consider themselves to be minimalists and a further 23% are interested in becoming minimalist (Ballard, 2019).

2.3.1 Relationship with anticonsumption and low-consumption lifestyles

Minimalism has been around for at least 15 years as a lifestyle movement, but only recently has research appeared in the literature (Zalewska et al., 2016). Minimalism research does, though, draw on longstanding research efforts into anticonsumption, low-consumption, and voluntary simplicity.

Minimalism is classified as a type of anticonsumption, a category which also includes: voluntary simplicity (VS), frugality, tightwadism, ethical consumption, sustainable consumption, and consumer resistance such as boycotts and activism (Makri et al., 2020). Low-consumption lifestyles (frugalism, tightwadism, VS, and minimalism) are a subset of anticonsumption that excludes consumer resistance (García-de-Frutos et al., 2016).

The most well-studied of these constructs is VS, which is about material simplicity (Rich et al., 2019), environmental concern, personal growth and reduced work hours (Alexander & Ussher, 2012). As part of creating a new VS scale, Rich et al. (2019) defined six VS factors: material simplicity, self-sufficiency such as growing food, sharing and giving back to the community, thoughtful purchasing, careful use of resources (such as repairing items), and work-life balance.

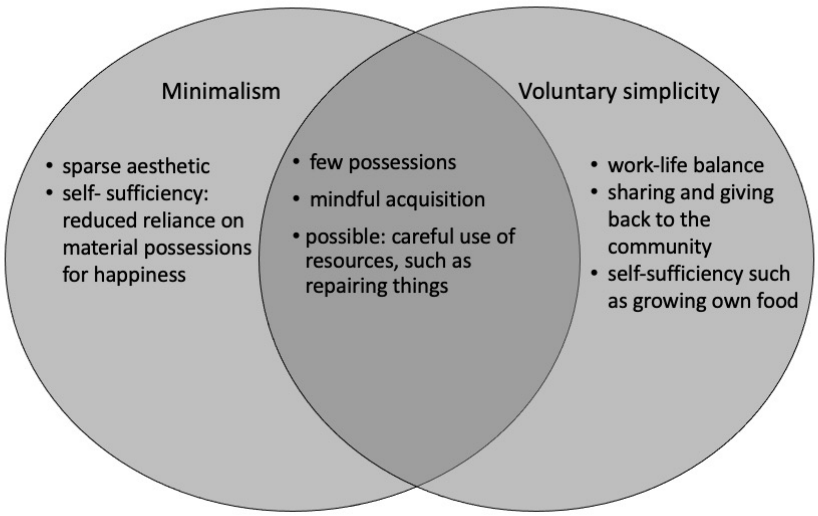
Frugalism and tightwadism are constructs which focus on how money is spent and saved. Frugalism is defined as saving in the short term to achieve long term goals (Lastovicka et al., 1999). Frugal values appear to be independent of ecocentric values (Lastovicka et al., 1999), and frugalists' carbon emissions are higher than other low-consumption lifestyles (Kropfeld et al., 2018). Frugalism is driven by experiencing pleasure from saving; in contrast tightwadism is defined as experiencing pain upon spending (Rick et al., 2008). Both groups spend conservatively, but their motivations are different. The newest construct is minimalism.

2.3.2 Defining minimalism

Scales to measure minimalism have been developed by Eckmann et al. (2020); Kang et al. (2021); Wilson et al. (2021), paving the way for quantitative explorations. Although minimalism is conceptually related to VS there is disagreement as to their relationship. Kasperek (2014) cited in Dopierala (2017) believes minimalism is a second wave of VS, while Kang et al. (2021) argue it is "a deliberate paradigm shift" (p 809). Both Kang et al. (2021) and Wilson et al. (2021) consider minimalism to be a distinct construct.

An analysis of the dimensions of minimalism and VS found that few possessions and mindful acquisition appear to be common to both (Figure 1). “Few possessions” is referred to as “eliminating clutter” by Kang et al. (2021), “curated possessions’’ by Wilson et al. (2021), “low quantity of possessions” by Eckmann et al. (2020), and “material simplicity” by Rich et al. (2019). Mindful acquisition was also identified as an essential element of minimalism - minimalists were “intentional about what they chose to acquire and keep” (Wilson et al., 2021, p. 5). This is referred to as “cautious shopping” by Kang et al. (2021). Rich et al. (2019) refers to purchasing food with less packaging from farmers’ markets and buying food from co-ops.

Figure 2.2 Characteristics of minimalism and voluntary simplicity



Note: It is not clear if careful use of resources is common to both constructs. Also, both constructs include self-sufficiency but use different definitions so are assumed to not overlap.

It is less clear if careful use of resources is characteristic of both minimalism and VS. Rich et al. (2019) found careful use of resources to be a core component of VS, which they defined as repairing items and frugal use of electricity and fuel. Kang et al. (2021) found longevity - defined as preferring durable items and repairing them - to be one of four

elements of minimalism. However, Wilson et al. (2021), argued that minimalism did not necessarily involve thrifty behaviours.

Similarly, it is unclear if self-sufficiency is a component of both minimalism and VS. Wilson et al. (2021) found that self-sufficiency was not essential for minimalism, in contrast to Kang et al. (2021). However Kang defines self-sufficiency as reduced reliance "on material possessions for happiness" (Kang et al., 2021, p. 805), which differs from Rich et al. (2019), who defined self-sufficiency as growing food or making things from recycled materials.

A distinction between VS and minimalism seems to be a preference for a sparse aesthetic, which according to Wilson et al. (2021) is necessary for minimalism but not VS. However Kang et al. (2021) neither identify nor consider a sparse aesthetic. Relatedly another area of conceptual debate are motives. VS is typically considered to have an environmental motive (Rich et al., 2019), while some conclude minimalism is neither environmental nor political in nature (Meissner, 2019; Wilson et al., 2021), which might be part of its attraction. This remains contested (Kang et al., 2021). Environmental concern was found to be a motivation for adopting minimalism (Herziger et al., 2020; Martin-Woodhead, 2022), although it is unclear if it is a primary or secondary motive. It is also a significant focus for some minimalism books (Johnson, 2013; Seferian, 2021).

Perhaps there are two types of minimalists: aesthetic minimalist and eco-minimalists. Aesthetic minimalists might constantly upgrade in the search for the perfect object, creating waste in the process (Sandlin et al., 2022). Eco-minimalists may be more interested in purchasing fewer high quality goods (Kang et al., 2021), and therefore are more likely to have a lower carbon footprint.

This review shows that minimalism and VS appear to overlap, though more research is needed to understand their relationship. Research on how VS relates to environmental perspective and wellbeing may illuminate how minimalism relates to these outcomes, but inferences should be made cautiously. This review also suggests that minimalism could potentially consist of two subgroups: eco-minimalism and aesthetic minimalism,

although this has yet to be tested. Establishing different subgroups may have significant implications for their potential carbon emissions.

2.4 Carbon emissions and minimalism

Twenty percent of household carbon emissions is due to manufactured products, clothing and footwear (Ivanova et al., 2016). Since minimalism is a lifestyle that focuses on having few possessions, it is tempting to assume that this lifestyle would produce fewer carbon emissions. However, emissions depend on actual consumption patterns. Decluttering may make room for more possessions resulting in a continuous purchase and purge cycle (Eike et al., 2021). Minimalists might have fewer possessions but upgrade them frequently for something more aesthetically pleasing (Zavestoski et al., 2022), or use extra time for carbon intensive hobbies (Hanbury et al., 2019) or use surplus money to travel overseas. Alternatively they might extend their philosophy to not owning a car (Paijmans & Pojani, 2021), which would considerably reduce their footprint (Ivanova et al., 2016). Others might use their surplus money to support social causes or set up a charity such as Joshua Becker's Hope Effect which cares for orphans (Rodriguez, 2017).

A minimalist lifestyle makes a distinction between needs and wants. Consuming only what you need could potentially result in a lower footprint. Needs and wants are however highly subjective and there doesn't appear to be a clear definition amongst minimalists. Some minimalists boast about how little they need, for instance, the 100 things challenge (Bruno, 2010), others state it is a personal decision (Becker, 2018) and some recommend flexible guidelines, such as 37-item wardrobes (Vladimirova, 2021). In their analysis of minimalist clothing challenges Vladimirova (2021) found number-based clothing limits were benchmarks rather than a definitive upper boundary. While planetary boundaries were not considered by minimalists who developed these guidelines, they could be useful as a starting point for a minimum standard for consumption corridors because they were based on wellbeing.

Minimalism might result in lower emissions because there could be greater behavioural elasticity associated with material possessions compared to transport or home energy

use. For example members of ecovillages had an 85% lower clothing carbon footprint than non-members but transport and home emissions were similar (Vita et al., 2020). Other research found when people voluntarily reduced their work hours and therefore their income, their emissions did not change except for clothing (Neubert et al., 2022). Their income reduction may have been too small to affect emissions, alternatively clothing is not affected by lock-in effects caused by infrastructure, policies and laws which impact housing and transport (Neubert et al., 2022).

We did not find research quantifying the carbon emissions of minimalism, although broader work on low-consumption lifestyles provides some insight. Modelling by (Vita et al., 2019) investigated the potential of various lifestyle scenarios to reduce carbon emissions. The authors found that carbon emissions might be reduced by extending the life of clothes (1.8%), downsizing living spaces (1.8%) using less media and internet (1.5%) and sharing and repairing appliances (4.3%). However, it is yet to be established whether minimalists actually practise these behaviours more frequently than non-minimalists.

A handful of studies have investigated the carbon emissions of other low-consumption lifestyles including VS, tightwadism, frugalism and living in an ecovillage using quantitative tools such as ecofootprint, carbon footprint, or lifecycle analysis (LCA) which account for both direct and indirect emissions (Brown et al., 2005; Kropfeld et al., 2018; Touchette et al., 2020; Vita et al., 2020).

A pioneering study by Brown et al. (2005) used an ecological footprint analysis to measure the impact of North American simplifiers. Measuring aspects of their diet, transport, and housing they found that simplifiers had a 23% smaller ecological footprint than non-simplifiers. More recently using lifecycle analysis of 27 high-impact products Kropfeld et al. (2018) showed that simplifiers and tightwads had the lowest impact compared to the environmentally concerned and frugalists. The frugalists had the highest impact lifestyle compared to the other three groups.

Touchette et al. (2020) looked at the emissions of American frugalists, tightwads, and simplifiers using a carbon footprint calculator. Participants were asked about environmental concern, ethical consumption, knowledge of relative emissions impact and their expenditure on energy, transport, food, clothing, restaurants, mortgage, clothing, and education. They found a negative correlation between tightwads and emissions, especially when knowledgeable about emissions impact (Touchette et al., 2020). This suggests that tightwads feel pain on spending and consume less, resulting in lower emissions. However, there was no correlation for simplifiers and frugalists with carbon emissions. The authors speculate that simplifiers might spend more on experiences such as overseas holidays, instead of possessions, and frugalists might save money for major purchases.

Vita et al. (2020) looked at the carbon footprint of members of grass root initiatives such as ecovillages, food co-ops and Transition Towns[4]. Members of these initiatives had a 16% lower carbon footprint when compared to non-members. While their transport and housing energy footprints were similar to non-members, their footprint was 86% lower for clothing and 43% lower for food.

Spillovers and rebound effects might also affect minimalists emissions. For example, income rebound might occur if minimalists spend less on material possessions and increase their non-material expenditure on carbon intensive areas such as travel. There is mixed evidence on rebound. Chitnis et al. (2014) found a rebound of 14-15% for household energy measures and 46% for efficient car use. However using Swedish purchasing data collected over four years, Andersson and Nässén (2023), found environmentally motivated people avoided rebound when adopting behaviours such as veganism, living in an apartment rather than a detached house, not driving a car and not flying. Alternatively, positive spillover might occur if a person adopts minimalism to be more organised and finds the lifestyle inspires new environmental behaviours. Research

[4] Vita et al 2020 identified food-coops (single issues), Transition Towns and ecovillages (which represent wholistic lifestyle change) as being environmental grassroots initiatives which focus on environmental or social wellbeing.

is necessary to ascertain the possibility of rebound and spillover when adopting minimalism.

To conclude there is insufficient research to determine if minimalists produce fewer emissions. The studies above indicate that belonging to an ecovillage, being a tightwad or possibly a simplifier, may result in lower carbon emissions or smaller environmental impact compared to frugalists or the general population. Given that some minimalism behaviours overlap with VS, minimalists may also have a lower-than-average impact, but this is uncertain. Possibly only specific behaviours connected to these lifestyles result in lower emissions. It may also depend on the type of minimalist being measured– aesthetic minimalist or eco-minimalist. Carbon emissions of minimalists may also depend on rebound or spillover effects. New research is necessary to determine the emissions of minimalists.

2.5 Motivations for adopting minimalism

If a minimalist lifestyle does lower environmental footprints, 'mainstreaming' the lifestyle might contribute to sizeable reductions in consumption-based emissions of the wealthy. However, to understand its potential to become mainstream, we must understand what motivates people to adopt minimalism in the first place.

The well-documented attitude-behaviour gap (Kollmuss et al., 2002) found that environmental concern does not necessarily result in action. For example, research comparing 'committed greens', 'material greens' and 'enviro sceptics' found no significant difference between their environmental impact (Newton & Meyer, 2013). Electricity and water expenditure was similar, and despite the 'committed greens' being the wealthiest and presumably more engaged, their impact was no different to the 'enviro sceptics' and 'material greens'. Environmental concern might be ineffective at motivating behaviour change that leads to lower environmental impact, but increased wellbeing and lower stress could be (Kasser, 2017), and minimalism may offer both.

Research specifically on the motivations for adopting minimalism includes three qualitative (Lloyd et al., 2020; Martin-Woodhead, 2022; Vladimirova, 2021) and three quantitative (Herziger et al., 2020; Kang et al., 2021; Shafqat et al., 2023) studies. These offer some evidence that wellbeing and stress reduction are important motivators (Table 2). Financial benefits were identified in three of the six studies (Herziger et al., 2020a; Martin-Woodhead, 2022; Vladimirova, 2021) and environmental motivations were identified in three studies (Herziger et al., 2020; Martin-Woodhead, 2022, 2023). It is possible that environmental motivations are secondary to primary motivations such as wellbeing, but further research is required to understand this relationship.

Table 2.2 Motivations of minimalists

General motivation	Specific motivation	Author
Wellbeing	Greater wellbeing	(Kang et al., 2021; Lloyd et al., 2020; Shafqat et al., 2023)
	Stress reduction and contentment	(Herziger et al., 2020; Vladimirova, 2021)
	Happier with uncluttered spaces, wanted to stop feeling overwhelmed	(Martin-Woodhead, 2022)
	More time (less time shopping, cleaning, and repairing)	(Martin-Woodhead, 2022)
Save money		(Herziger et al., 2020; Martin-Woodhead, 2022, 2023; Vladimirova, 2021)
Environmental	Reduced environmental impact	(Martin-Woodhead, 2022, 2023)
	Ecological concern	(Herziger et al., 2020)
Greater flexibility (to move house or go travelling)		(Martin-Woodhead, 2022)
Dislike of consumer culture		(Martin-Woodhead, 2022)
Frustration with personal style		(Vladimirova, 2021)
Wanting to curb mindless shopping		(Martin-Woodhead, 2022; Vladimirova, 2021)

The motivations of 326 self-identified minimalists (Herziger et al., 2020) included financial concerns, stress reduction and ecological concern. However an intervention (promoting biospherically or egoistically motivated consumption curtailment) was

ineffective at reducing intention to consume (Herziger et al., 2020). They also found a weak association between ethical purchasing and practising minimalism.

A UK study of 15 self-identified minimalists found motivations included: flexibility when moving house or travelling, less time shopping and caring for possessions, and feeling calmer and happier (Martin-Woodhead, 2022). Most participants were either strongly motivated by environmental concerns or noticed sustainability was a positive by-product; only a minority adopted the lifestyle solely for personal benefit. Relatedly Martin-Woodhead (2023) found participants of minimalist fashion challenges saved money, had less laundry and were more creative. Just over half the participants mentioned sustainability benefits and realised they needed fewer clothes than they thought, although the author noted that a wardrobe with fewer higher quality pieces might create a class barrier for those with limited financial resources.

A review of three minimalist fashion blogs found the authors were motivated by frustration with their style, wanting to reduce spending and mindless shopping, and feeling unhappy about their life (Vladimirova, 2021). The bloggers wrote that minimalist wardrobes were fun and creative, and they were more content after reducing their wardrobe. Environmental motivations were not mentioned, nor did they mention social implications such as the impact on those who made their clothes.

It is likely that minimalists adopt the lifestyle for a mixture of reasons. Improved wellbeing may be a primary motivation, and other motivations such as environmental concern may be secondary.

2.5.1 The relationship between minimalism and wellbeing

An association between minimalism and wellbeing was seen in six studies (Herziger et al., 2020; Kang et al., 2021; Lloyd et al., 2020; Martin-Woodhead, 2022; Shafqat et al., 2023; Vladimirova, 2021). These studies were correlational and cross-sectional, thus precluding causal conclusions. Kang et al. (2021), in their survey of 1,040 people, found minimalists had greater wellbeing, enhanced flourishing and reduced depression

compared to a normal population, measured using Diener's Flourishing Scale[5] (Diener et al., 2010). Another survey of 436 people found a positive association with Denier's Flourishing scale and minimalism (Shafqat et al., 2023). A qualitative study of 10 self-identified minimalists found they experienced greater wellbeing after adopting minimalism (Lloyd et al., 2020). Similarly, participants indicated that after adopting minimalism they felt "happier and calmer living in less cluttered spaces" (Martin-Woodhead, 2022, p. 9), and they had more time, because less time was spent on shopping, cleaning, and repairing.

2.5.2 Summary of research on wellbeing, carbon emissions and low-consumption lifestyles

Table 3 summarises research outlining the relationships between low-consumption lifestyles, carbon emissions, and wellbeing. While there was some research on minimalism and wellbeing, we were unable to find research on minimalism and carbon emissions, so research on VS, tightwadism, and frugalism has been included for comparison.

Table 2.3 Summary of research on wellbeing, carbon emissions, and low-consumption lifestyles

Lifestyle	Definition	Scales	Wellbeing	Carbon emissions
Minimalism	Few possessions, mindful curation, sparse aesthetic (Wilson et al., 2021)	12-item scale (Wilson et al., 2021) 22-item scale (Kang et al., 2021) 9-item scale (Eckmann et al., 2020)	Diener flourishing scale (Kang et al., 2021) + Qualitative (Lloyd et al., 2020; Martin-Woodhead, 2022; Vladimirova, 2021) + Diener flourishing scale (Shafqat et al., 2023) +	Unknown
Voluntary simplicity	Reduced consumption and simplification by choice with focus on self-development and environmental concern.	21-item VS scale (Rich et al., 2019) 22-item scale (Iwata, 2006)	Satisfaction with life scale (Boujbel & d'Astous, 2012, 2015; Brown et al., 2005; Kuanr et	Ecofootprint was 23% lower than a normal sample (Brown et al., 2005) +

[5] An example scale question is "I lead a purposeful and meaningful life"

			al., 2019; Rich et al., 2016) + (Bayat & Sezer, 2018) + - Asked if happier (Alexander et al., 2012) + Diener flourishing scale (Balderjahn et al., 2019) + (Seegebarth et al., 2016) - Qualitative (McGouran & Prothero, 2016)+ -	Lower emissions compared to frugalism based on LCA (Kropfeld et al., 2018) + No significant correlation between impact and VS, using carbon footprint analysis (Touchette et al., 2020) -
Frugalism	Find pleasure in saving (Lastovicka et al., 1999).	8-item frugality scale (Lastovicka et al., 1999)	unknown	Frugalism had a greater environmental impact compared to other low consumption lifestyles (Kropfeld et al., 2018; Touchette et al., 2020) -
Tightwadism	Avoids consumption because spending causes pain (Rick et al., 2008)	4-item tightwad-spendthrift scale (Rick et al., 2008)	unknown	Negative association with carbon emissions measured using LCA (Kropfeld et al., 2018) + and carbon footprint (Touchette et al., 2020) +
Grassroot initiatives (ecovillages, food co-ops and Transition Towns)	Bottom-up organisations which aim to improve environmental and social wellbeing (Vita et al., 2020)	NA	Members were higher on the Deiner life satisfaction scale compared to non-members (Vita et al., 2020) +	Carbon footprint was 16% lower compared to non-members; 86% lower footprint for clothing and 43% lower for food. (Vita et al., 2020) +

+ = positive association with wellbeing or lower footprint/environmental impact
- = negative association with wellbeing or higher footprint/environmental impact

2.6 Explaining the link between minimalism and wellbeing

As discussed, some evidence suggests an association between minimalism and wellbeing, but the causal direction is unclear. Do people experience increased wellbeing

because they adopted minimalism, or do people adopt minimalism because they already have high levels of wellbeing, or is wellbeing associated with other factors that relate to minimalism?

2.6.1 Clutter and wellbeing

A possible explanation for a minimalism-wellbeing association is that clutter has some disadvantages. Despite house sizes in the US tripling since the 1950s, increased consumption has created challenges with clutter and increased demand for storage. This struggle with managing enormous volumes of possessions is illustrated in an ethnography of 32 middle-class American families (Arnold et al., 2012), which contains photographs of cars in driveways because garages are stuffed with possessions, a shower cubicle filled with clothes, and a display of 248 dolls in a child's bedroom. Clutter might seem unimportant, but it can result in procrastination, higher cortisol levels, lower wellbeing, and reduced attention in children (Ferrari et al., 2017; Fisher et al., 2014; Rogers & Hart, 2021; Roster et al., 2016; D. E. Saxbe et al., 2010). A minimalist lifestyle may help to reduce clutter levels, potentially reducing procrastination, and lowering cortisol levels, thus improving wellbeing.

2.6.2 Consumption and wellbeing

Another possible explanation for the minimalism-wellbeing association hinges on materialism. Materialism is defined as a belief where people "place a high value on acquisition as a means to reach important life goals" (Richins, 2017, p. 481). Materialistic people are more likely to pursue extrinsic goals, such as status, fame, and wealth, than intrinsic goals, such as relationships and personal growth (Kasser, 2016). High levels of materialism are associated with lower wellbeing (Dittmar et al., 2014). Since minimalists have few possessions, they may be less materialistic. Alternatively, they might be more materialistic if they are focused on prioritising experiences or curating their possessions to signal status (Atanasova et al., 2021). Initial research into the minimalism-materialism link by (Wilson et al., 2021) found mixed results – one study found a negative association between minimalism and materialism, while another found no association.

2.6.3 Self-determination theory – a possible theoretical explanation

Among the many theories applied to understanding the motivational underpinnings of environmentally-relevant behaviour, self-determination theory (SDT) stands as potentially potent theoretical explanation for a possible association between wellbeing and minimalism (Ryan et al., 2000). SDT is often used in education and health (Guay, 2022; Sheeran et al., 2020), but less so in environmental behaviour research (Pelletier et al., 1998; Whitmarsh et al., 2017). According to SDT, wellbeing is promoted when three universal psychological needs are met: autonomy (ability to direct one's own behaviour), competence (feeling capable), and relatedness (needing to feel connected) (Ryan et al., 2000).

Several researchers have proposed that SDT might explain the behaviours of thrift, pro-environmental behaviour (PEB) and VS (Kasser, 2017; Rich et al., 2016; Taljaard et al., 2019). Kasser (2017) theorised that SDT could explain the positive link between wellbeing and PEB, for example, growing your own food might provide feelings of competence, working in a community garden might provide feelings of relatedness and being able to express one's values might provide for feelings of autonomy. Research by Rich et al. (2016) found a significant positive relationship between VS and life satisfaction. A study of dematerialisation behaviours found that high intrinsic motivation predicted who avoided buying new items (Whitmarsh et al., 2017). Research into the motivations for adopting VS clothing practices in South Africa found that motivation could be explained by SDT (Taljaard et al., 2019).

SDT suggests that minimalism may provide a greater sense of autonomy, competence, and relatedness. Feelings of autonomy may arise from better control over finances and less time shopping and caring for possessions (Martin-Woodhead, 2022). Feelings of competence may arise from having a small inventory which reduces overwhelm (Martin-Woodhead, 2022). Increased relatedness may come from having more time to socialise and through opportunities to connect via minimalism networks (Mendonça et al., 2021). Lloyd et al. (2020) found that minimalism increased wellbeing because it gave participants autonomy (because they felt less compelled to follow societal

expectations), competence (because they had more control over their environment), mental space, more mindfulness, and positive emotions such as joy. While promising, whether minimalism does meet each of the psychological needs described in SDT remains to be formally tested.

2.7 Potential for social change

Assuming minimalism can reduce carbon emissions while improving wellbeing what is its potential for achieving social change? In a clothing study Derwanz (2021), found that minimalists are important bottom up disseminators of sustainable clothing change, but concluded minimalists were not likely to create a social movement because of its individualistic focus. Uggla (2019) agrees that minimalism is primarily an individualistic pursuit motivated by the stresses created by overconsumption and therefore not a threat to capitalism. Minimalism is paradoxical in that it resists but also promotes capitalism says Meissner (2019), and at the same time capitalism is commodifying minimalism. For example, Marie Kondo encourages new forms of consumption such as organisation boxes and doesn't explain what to do with discards. Minimalism can't create social change until it explains what to do with the discards says Meissner (2019), yet The Buy Nothing Project does exactly that (Zavestoski et al., 2022), although some might not classify that as minimalism. Also while social change is rarely mentioned by minimalists, Joshua Becker, a leading minimalist, uses his excess money for social projects to address inequality and encourages his supporters to do the same (Rodriguez, 2017). In its current format minimalism can't create social change says Rodriguez (2017), but we do need radical anti-consumerism that focuses on collective action.

2.8 Future research directions and conclusions

This paper reviews the literature on how minimalism might provide the double dividend of increased wellbeing and reduced carbon emissions (Jackson, 2005). Our review found some support for an association between adopting minimalism and wellbeing, though causal direction is under-investigated. We also found some evidence that low-consumption lifestyles (VS, tightwadism, and living in ecovillages) have lower carbon

emissions than conventional lifestyles. Given the overlap of behaviours between VS and minimalism, it is possible that minimalists also have lower-than-average carbon emissions, although rebound and spillover might counter any reduction in emissions. Also, eco-minimalism may have a lower carbon footprint, but aesthetic minimalism may not. Direct empirical research on the carbon emissions of minimalism is required.

Existing research mostly ignores how disposal behaviours might affect emissions. For example, the aesthetic component of minimalism may create perverse outcomes if it involves constantly refreshing possessions and dumping old items into landfill. However, eco-minimalists might retain possessions for longer and dispose thoughtfully via upcycling, reselling, or recycling. Relatedly, it is unclear how minimalists influence, and are influenced by family, friends, and their broader network. Minimalists may be changing cultural expectations around consumption, or risking antagonising others, further entrenching consumerist behaviours. In their research about vegans and lycra-clad cyclists, Kurz et al. (2020) found that strong identification with these behaviours antagonised others who saw it as a moralised minority practice. Harnessing minimalists' influence on others' attitudes, by demonstrating new behavioural habits, and shifting descriptive and prescriptive norms is important for mainstreaming low-consumption lifestyles. Finally, almost all research has been done in the wealthy West and must be extended to other non-western, educated, industrialised, rich, and democratic (non-WEIRD) countries.

Adopting minimalism could present many challenges, but research is limited on how these are navigated. Challenges identified by (Mendonça et al., 2021) include the meaningfulness of nonessential possessions and shifting away from happiness-linked purchasing. Other barriers to adopting minimalism might include threats to self-image and status (Han et al., 2010).

To conclude, it is uncertain if minimalism could provide the double dividend of wellbeing and reduced emissions. A better understanding of minimalism should provide insights into what facets of minimalism results in lower carbon emissions and what motivates people to adopt a lower impact lifestyle. The next step is more empirical research to

develop policy (Thorman et al., 2020) and structural interventions to reduce consumption at local, national and global levels. However, a significant challenge is overcoming structural and economic forces driving consumption within capitalist economies. Also in its current format, minimalism is too individualistic to create social change, thus we need to be cautious about the idea that minimalism could be a strategy for the world's top 10% of income earners to reduce their consumption. Reducing consumption is just one lever for change, and while understanding individual psychology around reduced consumption is important, it should not negate attention on corporations and governments who are also significant contributors to climate change.

Chapter 3: The environmental and wellbeing benefits of minimalism

The place of Chapter 3 in this thesis

Chapter 3 aims to address:

Research Aim 2: Ascertain the environmental impact and wellbeing benefits of minimalism

RQ2.1 Do minimalists actually have a lower impact on the environment?
RQ2.2 Do minimalists have greater wellbeing?

The systematic review in Chapter 2 found that the relationship between minimalism and carbon emissions has not yet been empirically explored. In this Chapter, I measure the associations between minimalism and environmental impact, and between minimalism and wellbeing, via an online survey (N=444). For this study I chose to use an ecological footprint calculator to measure environmental impact. In environmental psychology, environmental impact is often measured using low impact measures that are difficult to quantity, such as "How much do you recycle?" This has been criticised in the literature for being imprecise, and not measuring high impact behaviours (Kristian S. Nielsen et al., 2021). Consequently, I chose to use an ecological footprint calculator. The calculator focuses on recognised high impact areas of food, housing, transport, and material goods (Ivanova et al., 2016). This paper has been published in the *Journal of Environmental Psychology* and is presented as it was submitted to the journal.

Abstract

Technological improvements alone will be insufficient to reduce carbon emissions to limit climate change; reducing consumption will also be necessary. Here we investigate minimalism, a low-consumption lifestyle which involves voluntarily reducing material consumption as a possible scalable pathway for consumption reduction. As minimalists aim to own few possessions, they might have a low carbon footprint, but this is yet to be established. This study investigates the environmental impact of minimalism, measured via an ecological footprint calculator in an online survey (N=444). We also investigate wellbeing (measured using life satisfaction and the PANAS), and its association with

minimalism. We found that minimalism is negatively associated with ecological footprint and negative affect, positively associated with positive affect, but not associated with life satisfaction. In addition, we investigated subdimensions of minimalism ('aesthetic' minimalism, 'few belongings' minimalism, and 'mindful' minimalism). We found that higher levels of 'few belongings' minimalism and 'mindful' minimalism were related to a lower ecological footprint, positive affect, and greater environmental concern, while 'aesthetic' minimalism was not. 'Few belongings' minimalism was also associated with having a more energy efficient house, a smaller goods footprint, purchasing fewer clothes, smaller transport and food footprints, and producing less waste than the other types of minimalism. Our findings suggest that the adoption of minimalism as a low-consumption lifestyle has potential advantages for both the environment and wellbeing, though some facets of minimalism appear more promising than others.

3.1 Introduction

Technology is often promoted as the solution to reducing carbon emissions, but this is not enough. Growth in carbon emissions is outpacing these gains in part due to population growth, but the strongest determinant and accelerator of carbon emissions is consumption by the affluent (Wiedmann et al., 2020). Globally, 65% percent of carbon emissions[6] can be attributed to individuals, when calculated using a consumption-based method (Ivanova et al., 2016). However, most of these emissions are due to the global top 10% of income earners – those earning an average of USD $122,100 per year – who alone account for half of global emissions (Chancel et al., 2022). A key challenge is how to reduce global emissions without increasing carbon inequality (Gore, 2021). Basic human needs such as food, water, security and shelter must be met, but consumption must be kept within planetary boundaries (Brand-Correa et al., 2017). This will require the top 10% of income earners to radically reduce their emissions (Gore, 2021).

[6] In this paper we refer to 'carbon emissions' as a generic description of environmental impact, except when referencing specific studies where the term is used to refer to a subset of ecological footprint. We refer to 'ecological footprint' when referencing data collected for this study.

To reduce consumption, Jungell-Michelsson et al. (2022) argue that both demand and production need to be addressed "for effective change" (p. 8). In this study we consider the demand side, which can be approached from both macroeconomic and microeconomic perspectives. A macroeconomic view includes strategies such as taxing the affluent and redistributing to the poor, while a microeconomic approach focusses on reducing individual resource use (Jungell-Michelsson et al., 2022). While it is important to address both perspectives, here we consider the latter. One group of individuals who are voluntarily reducing their consumption, despite strong economic and social forces that encourage the reverse, are those who belong to a lifestyle movement called minimalism, a lifestyle characterised by owning few possessions, and mindful acquisition (Kang et al., 2021; Wilson et al., 2022). A preference for a sparse aesthetic is also a key characteristic according to Wilson et al. (2022) and may separate minimalism from voluntary simplicity, a related low consumption lifestyle (Blackburn et al., 2023). Minimalism is a sufficiency practice (Sandberg, 2021), that is adopted voluntarily rather than due to poverty. Instead of constantly accruing goods as a pathway to happiness, as encouraged by capitalism, minimalists are said to recognise an individually defined point of 'enough'; for example, 200 pieces of clothing might be excessive, but 20 pieces might be enough. Vegetarianism, zero waste and environmentalism may be a part of minimalism, but are not core practices according to Dopierala (2017).

Minimalism could provide a valuable and scalable approach to reducing individual emissions because minimalists tend to own less 'stuff', and therefore, theoretically, should have a lower environmental impact (Blackburn et al., 2023). However, it is also possible that minimalists churn through more goods, especially if they are interested in aesthetics and replace items in response to trends. Therefore, it is important to establish whether those engaging in minimalist practices really do have a smaller carbon footprint than non-practitioners.

Consuming fewer material goods is one of the simplest environmental actions individuals can take to reduce emissions. Consuming less doesn't require homeownership (which is necessary for implementing energy upgrades), expensive technology such as electric vehicles, nor does it depend on state infrastructure such as walkable neighbourhoods or

good public transport networks. Reducing material consumption is a behaviour available to anyone who has ample material goods, such as those in the top 10% of global income earners. Moreover, a minimalist lifestyle might have a degree of mainstream interest and approval; one survey involving a representative sample of 8148 Americans, found 26% considered themselves to be minimalists, with a further 36% stating they have considered minimalism but had not reached it (YouGov, 2023). As one journalist put it, "Within a few years, minimalism has managed what decades of the green movement has not: make having less stuff cool" (Raith, 2019 para. 1).

In addition to its potential environmental benefits and scalability, recent research suggests minimalism offers wellbeing benefits by reducing decision-making stress and making life more peaceful (Lloyd et al., 2020; Martin-Woodhead, 2022). While research on minimalism and wellbeing is promising, is has to date been silent on any environmental benefits that might also accrue. In this paper we quantify the environmental impact of minimalism and confirm its wellbeing benefits to assess if minimalism offers a double dividend of greater wellbeing and a smaller carbon footprint (Jackson, 2008).

3.1.1 Minimalism and environmental impact

Given that manufactured products such as clothing and electronics contribute to 20% of household carbon emissions (Ivanova et al., 2016), we might assume that minimalism, which prioritises owning few possessions, results in fewer carbon emissions. Yet practices such as decluttering might accelerate the purchase-purge cycle (Wilson et al., 2022), thereby increasing carbon footprint, or money saved from buying fewer material possessions might be used for other carbon intensive activities such as overseas travel. Blackburn et al. (2023) speculate that these two scenarios may form distinct types of minimalism: eco-minimalism, whose adherents are primarily interested in reduced resource use, and aesthetic minimalism, whose adherents are more concerned with appearances. These two types of minimalism may vary in environmental footprint.

To our knowledge, no research has explicitly targeted the environmental impact of a minimalist lifestyle. A recent review paper (Blackburn et al., 2023) documents evidence that other low-consumption lifestyles have a lower environmental impact, though the evidence appears mixed. Previously studied lifestyle groups include: 'tightwads', who feel pain on spending (Rick et al., 2008), 'frugalists', who enjoy saving money (Lastovicka et al., 1999), 'voluntary simplifiers' (VS'ers), who are interested in simplicity and self-sufficiency (Rich et al., 2019) and members of ecovillages (Vita et al., 2020; Wiest et al., 2022). An early study found American VS'ers had ecological footprints that were 23% lower than non-simplifiers (Brown et al., 2005). More recently Kropfeld et al. (2018) reviewed the environmental impact of tightwadism, frugalism and VS based on the lifecycle impact of 27 goods and services. They found tightwadism and VS negatively correlated with the level of goods and services consumed, but frugalism showed no correlation. Another study of tightwadism, frugalism and VS, which used a carbon footprint calculator, found only tightwadism was correlated with a lower footprint; no correlations were found for VS and frugalism (Touchette et al., 2020). A study of European eco-villagers, Transition Towns and food co-op members found that, compared to non-members, their total carbon footprint was 16% lower. At a sub-footprint level, footprints for clothing (86%) and food (43%) were significantly lower, though housing and transport footprints were comparable (Vita et al., 2020).

To summarise, tightwadism, VS, or membership of an ecovillage may be linked to smaller ecological footprints compared to frugalism or the general population. Since some minimalist behaviours conceptually overlap with VS'ers (Blackburn et al., 2023), minimalists may also have a lower footprint, but currently there is no empirical research confirming this.

3.1.2 Minimalism and wellbeing

If a minimalist lifestyle is associated with a lower carbon footprint, then it is important to understand what might motivate people to sustain this lifestyle. Some research suggests greater wellbeing may be key. The idea that limiting one's possessions might be good for your wellbeing can be traced back thousands of years. It has been proposed by the

Ancient Greeks, religions, and philosophers such as Thoreau, Veblen, and Fromm (Belk, 1988; Fromm, 1976; Shi, 2007; Veblen, 1899). Last century, Gregg (1932) introduced the concept of VS, noting that "there may be a limit to the number of things ... which a person may own and yet keep himself psychologically healthy" (p.10). These ideas were later promoted by the VS movement of the 1970s and 1980s (Elgin & Mitchell, 1978). Minimalism is the most recent iteration of this philosophy.

Greater wellbeing appears to be a consequence of adopting minimalism, although much of the existing evidence is cross-sectional (Kang et al., 2021; Lloyd et al., 2020; Malik & Ishaq, 2023; Martin-Woodhead, 2022; Shafqat et al., 2023; Vladimirova, 2021). The association may be explained by financial benefits (Herziger et al., 2020; Martin-Woodhead, 2022, 2023; Vladimirova, 2021), stress reduction and feeling calmer due to less clutter (Herziger et al., 2020; Martin-Woodhead, 2022; Roster et al., 2016; Vladimirova, 2021), ease of moving house or travelling, and more time due to less shopping and cleaning (Martin-Woodhead, 2022).

3.1.3 Characteristics of minimalism

Understanding the characteristics of minimalists might provide some insight as to the types of people who adopt minimalism. Given minimalists prefer to own fewer possessions, it is likely those higher in minimalism are lower in materialism, providing a further explanation for the minimalism-wellbeing association. Materialism is a measure of the 'centrality of material possessions in one's life' and a belief that possessions and money will bring happiness and status (Richins & Dawson, 1992). Materialism is associated with lower wellbeing, according to a meta-analysis by Dittmar et al. (2014). Research on the associations between materialism and minimalism is limited and inconclusive. Herziger et al. (2020) found a negative association between minimalism and materialism, while Wilson et al. (2022) found negative and positive (but not significant) associations, in separate studies. Social status is closely tied to materialism. Atanasova et al. (2021) propose that, for some minimalists, having less might be a 'conspicuous signal of status'. Evidence that minimalists are environmentally concerned is mixed. Some research suggests minimalists are environmentally concerned (Herziger

et al., 2020; Martin-Woodhead, 2022), while a qualitative survey of minimalist fashion blogs found no explicit mention of the environment or sustainability (Vladimirova, 2021). In the present study, we will probe associations between minimalism and materialism, environmental concern, social status, and wellbeing concurrently.

3.1.4 The present study

In this paper we investigate associations between minimalism with both environmental impact and wellbeing concurrently. To our knowledge we are the first to investigate the environmental impact of minimalism. We measure minimalism on an incremental scale[7], environmental impact using an ecological footprint calculator, and wellbeing using the PANAS and life satisfaction scales. We hypothesise that, because minimalists prefer to own fewer possessions, minimalism will be negatively associated with ecological footprint via smaller homes, less waste disposal, and purchasing fewer clothes. Given that higher levels of clutter are associated with lower wellbeing, we expect higher levels of minimalism will correlate with greater wellbeing. We anticipate minimalism, which emphasises owning fewer possessions, will be negatively correlated with materialism. We also investigate the relationship between a minimalist practices, social status, and environmental concern, though we are agnostic about the direction on these relationships. Further, we examine minimalism's relationship to other low-consumption lifestyle constructs, namely VS, frugalism, and tightwadism, and explore the possible sub-dimensionality of minimalism.

3.2 Method

3.2.1 Participants and procedure

The survey was administered to 444 people online between 10 and 20 June 2022. A sample size of 403 was determined based on apriori G*Power analysis (Faul et al., 2009), calculated for a regression using an f2 effect size of 0.03, alpha value of 0.05, power of 0.80, with four low consumption lifestyles as the independent variables. The effect size

[7] While previous research has often treated minimalism as a category (i.e., as a lifestyle that has, or has not been adopted), some (YouGov, 2023) suggest that minimalism is a journey on which people embark. Therefore, in our study we conceptualise minimalism as incremental, rather than as something one does or does not possess."

was based on meta study by Hook et al. (2021) on VS and wellbeing, which found effect sizes ranged from small to medium. To account for invalid surveys (for example those who failed attention checks), an extra 10% was added to the identified minimum sample size of 403, resulting in a total target sample size of 444.

A total of 444 participants were recruited via Prolific, an online platform known for its quality data collection (Peer et al., 2022). Participants were from Australia and aged 18 or over. All participants in the survey passed an attention check. Data cleaning did not reveal straightlining. The sample (see Table 3.1) was significantly more educated than the Australian average, slightly younger, had a slightly higher proportion of women, and a higher household income. Home ownership was lower than the Australian average (ABS, 2021). Before commencing the study, participants read an information sheet that explained that the research will investigate the relationships between different lifestyles, environmental footprints, and wellbeing, and agreed to participate via an online consent form. Ethics approval for the study was granted by the university Human Ethics Committee (protocol 2021/289).

Table 3.1 Demographics of survey participants compared to Australian average

Demographics	Survey participants	Australian average*
Gender		
Female	56.3 %	50.7%
Male	41.4%	49.3%
Non-binary/third gender	1.8%	Not recorded
Prefer not to say	0.5%	Not recorded
Median age	36	38
Education		
Not finished school	2.5%	24.5%
High school Year 12	16%	15.7%
Vocational	19.4%	24.6%
University degree	40.1%	17.1%
Postgraduate	22.0%	6.5%
Total annual household income before tax		
$1-$9999 per year ($1 – 189 per week	3.6%	
$10 000-$19 999 per year ($190-379 per week)	3.8%	
$20 000-$29 999 per year ($380 - $579 per week)	4.3%	
$30 000 -$39 999 pear year ($580-$769)	4.5%	
$40 000 - $49 999 per year ($770-$959	6.5%	
$50 000 - $59 999 per year ($960-$1149	7.9%	
$60 000 – $79 999 per year ($1150-$1529	11.5%	
$80 000 - $99 999 per year ($1530-1919	11%	
$100 000 - $124 999 per year ($1920-2399)	11.5%	
$125 000 - $149 999 per year ($2400-2879	6.8%	
$150 000 - $199 999 per year ($2880-3839)	10.6%	
$200 000 or more per year ($3840 or more	8.8%	
Prefer not to say	9%	
Median income	$80 000	$53,933**
Mean income	$70 000	$60, 700**
Homeownership		
Own outright or with a mortgage	55.63%	66%
Rent	40.76%	30.6%
Other	3.6%	3.4%

Note. * (ABS, 2021) ** (Wilkins et al., 2020)

3.2.2 Measures

Participants were asked questions relating to low consumption lifestyles (minimalism, VS, frugalism, and tightwadism), environmental behaviours, wellbeing, materialism, subjective social status, environmental concern, and demographics. Scales demonstrated good internal reliability, with Cronbach alphas ranging between .70 and .91 (see below for details).

3.2.2.1 Environmental impact

The importance of measuring high impact behaviours in environmental psychology has recently been emphasised (Capstick et al., 2015; Kristian S. Nielsen et al., 2021). Pro-environmental behaviour scales often focus on low impact, non-quantifiable behaviours such as 'do you take short showers?' or intentions such as 'do you intend to recycle?' and exclude high impact behaviours such as a plant based diet or living car free (Ivanova et al., 2016; Wynes & Nicholas, 2017). Consideration of indirect emissions from consumption of goods and services is also largely ignored (Capstick et al., 2015). Hence, for this study we measure environmental impact using the Global Footprint Network ecological footprint online (https://www.footprintcalculator.org). The calculator quantifies the impact of food, transport, housing and consumption of goods and services, reflecting the high impact individual categories identified by Ivanova et al. (2016). The calculator measures the environmental impact of the production of goods plus imports minus exports - the method is outlined by (Lin et al., 2018). Questions cover the consumption of material goods and waste, house size and energy efficiency, animal product consumption, and travel (e.g., *How many hours did you fly in the past year*?). The tool also allows for individual subcomponents of the ecological footprint - food, housing, transport, and goods - to be calculated. To better understand environmental impact, we separately analysed house size, household size and energy efficiency from the house footprint and waste from the goods footprint. The lead author manually entered the survey data into the online calculator, and ecological footprint scores were downloaded for analysis. While the calculator relies on self-report answers, questions are specific and are phrased in a way to minimise value judgments, for example *How often do you eat beef or lamb?* Answer options range from never, to once every few weeks, once or twice a week, nearly every day, and nearly every meal. However, we acknowledge that memory and social desirability may influence participant responses. A list of questions and how they were scored is in Appendix B (Table B1).

We also investigated pet ownership and clothing purchases as part of environmental impact. The footprint calculator does not consider the impact of pets, despite pet ownership being a moderate source of carbon (Ivanova et al., 2020), mainly due to their

food consumption, which is the equivalent to 19% of the calories consumed by a human (Okin, 2017). Clothing is included in the goods footprint but is difficult to analyse as it is grouped in with sporting equipment. Given clothing is a major discretionary purchase and has a significant environmental footprint (Bläse et al., 2023), we asked participants how many clothes they purchased per month, with responses options ranging from none, I only purchase second-hand to 52 items per week.

3.2.2.2 Wellbeing

Wellbeing was assessed via three measures: the Positive and Negative Affect Schedule (PANAS) Short Form International Scale (Thompson, 2007), comprising both a positive affect and negative affect scale, and the Satisfaction with Life Scale (Diener et al., 1985). For the PANAS, participants were asked ten questions about how they normally felt (e.g., *Thinking about yourself and how you normally feel, to what extent do you feel… upset*), with responses recorded on a 5-point scale from '1 - never' to '5 - always' (positive affect α = .78; negative affect α = .80). For the Satisfaction with Life Scale participants were asked five questions (e.g., *In most ways my life is close to my ideal*) about their overall assessment of their life using a 7-point scale from '1 - strongly disagree' to '7 - strongly agree' (α = .90).

***3.2.2.3** Lifestyle scales*

Four lifestyle measures were used. *Minimalism* was measured using the 12-item Minimalist Consumer Scale (Wilson et al., 2022). Participants were asked questions about the number of possessions owned (e.g., *I avoid accumulating lots of stuff*), preference for sparse interiors (e.g., *I prefer simplicity in design*), and mindful consumption (e.g., *My belongings have been mindfully selected*), with responses recorded on a scale from '1 - strongly disagree' to '7 - strongly agree' (α = .91).

Voluntary simplicity was measured using the 21-item Voluntary Simplicity Engagement Scale (Rich et al., 2019). Participants were asked questions about frugality, time, self-sufficiency, pragmatism, sustainability, and social connection (e.g., *I repair items rather than replace them*). Responses were recorded on a scale where 1 represented the lowest

amount of agreement, representative or percentage and 7 equalled the highest value (α = .83).

Tightwadism was measured using the 4-item Spendthrift-tightwad Scale (Rick et al., 2008). Participants were asked questions about their attitudes towards spending money (e.g., *Do you have trouble limiting your spending for example on clothes, meals, and holidays? This is a reverse coded item*). All four items were measured on a scale where 1 indicated low levels of tightwadism and 7 indicated high levels (α = .70).

Frugalism was measured using an 8-item Frugalism Scale (Lastovicka et al., 1999). Participants were asked questions about frugality and resourceful use of money and possessions (e.g., *I believe in being careful in how I spend my money*). Responses were recorded on a scale from '1 - strongly disagree' to '7 - strongly agree' (α = .84).

3.2.2.4 Identity and environmental concern

Environmental identity was measured by asking participants if they identified as someone who is *environmentally concerned,* with responses recorded on a scale from '1 - strongly disagree' to '7 - strongly agree'. A minimalist identity question was also added for comparison with a national US survey (CivicScience, 2018), and to test whether identification as a minimalist was associated with differences in minimalism as measured on 12-item Minimalist Consumer Scale. The question asked participants to select which statement best described their experience with minimalism: *I consider myself a minimalist; I am actively working towards becoming a minimalist; I want to be a minimalist one day; I have no desire to become a minimalist*.

***3.2.2.5** Materialism*

Materialism was measured using the 9-item short Materialistic Values Scale (Richins, 2004). Participants were asked questions about measures of success and happiness and the importance of money and possessions (e.g., *I admire people who own expensive homes, cars, and clothes*), with responses recorded on a scale from '1 - strongly disagree' to '7 - strongly agree' (α = .84).

3.2.2.6 Subjective social status

Subjective social status was measured using Cantril's Self Anchoring Striving Scale (Glatzer & Gulyas, 2014), which is a single item measure. Participants were asked to choose where they stood on a 10-rung ladder where 1 represents people in Australia with the least amount of money, least education and least respected job or no job, and 10 represents people who have the most money, most education, and most respected jobs.

3.2.3 Analyses

Data cleaning is outlined in Appendix B. To ensure there was no violation of linearity and normality assumptions, six extreme SPSS identified outliers (all with high footprints), were removed from the ecological footprint data, bringing the total number of participants to 438. For comparison, main footprint analyses with outliers are in Appendix B (Tables B2-B4). The number of participants in analyses for gender (n=428), and income (n=398), was lower as some participants opted out of these questions. Analyses not involving ecological footprint, gender or income were conducted using the full sample of 444 participants. Associations between ecological footprint and wellbeing with the four lifestyles were investigated using correlation and hierarchical regression analysis. We also correlated lifestyles with environmental concern, materialism, and subjective social status. A confirmatory factor analysis produced several dimensions of minimalism, confirming Wilson's conclusion that minimalism is not unidimensional. We then repeated footprint and wellbeing analyses using the minimalism subdimensions. The analysis was conducted in SPSS Version 29.0.0.0, except for the confirmatory factor analysis of minimalism subdimensions, which was conducted using JASP Version 0.17.2.1.

3.3 Results

Descriptive statistics for the four low consumption scales (minimalism, VS, frugalism and tightwadism), wellbeing and materialism scales, and ecological footprint are presented in Table 3.2. When asked the question 'Which of the following best describes

your experience with minimalism', 15.5% of participants considered themselves to be a minimalist (See Table S6).

Table 3.2 Descriptive statistics for low consumption lifestyles, wellbeing, and materialism scales, subjective status, environmental concern, and footprint

Scale	M	SD	Min score	Max score	Possible range
Minimalism	4.61	1.04	1.42	7.00	1-7
Voluntary simplicity	4.36	0.69	2.43	6.33	1-7
Tightwadism	4.38	1.00	1.00	7.00	1-7
Frugalism	5.74	0.77	2.25	7.00	1-7
PANAS positive	3.22	0.63	1.40	4.60	1-5
PANAS negative	2.53	0.66	1.00	4.60	1-5
Life satisfaction	4.16	1.38	1.00	7.00	1-7
Materialism	3.80	1.05	1.00	6.33	1-7
Subjective social status	5.67	1.66	1.00	10.00	1-10
Environmental concern	5.20	1.39	1.00	7.00	1-7
Ecological footprint[8]	6.80	3.52	1.40	17.60	.12-13.13
Food footprint	0.73	0.19	0.40	1.40	-
House footprint	3.51	2.92	0.00*	14.80	-
Transport footprint	1.28	1.30	0.00*	10.50	-
Goods footprint	0.37	0.28	0.00*	1.70	-

N=444 for lifestyles, wellbeing, and materialism, N=438 for ecological footprint.
* The footprint calculator was not fine grained enough to measure extremely low sub-footprints, such as two people living in a tiny house with 100% renewable energy. This resulted in some zero minimum scores.

3.3.1 Minimalist identity

To explore the differences between the minimalism scale and minimalist identity questions from a CivicScience (2018) survey, we conducted a one-way ANOVA (Table B5 in Appendix B). All four identity groups significantly differed on the minimalism scale. A Tukey post hoc test found that those who consider themselves to be a minimalist had the highest minimalism scale score, followed by those who were actively working toward minimalism, followed by those who wanted to be minimalist one day. Those who have no

[8] Australian average footprint is 5.7, global average is 1.71 Source: Footprint Data Foundation, York University Ecological Footprint Initiative, and Global Footprint Network: National Footprint and Biocapacity Accounts, 2023 edition. Downloaded 3/11/23 from https://data.footprintnetwork.org.

desire to become a minimalist had significantly lower minimalism scale scores than all other groups.

3.3.2 Associations with ecological footprint

All four low-consumption lifestyles correlated significantly and negatively with ecological footprint, and positively with each other (Table 3.3), suggesting each lifestyle is associated with reduced environmental impact, and that the lifestyles are related though distinct constructs. Minimalism was not correlated with any of the demographic measures, while VS was associated with being female, frugalism with being older, and tightwadism with being male. We also explored whether associations between minimalism and ecological footprint were consistent across different age, income, and gender groups (Table B6 in Appendix B). We found a negative and significant relationship for males, high-income and middle and older age groups, but failed to reach significance for other income groups and 18-27 year-olds.

Table 3.3 Low consumption lifestyles correlated with ecological footprint and demographics

Variable	1	2	3	4	5	6	7	8	9
1. Minimalism	1								
2. Voluntary simplicity	.45**	1							
3. Frugalism	.44**	.52**	1						
4. Tightwadism	.31**	.23**	.46**	1					
5. Ecological footprint	-.16**	-.19**	-.13**	-.13**	1				
6. Age	.06	.07	.17**	-.01	.07	1			
7. Gender	-.01	.10*	.02	-.19**	-.03	-.09	1		
8. Income	.06	.01	.07	.01	.09	-.02	-.09	1	
9. Education	.02	.02	.08	.04	.01	.18**	-.05	.27**	1

N=438 for footprint, age and education, N=428 for gender, N=398 for income
* $p < .05$
** $p < .01$
Gender: 1=males, 2=females

We explored the associations between low-consumption lifestyles and specific footprint measures: house size, household size, energy efficiency, low waste, fewer clothes, and fewer pets (Table 3.4). Minimalism was associated with smaller house size, smaller household size, energy efficiency, less waste, fewer new clothes, and fewer pets.

Frugalism and VS was associated with energy efficiency, less waste, and fewer new clothes, while tightwadism was associated with less waste and fewer new clothes.

Table 3.4 Low consumption lifestyles correlated with additional environmental measures

	1	2	3	4	5	6	7	8	9	10
Minimalism	1									
Voluntary simplicity	.45**	1								
Frugalism	.44**	.52**	1							
Tightwadism	.31**	.23**	.46**	1						
House size – house FP	-.14**	.00	.01	-.06	1					
Household size – house FP	-.10*	.01	-.03	.00	.54**	1				
Energy efficiency – house FP	.10*	.19**	.11*	.07	.18**	.06	1			
Waste – goods FP	-.16*	-.32**	-.24**	-.18**	.06**	.19**	.12*	1		
New clothes	-.14**	-.20**	-.26**	-.37**	.12*	.07	-.03	.00	1	
Pets	-.11*	.01	-.03	-.05	.27**	.22**	.09	.05*	-.17**	1

N=438
* $p < .05$
** $p < .01$

Given that research on the influence of sociodemographic factors on ecological footprint is mixed (see Table B7 in Appendix B for an overview of previous findings), we controlled for age, income, and gender in a hierarchical regression to assess how the four lifestyles predicted ecological footprint. Together, the lifestyles explained 5% of the variance in ecological footprint, $F(7, 383) = 3.82$, $p=<.001$, however only VS made a significant unique contribution to the model (Table 3.5). In the final model, income also uniquely explained some of the variance in ecological footprint

Table 3.5 Hierarchical regression of the four lifestyle variables predicting ecological footprint

	B	SEB	Beta	t	Sig
Constant	5.42	.80		6.81	<.001
Age	.02	.01	.07	1.42	.158
Gender	-.06	.30	-.01	-.20	.842
Income	.09	.05	.09	1.82	.07
				R^2= .01	
Constant	10.04	1.35		7.42	<.001
Age	.02	.01	.09	1.77	.078
Gender	-05	.31	-.01	-.15	.881
Income	.10	.05	.10	2.03	.043*
Minimalism	-.02	.01	-.09	-1.57	.116
Voluntary simplicity	-.03	.01	-.13	-2.06	.040*
Frugalism	.01	.03	-.02	-.31	.754
Tightwadism	-.05	.04	-.07	-1.11	.266
	R^2 Δ = .05; FΔ = 5.23***				
	R^2=.07* **				

N=438 footprint, lifestyle and age, N=398 income, N=428 gender
*p<.05
** p < .01
***p<.001

3.3.3 Associations with wellbeing

Table 3.6 shows correlations between wellbeing variables and the four low-consumption lifestyles. Minimalism correlated positively with PANAS positive and negatively with PANAS negative, but not with life satisfaction. Frugalism and VS correlated with all three measures of wellbeing (positively with PANAS positive and life satisfaction, and negatively with PANAS negative), while tightwadism was uncorrelated with wellbeing measures. We also explored whether the associations between minimalism and wellbeing were the same for income, age, and gender groups (Table B6 in Appendix B). Significant and positive association were found between PANAS positive and minimalism for high-income and low-income groups, 18-27 year-olds, and females, while significant and negative associations were found between PANAS negative and minimalism for the medium income group and females. The association between minimalism and life satisfaction was significant only for 18-27 year-olds.

Table 3.6 Correlations between low consumption lifestyles and wellbeing variables

	1	2	3	4	5	6	7
Minimalism	1						
Voluntary simplicity	.44**	1					
Frugalism	.44**	.52**	1				
Tightwadism	.31**	.23**	.46**	1			
PANAS positive	.14**	.27**	.20**	.01	1		
PANAS negative	-.11*	-.14**	-.10*	-.04	-.35**	1	
Life satisfaction	.07	.20**	.14**	-.01	.49**	-.44**	1

N=444
* p < .05
** p < .01

We used hierarchical regression to assess the extent to which the low-consumption lifestyles predicted wellbeing (Table 3.7). As expected, demographics explained a significant amount of variance in PANAS positive (11%), PANAS negative (12%) and life satisfaction (14%). An additional and significant 7% of the variance in PANAS positive was explained by the four lifestyles. Only VS made a significant unique contribution. An additional and significant 2% of the variance in PANAS negative was explained by the four lifestyles, again with only VS uniquely predicting variance. Finally, an additional and significant 4% of the variance in life satisfaction was explained by lifestyle, with VS the only variable to make a significant unique contribution.

3.3.4 Characteristics of minimalism

Table 3.8 shows associations between the four low-consumption lifestyles and materialism, environmental concern, and social status. Minimalism, frugalism and VS correlated positively with environmental concern, while tightwadism was not correlated. All four lifestyles correlated negatively with materialism. Only tightwadism correlated with social status (negatively).

Table 3.7 Hierarchical regression: lifestyle predicting wellbeing

	PANAS positive					PANAS negative					Life satisfaction				
	B	SEB	Beta	t	Sig	B	SEB	Beta	t	Sig	B	SEB	Beta	t	Sig
Constant	11.63	.80		14.51	<.001	14.20	.83		17.04	<.001	9.73	1.73		5.62	<.001
Age	.07	.01	.29	5.96	<.001	-.06	.01	-.24	-5.06	<.001	.07	.03	.13	2.69	.007
Gender	.32	.31	.05	1.05	.295	1.17	.32	.18	3.69	<.001	1.85	.66	.13	2.80	.005
Income	.20	.05	.19	4.05	<.001	-.16	,05	-.15	-3.18	.002	.77	.11	.34	7.23	<.001
				R^2=.11* **					**R^2=.12*** **					**R^2=.14*** **	
Constant	7.36	1.35		5.47	<.001	16.42	1.44		11.44	<.001	3.03	2.95		1.02	.306
Age	.06	.01	.25	5.36	<.001	-.06	.01	-.23	-4.70	<.001	.06	.03	.11	2.22	.027
Gender	.05	.31	.01	.16	.870	1.32	.33	.20	4.03	<.001	1.41	.67	.10	2.09	.037
Income	.19	.05	.19	3.99	<.001	-.16	.05	-15	-3.10	.002	.76	.11	.34	7.26	<.001
Minimalism	.00	.01	.02	.27	.786	-.01	.01	-.04	-1.06	.476	-.03	.03	-.05	-.96	.336
Voluntary simplicity	.05	.01	.24	4.22***	<.001	-.03	01	-.14	-1.67	.018*	.09	.03	.20	3.43***	<.001
Frugalism	.02	.03	.04	.70	.486	.01	.03	.01	-.58	.867	.04	.07	.04	.64	.522
Tightwadism	-.06	.04	-.07	-1.30	.194	.03	.05	.04	.39	.473	-.07	.09	-.04	-.69	.491
				R^2 Δ = .07; FΔ = 7.68*** **R^2=.18*** **					R^2 Δ = .02; FΔ = 2.41* **R^2=.14***					R^2 Δ = .04; FΔ = 4.24** **R^2=.17*** **	

N=444 except for, N=434 gender, N=403 income

*p<.05

** p < .01

*** p<.001

Table 3.8 Lifestyle correlated with environmental concern, materialism, and social status

	1	2.	3.	4.	5.	6.	7.
1. Minimalism	1						
2. Voluntary simplicity	.44**	1					
3. Frugalism	.44**	.52**	1				
4. Tightwadism	.31**	.23**	.46**	1			
5. Environmental concern	.15**	.41**	.21**	-.03	1		
6. Materialism	-.27**	-.34**	-.25**	-.35**	-.04	1	
7. Social status	.05	.02	.04	-.10*	.08	-.02	1

N=444
* $p < .05$
** $p < .01$

3.3.5 Subdimensions of minimalism

Despite the overall minimalism scale possessing good scale reliability, Wilson et al. (2022) found via factor analysis that minimalism is not a unidimensional construct, and consists of three subdimensions: 'few belongings' (FB) minimalism, 'aesthetic' minimalism and 'mindful' minimalism. To test this dimensionality in our own data, we performed a confirmatory factor analysis using JASP Version 0.17.2.1 (Table 3.9). Following Wilson et al. (2022), we used maximum likelihood (ML) estimation plus full information maximum likelihood (FIML) for missing data. Fitting the data to a three-factor model produced a Tucker-Lewis Index (TLI) of 0.94, Comparative Fit Index (CFI) of 0.95 and Root Mean Square Error of Approximation (RMSEA) of .09 ($CI_{90\%=}$ 0.07-.10). While the TLI and CFI were similar to (Wilson et al., 2022), our RMSEA was marginal (values greater than .08 and less than 0.1 are considered marginal according to (Brown & Cudeck, 1992). Wilson et al. (2022) found a RMSEA of .02 ($CI_{90\%}$ 0.00-0.04). We also found a Standardised Root Mean Square (SRMR) of 0.05 and goodness of fit index (GFI) of 0.99, which are both acceptable. Despite the mediocre RMSEA, given the good TLI, CFI, GFI and SRMR values we consider the overall model fit acceptable. The standardised coefficients for the factor loadings ranged from .76 to .86, which was similar to (Wilson et al., 2022) which ranged from .72 to .83.

Table 3.9 Confirmatory factor analysis of minimalism

	Factor loading estimates			AVE
	Factor 1	Factor 2	Factor 3	
Few belongings minimalism				.69
I avoid accumulating lots of stuff	.82			
I restrict the number of things I own	.86			
Less is more when it comes to owning things	.82			
I actively avoid acquiring excess possessions	.82			
Aesthetic minimalism				.64
I am drawn to visually sparse environments		.78		
I prefer simplicity in design		.73		
I keep the aesthetic in my home very sparse		.82		
I prefer leaving spaces visually empty over filling them		.85		
Mindful minimalism				.68
I am mindful of what I own			.75	
The selection of things I own has been carefully curated			.84	
It is important to me to be thoughtful about what I choose to own			.82	
My belongings are mindfully selected			.85	
X_2, df	214.23, 51			
Comparative fit index (CFI)	0.95			
Tucker-Lewis index (TLI)	0.94			
Goodness of fit index (GFI)	0.99			
SRMR	0.05			
RMSEA ($Cl_{90\%}$)	0.09			

N=444

AVE = average variance extracted

Overall, the analysis yielded results consistent with Wilson et al.'s (2022) three-dimensional structure. We therefore performed further analyses to explore associations of these three subdimensions – 'FB' minimalism, 'mindful' minimalism, and 'aesthetic' minimalism – with ecological footprint and wellbeing.

3.3.5.1 Minimalism subdimensions and ecological footprint

'FB' minimalism and 'mindful' minimalism were negatively correlated with ecological footprint, while aesthetic minimalism was uncorrelated (Table 3.10). 'FB' minimalism was the only subdimension to be correlated (negatively) with all four subcomponents of ecological footprint. 'Mindful' minimalism was negatively correlated with food and house footprints, while aesthetic minimalism did not correlate with any subcomponent.

Table 3.10 Minimalism subdimensions correlated with ecological footprint

	1.	2.	3.	4.	5.	6.	7.	8.
1. FB minimalism	1							
2. Mindful minimalism	.53**	1						
3. Aesthetic minimalism	.57**	.36**	1					
4. Ecological footprint	-.19**	-.16**	-.06	1				
5. Food footprint	-.15**	-.15**	-.08	.24**	1			
6. House footprint	-.15**	-.12*	-.08	.81**	.11*	1		
7. Transport footprint	-.10*	-.08	-.01	.53**	.12*	-.04	1	
8. Goods footprint	-.12*	-.09	.04	.23**	.17**	.00	.21**	1

N=438
* p < .05
** p < .01

Exploring associations between the sub-dimensions and specific elements of ecological footprint, pets, and clothes (Table 3.11), 'FB' minimalism and 'mindful' minimalism were negatively correlated with house size, waste, and number of clothes. 'FB' minimalism was the only subdimension to be correlated (negatively) with pets and number of people in the household, and (positively) with energy efficiency. 'Aesthetic' minimalism was not correlated with any of these measures.

Table 3.11 Additional environmental measures correlated with minimalist subdimensions

	1.	2.	3.	4.	5.	6.	7.	8.	9
1. FB minimalism	1								
2. Mindful minimalism	.53**	1							
3. Aesthetic minimalism	.57**	.36**	1						
4. House size – house FP	-.16**	-.12*	-.06	1					
5. Household size – house FP	-.14**	-.05	-.07	.54**	1				
6. Energy efficiency – house FP	.11*	.08	.05	-.10*	.06	1			
7. Waste – goods FP	-.19**	-.17**	-.02	.04	.19**	-.12*	1		
8. Number of clothes	-.19**	-.12*	-.03	.12	.07	-.03	.17**	1	
9. Number of pets	-.11*	-.07	-.09	.27**	-.22**	.09	.05	-.17**	1

N=438
* p < .05
** p < .01

A hierarchical regression predicting ecological footprint and controlling for age, income, and gender (Table 3.12), shows that the three minimalism sub-dimensions accounted for an additional 5% of the variance in ecological footprint, F (6, 384) =4.04, *p*=<.001), with 'FB' minimalism the only significant unique predictor. Demographics did not explain any unique variance after the inclusion of the minimalism sub-dimensions.

Table 3.12 Hierarchical regression, minimalism sub-dimensions predicting ecological footprint

	Ecological footprint				
	B	SEB	Beta	T	Sig
Constant	5.42	.80		6.81	<.001
Age	.02	.01	.07	1.42	.158
Gender	-.06	.30	-.01	-.20	.842
Income	.09	.05	.09	1.8	.070
				R^2 = .01	
Constant	7.56	1.00		7.56	<.001
Age	.02	.01	.08	1.56	.120
Gender	-.04	.30	-.01	-.12	.906
Income	.09	.05	.10	1.92	.056
FB minimalism	-.11	.04	-.19	-2.90**	.004
Mindful minimalism	-.05	.04	-.08	-1.35	.179
Aesthetic minimalism	.04	.03	.06	1.05	.292
				R^2 Δ = .05; FΔ = 6.20 ***	
				R^2=.06**	

N=438 footprint, lifestyle and age, N=398 income, N=428 gender
* $p < .05$
** $p < .01$
***p<.001

3.3.5.2 Minimalism subdimensions and wellbeing

'FB' minimalism and 'mindful' minimalism were positively correlated with PANAS positive but were not correlated with PANAS negative (Table 3.13). 'Aesthetic' minimalism was negatively correlated with PANAS negative but was not correlated with PANAS positive. None of the three minimalism subdimensions correlated with life satisfaction.

Table 3.13 Minimalist sub-dimensions correlated with wellbeing

Variable	1.	2.	3.	4.	5.	6.
1.FB minimalism	1					
2.Mindful minimalism	.57**	1				
3.Aesthetic minimalism	.57**	.36**	1			
4.PANAS positive	.12*	.15**	.09	1		
5.PANAS negative	-.08	-.09	-.10*	-.35**	1	
6. Life satisfaction	.05	.09	.02	.49**	-.44**	1

N=444
* p < .05,
** p < .01

We used hierarchical regression to show the extent to which minimalist sub-dimensions explained wellbeing (Table 3.14). As expected, demographics explained a significant amount of the variance in PANAS positive (11%), PANAS negative (12%) and life satisfaction (14%). The inclusion of the minimalism sub-dimensions explained an additional 2% of the variance in PANAS positive scores, with 'mindful' minimalism the only significant unique predictor. The sub-dimensions explained a non-significant additional amount of variance in PANAS negative and life satisfaction.

3.3.5.3 Minimalism subdimensions, materialism, environmental concern, and social status correlated with minimalism subdimensions

'FB' minimalism was moderately negatively correlated with materialism while 'mindful' minimalism and 'aesthetic' minimalism demonstrated a small correlation with materialism. (Table 3.15). 'FB' minimalism and 'mindful' minimalism correlated with environmental concern, but aesthetic minimalism was uncorrelated. None of the minimalism subdimensions correlated with social status.

Table 3.14 Hierarchical regression: minimalism subdimensions predicting wellbeing

	PANAS positive					PANAS negative					Life satisfaction				
	B	SEB	Beta	T	Sig	B	SEB	Beta	T	Sig	B	SEB	Beta	T	Sig
Constant	11.63	.80		14.51	<.001	14.20	.83		17.04	<.001	9.73	1.73		5.62	<.001
Age	.07	.01	.29	6.00	<.001	-.06	.01	-2.40	-5.06	<.001	.07	.03	.13	2.69	.007
Gender	.32	.31	.05	1.05	.295	1.17	.32	.18	3.69	<.001	1.85	.66	.13	2.80	.005
Income	.20	.05	.19	4.05	<.001	-.16	.05	-.15	-3.18	.002	.77	.11	.34	7.23	<.001
				R^2 = .11***					R^2 = .12***					R^2 = .14***	
Constant	9.86	1.02		9.68	<.001	15.51	1.07		14.55	<.001	8.14	2.22		3.67	<.001
Age	.07	.01	.28	5.96	<.001	-.60	.01	-.24	-4.99	<.001	.07	.03	.13	2.75	.006
Gender	.28	.30	.04	.93	.353	1.18	.32	.18	3.73	<.001	1.76	.66	.13	2.67	.008
Income	.20	.05	.19	4.00	<.001	-.16	.05	-.15	-3.08	.002	.77	.11	.34	7.25	<.001
FB minimalism	.02	.04	.04	.61	.546	.01	.04	.01	.14	.890	.02	.08	.01	.20	.843
Mindful minimalism	.09	.04	.13	2.34*	.020	-.06	.04	-.09	-1.56	.120	.13	.08	.09	1.62	.105
Aesthetic minimalism	-.10	.03	-.02	-.34	.736	-.02	.04	-.03	-.52	.601	-.07	.08	-.05	-.86	.388
				R^2 Δ = .02; FΔ = 3.21*						R^2 Δ = .01; FΔ = 1.40				R^2 Δ = .01; FΔ = 1.20	
				R^2=.14						**R^2=.13**					**R^2=.14**
				*											

N=444 except for, N=434 gender, N=403 income

* p < .05

** p < .01

***p<.001

Table 3.15 Minimalism sub-dimensions correlated with materialism, environmental concern, and social status

	1.	2.	3.	4.	5.	6.
1. FB Minimalism	1					
2. Mindful minimalism	.53**	1				
3. Aesthetic minimalism	.57**	.36**	1			
4. Materialism	-.35**	-.11*	-.17**	1		
5. Environmental concern	.12*	.21**	.05	-.04	1	
6. Social status	.04	.01	.06	.02	.08	1

N=444
* p < .05
** p < .01

3.4 Discussion

We set out to examine whether minimalism can produce a double dividend of reduced ecological footprint and increased wellbeing. We also examined whether different dimensions of minimalism could be identified and, if so, how they each relate to ecological footprint and wellbeing.

We found minimalism had a negative association with ecological footprint, a negative association with negative affect, a positive association with positive affect, and no association with life satisfaction. Together these results imply that a minimalist lifestyle has promise as a lifestyle concurrently offering lower environmental impact and greater wellbeing. Consistent with Wilson et al. (2022), we find minimalism has three distinct sub-dimensions: 'few belongings' (FB) minimalism, 'aesthetic' minimalism, and 'mindful' minimalism. These sub-dimensions differ in their ecological footprint and wellbeing associations, with 'aesthetic' minimalism appearing to confer fewer dividends than the other dimensions. We also found the benefits of minimalism accrue differently to different demographic groups; younger people have greater wellbeing while middle-aged, older, and high-income groups have a negative association with ecological footprint. Young people might experience greater wellbeing because they find minimalism empowering as they are more likely to have a lower income. The footprint

outcome is surprising since wealthier people tend to have a higher ecological footprint. Possibly younger people spend more on fast fashion contributing to a higher footprint[9].

Each of the four low-consumption lifestyles we investigated negatively correlated with ecological footprint. With respect to frugalism, our findings differ from previous research showing no association between frugalism and environmental impact (Kropfeld et al., 2018; Touchette et al., 2020). Similarly, for VS, our findings differ from Touchette et al. (2020) who found no association between VS and footprint. These differences may be due to different geographic samples or different methods to measure environmental impact; rather than our holistic ecological footprint calculator, Kropfeld et al. (2018) used lifecycle analysis and Touchette et al. (2020) used a footprint calculator that only considered carbon.

Importantly, we found a strong appetite for the minimalist lifestyle in our Australian sample, with two-thirds of participants having either adopted minimalism, actively working towards it, or considering it. That 15.5% of our participants considered themselves to be a minimalist is broadly consistent with figures from two surveys in US, where between 11% (CivicScience, 2021) and 26% (YouGov, 2023) considered themselves a minimalist. While the other low-consumption lifestyles under consideration, in particular VS, showed promise regarding various aspects of wellbeing and environmental footprint, minimalism was the only lifestyle uncorrelated with demographics, underscoring its potential for broader appeal than VS, tightwadism and frugalism.

3.4.1 Minimalism and ecological footprint

In summary, while higher levels of minimalism were associated with a lower total ecological footprint, it was the 'FB' minimalism subdimension that was consistently negatively correlated with both overall ecofootprint and its subcomponents. By contrast, 'mindful' minimalism correlated negatively only with overall footprint and the food

[9] Follow-up tests showed that younger people did indeed purchase more clothing see Table B8, Appendix B.

subcomponent, while 'aesthetic' minimalism did not correlate with anything. Below we discuss what might underlie some of these findings.

3.4.1.1 Housing

Given minimalists are thought to have fewer possessions, we expected this to translate to needing less space. We found a lower housing footprint was correlated with higher levels of 'FB' minimalism and 'mindful' minimalism, but not 'aesthetic' minimalism. Lower housing footprints may be due to smaller homes. The main driver of household energy consumption is per-capita floor space (Lorek et al., 2019). Both 'FB' minimalism and 'mindful' minimalism showed a small negative correlation with house size; however, 'FB' minimalism also showed a negative correlation with *household* size. While 'FB' minimalists might have smaller homes, fewer people live there, suggesting that per capita floor space is not in fact smaller. In this study participants indicated house size based on one of five house size options (bedsit to very large house). Future studies could ask for actual floor area, which would enable per capita floor space to be calculated (although it is possible participants do not know their floor area).

Another possible driver of minimalism's association with a smaller housing footprint is greater energy efficiency (which in the footprint calculator is based on levels of insulation, efficient appliances, and lighting). Minimalism and 'FB' minimalism were positively correlated with energy efficient homes. This is interesting given that energy efficiency doesn't appear to be conceptually important to a minimalist lifestyle.

3.4.1.2 Goods

We thought it was likely that minimalists would have a lower goods footprint, as they are thought to avoid purchasing material goods. Surprisingly though, minimalism was not associated with a smaller goods footprint (although the 'FB' minimalism sub-dimension was).

At the other end of the lifecycle of possessions we found minimalism, 'FB' minimalism and 'mindful' minimalism were associated with producing less waste (a component of

the goods footprint calculation), but 'aesthetic' minimalism was uncorrelated. Understanding why some types of minimalists produce less waste warrants further examination. It is possible some are excellent recyclers or may extend the life of items via repair and hold onto them longer. Some minimalists may also be more likely to pass on unwanted goods to charities, family, and friends, or to sell items. It is surprising that 'aesthetic' minimalism was not correlated with producing less waste. Perhaps 'aesthetic' minimalists turnover their possessions more frequently, possibly in response to trends (Wilson et al., 2022), than those higher on the other minimalism dimensions.

3.4.1.3 Food

We did not expect minimalists to have a lower food footprint, since food preferences are not generally considered to be a part of minimalism. However, minimalism, and the 'FB' and 'mindful' minimalism subdimensions, were all negatively correlated with food footprint, suggesting that diet might be more central to the minimalist lifestyle than previously thought, though it is not clear to us why this might be. Future investigations might explore whether levels of environmental concern (discussed below) underlie our findings.

3.4.1.4 Transport

The literature is not clear about the role of travel behaviour in minimalist lifestyles. Minimalists might extend their preference for fewer possessions to having fewer or no cars (Paijmans et al., 2021). On the other hand, it is possible they might swap expenditure on material goods for practices like overseas holidays. In our study we found overall minimalism was not correlated with the travel footprint, but the 'FB' minimalism subdimension was. Our data suggest a possible explanation – 'FB' minimalists live in smaller homes, so they might have more flexibility as to where they live, which in turn may enable them to reduce their commute. Further research could probe the potential dynamics between house size, possessions, flexible housing choices and commute times.

3.4.1.5 Pet ownership and clothes

Only minimalism and 'FB' minimalism were correlated (negatively) with number of pets, although again the reason is not immediately clear. It could be that minimalists include pet ownership in their philosophy of wanting fewer possessions, or, since minimalists live in smaller homes, they might not have the room for pets. Again, future qualitative studies could tease out these connections.

As expected, minimalism, 'FB' minimalism, and 'mindful' minimalism were negatively correlated with number of clothes, although surprisingly 'aesthetic' minimalism was not. Again, this suggests that 'aesthetic' minimalists churn through purchases.

3.4.2 Minimalism and wellbeing

A second aim of the study investigated if minimalists have greater wellbeing, for which we found mixed evidence. Drilling down, we found 'FB' minimalism and 'mindful' minimalism were positively correlated with PANAS positive, but not PANAS negative, while 'aesthetic' minimalism was negatively correlated with PANAS negative. While the associations between minimalism and wellbeing outcomes were either small or non-significant, they were not negative, indicating minimalism does not adversely affect wellbeing.

These results are consistent with previous studies finding positive minimalism-wellbeing associations (Herziger et al., 2020; Kang et al., 2021; Malik et al., 2023; Shafqat et al., 2023). Our small effect size is similar to the small to medium effect sizes found by Hook et al. (2021) in their meta study of VS (a construct related to minimalism) and wellbeing.

Blackburn et al. (2023) suggest that lower levels of clutter might explain greater levels of wellbeing in minimalism. Clutter is associated with higher levels of stress, cortisol (D. Saxbe & R. L. Repetti, 2010) and procrastination (Ferrari et al., 2017), so reducing clutter may increase wellbeing. Another possible reason for the minimalism-wellbeing association is the financial benefits of minimalism. Presumably buying less saves money. Research suggests that minimalists have greater financial wellbeing, (Malik et al., 2023),

meaning they have control over their finances and have enough resources. An alternative interpretation is that happier people adopt minimalism, rather than minimalism practices increasing wellbeing. Longitudinal research could help identify the causal direction between minimalism and wellbeing.

3.4.3 Characteristics of minimalism

3.4.3.1 Identity, environmental concern, and minimalism

We found those who consider themselves to be a minimalist had the highest minimalism scale score, further validating the Wilson et al. (2022) minimalism scale. 'FB' minimalism and 'mindful' minimalism were associated with environmental concern, while 'aesthetic' minimalism showed no correlation. This is consistent with US survey results finding 46% of self-identified minimalists, 51% of those working towards minimalism, and 46% of those who one day want to be minimalists were very concerned about climate change and the environment (CivicScience, 2018). Our results suggest that at least some minimalists are concerned about the environment, providing further differentiation between 'aesthetic' minimalism and the other subdimensions. Future research could further explore the interconnections between minimalism and environmentalism; for example, qualitative approaches could unpack whether concern the environment drives a minimalist lifestyle, or whether adopting such a lifestyle makes environmentally considerations more salient.

3.4.3.2 Materialistic values and minimalism

We thought it likely that the low consumption of consumer goods underpinning minimalism might be reflected in low levels of materialism, but as discussed earlier, previous research on materialism and minimalism has been inconclusive. We found that minimalism and all three minimalism subdimensions negatively correlated with materialism, most markedly for 'FB' minimalism, which showed a medium-strength negative correlation.

Materialism can be thought of as sanctioning capitalism at an individual level (Hurst et al., 2013). Critiques of minimalism suggest that, despite minimalism appearing to be critical of capitalism, it does not question the structural challenges of growth capitalism (Meissner, 2019). Our finding that minimalists, including 'aesthetic' minimalists, are not materialistic, are at odds with this critique, although further research would elucidate whether minimalists are indeed critical of system-level processes.

3.4.3.3 Subjective social status and minimalism

Despite showing a negative correlation with materialism, we found that minimalism and its subdimensions were not correlated with subjective social status (how people perceive their rank relative to others). This is surprising given Atanasova et al. (2021) thought some minimalists consider having 'less' as a status signal. However, it is also possible that Cantril's ladder is a poor measure of social status. New research suggests the ladder measures both economic status and social status, such as need for respect and recognition, and is therefore not only a measure of social status (Galvan et al., 2023). This might be resolved in future research by having two ladders, one which asks about relative economic status and the other that asks about social status, thus disambiguating whether minimalists are unconcerned with status on one or both dimensions.

3.4.4 Theoretical implications

Research concerning the environmental motivations of minimalists is mixed. Wilson et al. (2022) concluded that concern for the environment was "not a necessary aspect for consumer minimalism" (p. 8), although it may encourage some to adopt minimalism. Martin-Woodhead (2022) found that environment is a motivation at least for some minimalists. In their review paper Blackburn et al. (2023) proposed that there might be two broad groups of minimalists, those who are interested in environmentalism (eco-minimalists) and those who are more interested in aesthetics. In our study, we found both a difference in footprint and environmental concern between the three minimalist subdimensions. The popular image of the minimalist lifestyle as a white, spare, pared-back home with few decorative objects is most closely represented by the 'aesthetic' minimalism sub-dimension. We found that, while 'aesthetic' minimalism was negatively

correlated with materialism, it was unrelated to ecological footprint, and environmental concern, (consistent with (Wilson et al., 2022). 'FB' minimalism, however, was associated with a lower total footprint, with all four footprint subcomponents, and with environmental concern. Moreover, 'FB' minimalism was associated with smaller, more energy-efficient homes, less waste, fewer clothes, and pets and with lower levels of materialism. 'FB' minimalism therefore may be conceptually similar to eco-minimalism, which has a presence on social media (Johnson, 2013; Ofei, 2023), albeit a lower presence than aesthetic minimalism. 'Mindful' minimalism seems to fall somewhere in between, correlating with a lower total footprint, and lower waste, lower materialism, and higher environmental concern, but not with the goods and transport footprint subcomponents or fewer pets. These different patterns across different sub-dimensions suggest two broad groups of minimalists: eco-minimalists and those more interested in aesthetics.

3.4.5 Limitations and future research

Several factors limit our study. As discussed in the introduction, measuring environmental impact is complex. While many details of the ecofootprint calculation method are known (Lin et al., 2018), the calculator is proprietary and its algorithms are not made public. This makes it challenging to replicate studies, as survey data must be entered manually. Also, the footprint uses self-reported data, leaving room for error. However, we suggest that such a measure is preferable to self-report scales of environmental behaviours, because it is based on measurable, high impact behaviours rather than low impact, difficult to measure behaviours. Relatedly, we relied on self-reported data to assess levels of minimalism, which, in conjunction with a measure for environmental impact, may have created a demand effect. Future research could attempt to replicate the associations found in the current study using observational methods such as diary-keeping alongside consumption tracking over time.

Another limitation is that wellbeing levels may have been impacted by the COVID-19 pandemic (Zaninotto et al., 2025), and this may have differentially impacted participants (for example, those who live in smaller houses may have been more negatively impacted

by lockdowns than others). Relatedly, given the study was cross-sectional, it is possible that among those who scored high on the minimalism scale, some had only recently adopted the lifestyle, giving insufficient time for any wellbeing benefits to be realised. Measuring wellbeing using the PANAS and life satisfaction scales may also insufficiently capture wellbeing. Given wellbeing is a multi-dimensional construct, VanderWeele et al. (2020) recommend using a range of measures to achieve a more accurate outcome. Other measures of wellbeing such as social connectedness, flourishing or eudemonic wellbeing could be considered in future research. Finally, we also recognise that our study relied on a convenience sample, thus limiting our ability to generalise our results to the population.

3.5 Conclusion

A minimalist lifestyle is financially inexpensive to adopt, as it does not require infrastructure like solar panels or electric cars and is available to renters as well as homeowners. We find evidence for two more factors that might facilitate the widespread adoption of the lifestyle: it's association with wellbeing, especially among younger age cohorts, and, unlike the other lifestyles we examined, the lack of association between adopting minimalist practices with demographic factors. Moreover, two thirds of our participants expressed an interest in adopting minimalism or were actively working on it. Given our data suggest a minimalist lifestyle is indeed associated with a reduced ecological footprint, the lifestyle shapes as a potentially fruitful pathway for reducing global emissions amongst the wealthy. We suggest further research explore in greater depth the individual motivations to engage in minimalism, to help guide the development of policy and structural changes necessary to encourage and maintain this lifestyle.

Chapter 4: Minimalist environmental practices, wellbeing, and potential for social influence

The place of Chapter 4 in this thesis

Chapter 4 aims to address:

Research Aim 3: Investigate the motivations, challenges, enablers and practices of minimalists

RQ 3.1. What motivates people to adopt minimalism?
RQ 3.2 What are the barriers and enablers to becoming a minimalist?
RQ 3.3 What environmental behaviours define minimalism?

Research Aim 4: Determine how minimalists might influence others and how minimalists are influenced

RQ 4.1 How do minimalists influence others to adopt minimalism?
RQ 4.2 What is the role of social influence in encouraging people to become minimalist?

Research Aim 5: Explain minimalist motivations

RQ 5.1 Can the three basic psychological needs of autonomy, competence, and relatedness outlined by self-determination theory, help explain why minimalism is associated with greater wellbeing outcomes?

In Chapter 3 minimalism was found to be negatively associated with ecological footprint, validating my assumption that minimalism is a low consumption lifestyle. I also found minimalism was positively associated with greater wellbeing. These results establish that it is worth pursuing a deeper investigation into minimalism as a low carbon lifestyle. To find out how and why people adopt minimalism despite the challenges of the consumptogenic system, in this chapter I investigate motivations, triggers, and barriers to adopting the lifestyle. Given these aspects are difficult to probe using quantitative methods, I chose a qualitative approach using interviews. I also investigate minimalist behaviours around use and disposal, to further understand their environmental behaviour. I also investigate the potential for minimalists to influence other people. Finally, I explore why minimalism is associated with positive wellbeing outcomes, guided by the framework of self-determination theory. This chapter has been submitted to the *Journal of Environmental Psychology* for publication and is presented as it was submitted to the journal.

Abstract

Demand side solutions such as reducing consumption are important for reducing carbon emissions, however structural and social forces make this challenging. Here we conduct an exploratory qualitative investigation (N=15) into the practices and challenges of people who practise a minimalist lifestyle. We identified environmental practices such as reuse and repair, giving possessions away and minimising disposal. Participants proactively reduced consumption by avoiding shopping, advertising, and social media, and modified gift-giving norms among friends and family. Participants seemed to influence others via modelling and social norms, potentially inspiring others to adopt the lifestyle. Importantly, our data suggested minimalism may enable participants to meet their basic psychological needs: competence (feeling organised); relatedness (time for family); and autonomy (ability to direct one's behaviour). Adoption of minimalism could be encouraged by communicating how psychological needs can be met by embracing the lifestyle.

4.1 Introduction

We all need to consume to meet basic needs such as nutrition and shelter, but as the world becomes more affluent, a greater proportion of consumption is non-essential. While technology offers promise with reducing emissions, it is not keeping up with rising consumption. Over half of global carbons emissions are due to the top decile of income earners: from an environmental and social justice perspective, it is imperative this group reduce consumption (Gore, 2021). A strategic place to start looking at reducing emissions is non-essential consumption. However, reducing consumption is challenging when living in a 'consumptogenic' society, where structural and social forces encourage over-consumption (Friel, 2022). Yet one group of people - minimalists - have voluntarily reduced their consumption. As such, minimalists could provide insights into behaviour to guide policy that could make structural changes necessary to reduce excess consumption amongst the affluent. In this study we explore how and why people adopt

minimalism, behaviours of minimalists (including environmental practices), challenges they face, and potential pathways to influence others to adopt the lifestyle.

Minimalism is a low-consumption lifestyle that took off around the 2008 global financial crisis (Dopierala, 2017). It is characterised by few belongings, mindful consumption and a preference for a sparse aesthetics (Wilson et al., 2022). Minimalism is a voluntary choice to consume less and is not adopted due to poverty. While a relatively new research area, initial investigations have considered motivations and triggers for adopting minimalism. Motivations for adopting minimalism include greater wellbeing (Kang et al., 2021; Shafqat et al., 2023), financial benefits (Malik et al., 2023), and increased time and space (Martin-Woodhead, 2022). Triggers for becoming a minimalist include a dislike of consumerism, learning about minimalism via books and social media, moving house, travelling, new jobs, and cluttered childhood homes (Martin-Woodhead, 2022; Mendonça et al., 2021).

While motivations and triggers for adopting minimalism are comparatively well researched, challenges associated with living a low-consumption lifestyle in a consumptogenic society are poorly understood. A study by Mendonça et al. (2021), identified several challenges associated with minimalism, including: transitioning away from happiness-linked consumption, decluttering sentimental items, pressure from other minimalists to abide by certain rules, and uncertainty about whether one can be a minimalist if wealthy. A recent systematic review considering eight types of low-consumption lifestyles, including minimalism, and found only 10 of the 85 studies considered negative consequences (e.g., social judgement) associated with these lifestyles (Riefler et al., 2024).

Another area lacking clarity is the relationship between minimalism and environmentalism. Individuals high in minimalism have a lower ecological footprint than average (Blackburn et al., 2025), but it unknown how this is achieved. Evidence for environmental motivations is mixed, with some researchers (Herziger et al., 2020; Martin-Woodhead, 2022) finding support for environmental concern, but others finding no evidence Vladimirova (2021). Martin-Woodhead (2022) noted that, while not all

participants in their study were motivated by environmentalism, adopting minimalism resulted in a sustainable outcome. Research investigating minimalist practices include minimalism scale creation (Kang et al., 2021; Wilson et al., 2022), and a qualitive study of UK minimalists (Martin-Woodhead, 2022). Wilson et al. (2022) defined three key practices of minimalists: buying less, mindful consumption, and a preference for sparse aesthetics. Kang et al. (2021) delineate four behaviours: clutter removal, cautious shopping, purchasing quality, durable goods, and self-sufficiency (defined as not on relying on possessions for happiness). Martin-Woodhead (2022) outline three behaviours: limited consumption, considered consumption, and ethical and sustainable consumption. While these studies are consistent regarding reduced consumption and mindful consumption, and a preference for quality over quantity, they do not agree on all behaviours that define minimalism. For example, Kang et al. (2021) and Martin-Woodhead (2022) include repair and reuse behaviours, but Wilson et al. (2022) do not. Wilson et al. (2022) include a preference for a minimal aesthetic, described as "simple design, clean lines, limited ornamentation and monochromatic colours" (p 5), while Kang et al. (2021) and Martin-Woodhead (2022) mention uncluttered spaces, but do not discuss aesthetics. Decluttering might result in a tidy environment, but it does not necessarily mean clean lines or a monochromatic palette. This has implications for environmental impact because focusing on aesthetics might result in frequent upgrading of belongings (Sandlin et al., 2022; Wilson et al., 2022) which end up in landfill or overwhelm charities, cancelling out positive environment impacts. Alternatively, retaining possessions for longer, and disposing thoughtfully via upcycling, reselling, or recycling, might result in a lower environmental impact. We are not aware of any studies describing how minimalists dispose of items.

Blackburn et al. (2023) proposed two broad categories of minimalism: eco-minimalism, which is focused on lower resource use, and aesthetic minimalism, which is more concerned with appearance. These two categories of minimalism may explain differing perspectives on both its link to environmentalism, and the practices which define it. Here we investigate if and when minimalists are interested in the environmental benefits of

minimalism, and if this relationship depends on the presence or absence of a focus on aesthetic minimalism. We also investigate how minimalists dispose of goods.

Environmental psychology has often focused on individual-level change, such as recycling, with less attention paid to the broader roles of individuals and their potential influence as citizens, community members, investors, employees, and members of organisations (K. S. Nielsen et al., 2021). People typically underestimate the influence of social norms (Nolan et al., 2008), despite research showing norms influence environmental behaviours such as adoption of solar panels (Palm, 2017). Little is known about how minimalists might influence others to adopt a low consumption lifestyle. One qualitative study of sartorial practices of European minimalists found they promote minimalism from the bottom up via social media (Derwanz, 2021), although other studies conclude minimalism will not result in collective action because it is too individualistic (Meissner, 2019; Rodriguez, 2017). In this study we investigate how minimalists might influence others to adopt the lifestyle.

4.1.1 Psychological basis for adopting minimalism

The idea that consuming fewer material goods will increase happiness is anathema for many in capitalist societies (Kasser, 2017), yet greater wellbeing has been associated with minimalism (Blackburn et al., 2025; Kang et al., 2021; Malik et al., 2023). Self-determination theory (SDT) offers a possible explanation for how minimalism might create greater wellbeing (E. L. Deci & R. M. Ryan, 2000). According to SDT, people thrive when three basic psychological needs are met: competence (feeling capable); autonomy (ability to direct one's behaviour); and relatedness (feelings of belonging). Research investigating voluntary simplicity (another low-consumption lifestyle) and psychological needs found adopting the lifestyle resulted in greater life satisfaction due to all three psychological needs being met (Rich et al., 2016). This might also hold true for minimalism, given the lifestyles are related (Blackburn et al., 2023). In a qualitative study of minimalism and SDT Lloyd et al. (2020) found minimalism met the needs for competence and autonomy, although relatedness was not discussed. Here we explore if

and how minimalists increase their experiences of basic psychological needs through minimalist practices.

4.1.2 Current study

This exploratory qualitative study uses in-depth interviews to explore minimalist environmental practices, challenges associated with adopting and maintaining minimalism, and how minimalists might influence others to adopt minimalism. We also investigate how SDT might explain minimalist motivations, and how minimalism might increase relatedness, a component of SDT yet unprobed. We investigate the relationship between sustainability and minimalist practices, including repair, reuse, and disposal behaviours, and aesthetics. We also aim to provide a richer understanding of minimalist motivations and triggers proposed by previous research.

4.2 Method

Fifteen participants were interviewed between November 2023 and January 2024. The sample size was based on a systematic review by Hennink and Kaiser (2022)**,** who found saturation occurred between 9-17 interviews, with a mean of 12-13 interviews. We concluded saturation was met after coding 14 interviews and no new codes were found. Ethics approval was granted by the University Human Ethics Committee (protocol 2023/249).

Eligibility for the study required participants live in Australia, be 18 years or older, and identify as a minimalist. Participants were recruited via emails to 16 Australian minimalist bloggers, advertising on Facebook (subsequently abandoned after receiving spam), and snowballing. Participants were interviewed via Zoom for approximately one hour. Interview times ranged between 33 and 83 minutes, with a mean of 58 minutes. Before the interview participants were emailed participant information and gave verbal consent. We used a semi-structured interview guide covering questions on motivations, triggers, practices, environmental behaviour, relationships, social norms, social influence, and

aesthetics (see Table 4.1 and Appendix C). Video recordings and transcripts were downloaded onto a secure server and deleted from Zoom.

Table 4.1 Example interview questions and responses

Topic	Question	Example response
Triggers	What prompted you to become a minimalist?	"*I just started doing it when we moved house ....and then I realized, oh my goodness, this is so freeing and my life is simpler, better*" (P3)
Motivations	What motivated you to adopt minimalism?	"*It does make me happy. And that's why I guess I've just continued doing it since such a young age*" (P4)
Challenges	Was it difficult to become a minimalist?	"*I think it's really difficult to become a minimalist. The shops, the advertising, the peer pressure, the marketing, everything in the world we live in, including governance systems is geared to just keep buying things*" (P12)
Consumption and disposal	How has your life changed since adopting minimalism in terms of your relationship with material goods?	"*For me, it's very much made me reflect on my purchases significantly more in terms of thinking like, do I need this? How many uses am I going to get out of this purchase*." (P11)
	What do you do with items you no longer want?	*"Mostly donate them. We've got couple of Op Shops here where I live... I just think it's really good to donate, ... so that they can get some money for their charity, but also so that people can buy affordable things because so much of what I got for my daughter I got it from the Op. Shop. ... it's nice to be able to give back*" (P8)
Environment	Was concern for the environment a motivation?	"*The environment is the first concern, but, secondly, I've noticed, when I have fewer things and an awareness of more space in my personal surroundings, fewer things make me feel lighter and less encumbered and it's just easier with less*" (P12)
	Since adopting minimalism has your attitude towards the environment changed?	"*I didn't really aim for involvement, but it turns out it is a by-product of the lifestyle*." (P2)
Relationships	Does minimalism affect social occasions?	"*We're probably the standout in the family around present giving, and a lot of them still love giving presents, whereas we're much more likely to give a consumable or an experience, or something like that*" (P3)
	Would you like to influence others to become minimalist or is it a personal pursuit?	"*Me and my partner, highly recommend* Buy Nothing *... but yeah, we never force it on anyone"* (P10)

Social norms	Before adopting minimalism did you care about what others thought about your clothes, house, and car?	"*When I was younger …I used to spend some money on my hair to get it permed and stuff like that. But not nowadays I don't really worry anymore*" (P1)
Aesthetic minimalism	Is aesthetic minimalism important to you?	"*I love it when my house is mostly empty, because I get a feeling of space*" (P13)

We used thematic analysis to analyse the data, following the Braun and Clarke (2006) six-step process: familiarisation, coding, creating themes, reviewing themes, defining themes, and writing up. For the familiarisation process transcripts were read at least twice. The first reading aimed to fix spelling and anonymise to preserve participants' privacy. The second reading involved comparing the Zoom-generated transcript against audio for accuracy. NVIVO 14.23.4 was used for coding and developing themes. We used open coding; codes were developed and revised during the coding process. Themes were analysed at both semantic (surface meaning) and latent (underlying ideas) levels. Semantic themes were based on research questions (e.g., what motivates people to adopt minimalism), while latent themes arose during the coding process (e.g., generosity versus stinginess). Coding and theme development was conducted by the primary author. To check reliability, another author coded three interviews and compared those codes with those created by the primary author. A third author reviewed codes created by the primary author, created their own themes, and compared these against themes created by the primary author. In both cases, there was consensus with most codes and themes, although terminology applied to themes was slightly different.

Participants' demographics are outlined in Table 4.2. Participants' ages ranged between 25-64 years (M= 44.40 years, Mdn= 42.00 years), time as a minimalist ranged between 2-25 years (M=11 years, Mdn=10), and household income ranged between AU $40 0000 to >$200 000. Nearly two-thirds of participants had a bachelor's degree or higher. The group was disproportionately female.

Table 4.2 Participant demographics

Participant	Age	Gender	Time as a minimalist (Years)	Education	Household income	Occupation
P1	64	F	25	Bachelor's degree	$50,000-$59,000	Public servant
P2	27	M	6	Master's degree	$80,000-$100000	Software engineer
P3	43	F	13	High-school diploma	$150,000-$199,000	Professional organiser
P4	33	F	10	TAFE diploma	$100, 000 - $150, 000	Administration
P5	54	F	2	Honour's degree	>$200,000	Business Development
P6	62	F	15-20	Master's degree	$50,000-$60,000	Human Resources and Professional organiser
P7	40	M	25	Post graduate diploma	$80,000-100,000	Professional organiser
P8	39	F	10	TAFE diploma	$40, 000-$50, 000	Administration
P9	42	F	11	Post graduate certificate	$150-$199, 999	Communications
P10	38	F	7	Master's degree	$100-$150, 000	Research manager
P11	25	F	3-4	Bachelor's degree	$80,000 -100,000	Public servant
P12	55	F	5-10	Bachelor's degree	$150-$200, 000	Editor
P13	49	F	10	Bachelor's degree	$50,000 -$60, 000	Wildlife Rescuer
P14	36	F	7	Honour's degree	$100-$150,000	Student
P15	59	F	11	Associate diploma	$40000-$50000	Graphic designer
Mean	44.4		11			
Median	42		10			

4.3 Results

4.3.1 Themes

The following section is organised around five broad themes: motivations, triggers, practices, values, and challenges. Themes and sub-themes are summarised in Table 4.3. When referring to the number of participants who expressed a similar sentiment, we used the following terminology: 'all' refers to all 15 participants, 'most' refers to 10-14 participants, 'some' refers to 4-9 participants and a 'few' refers to 2-3 participants.

Table 4.3 Themes and subthemes

Themes	Sub-theme
1. Motivations	Greater wellbeing
	Financial benefits
	More time
	Ethical considerations
2. Triggers	Frustration with consumerism
	Learning about minimalism
	Consolidating/splitting households
	Cluttered childhood homes
	Always a minimalist
3. Minimalist practices	Edit possessions
	Acquire less
	Prolong product life
	Mindful acquisition
	Generous and thoughtful disposal
	Other environmental practices
	Aesthetic minimalism
	Influencing others
4. Minimalist values	Sense of enough
	Less concerned with social norms
	Dislike of consumerism
5. Challenges	Managing the influx of goods into the home
	Other householders' possessions
	Consumerism and advertising
	Norms around gift-giving
	Decluttering process

4.3.1.1 Motivations to become a minimalist

Participants expressed multiple motivations for becoming a minimalist, including greater wellbeing, financial benefits, more time, and ethical motivations.

Greater wellbeing was mentioned by all but one participant; “I feel much calmer and relaxed, less stressed. I feel like I've got space to just curl up in a comfy chair with a book and not worry about things around me” (P12). Participants reported feeling more in control (n=8), lighter (n=4), and calmer (n=4), and minimalism reduced the burden of decision making (n=3). The benefits of a “calming and restful” (P6) home were particularly helpful for participants who reported mental health issues (n=4).

Most reported **financial benefits** as a primary and secondary motivation (n=9), providing participants with more flexibility about how they lived; “we don't have the pressure ...to work full-time, ... lots of our friends work full-time, not because they want to, because they have to” (P3). Minimalism enabled participants to have a small mortgage, work four days a week, start a small business, live in a smaller less costly home, or be debt-free despite a low income (n=6). Some participants reported minimalism motivated them to stop shopping recreational shopping (n=4), providing financial benefits. Two participants hoped minimalism could help them reach financial independence and retire early.

Most participants reported **more time** as a motivation for, and outcome of, adopting minimalism (n=10); “I hate cleaning with a passion. I don’t want to be spending my weekends with a big yard, mowing lawns, maintaining a house” (P7). Participants reported spending less time shopping, cleaning, and maintaining homes (n=9), creating more time for family and friends; “we've got so much more time to be creative, to get bored, to play games” (P3).

Several participants reported **ethical considerations**, with four saying the environment is their main concern; “definitely concern for the environment ... that's why when we buy, we try to buy second-hand cause it's already in existence” (P8). Two mentioned religious reasons for adopting minimalism, although ultimately this was about environmental

stewardship. Environment was also mentioned as a secondary motivation for all but one participant. (Environmental behaviour is discussed in Section 4.3.1.3).

4.3.1.2 Triggers for adopting minimalism

Triggers to adopt minimalism included: a dislike of consumerism (n=8), consolidating or splitting households (n=6), learning about minimalism (n=5), and cluttered childhood homes (n=3). One participant felt they were always a minimalist. Disliking consumerism was the most common impetus for adopting minimalism. “Something that really appealed to me about minimalism is it's so contrary to capitalism and the way our society works, like work, work, work, and then you can buy more things” (P8). Consolidating or splitting households occurred after a relationship breakdown or pairing, moving house, or managing deceased estates. One participant observed after managing three deceased estates. “how much is frivolous or purchased without thinking too hard about its utility or value” (P12). Another was inspired to adopt minimalism after backpacking around Europe and realising they did not need much. Learning about minimalism from minimalist bloggers, authors, and YouTubers was also mentioned as a trigger (n=5). The Minimalists (bloggers) “got me thinking about what I owned and why I needed it or wanted it” (P12). A few were inspired to adopt minimalism after growing up in cluttered homes; “I used to try and sleep over at friends’ houses, just trying to escape the environment” (P14). (Consumerism is discussed in Sections 3.1.4 and Section 3.1.5).

4.3.1.3 Minimalist practices

We identified five core minimalist practices: editing possessions, acquiring less, prolonging product life, mindful acquisition, and generous and thoughtful disposal. Participants also practised environmental behaviours, aesthetic minimalism, and appeared to influence others.

Editing possessions varied depending on the stage of minimalism. Three participants were still in the decluttering phase, while most maintained minimalism via regular decluttering sessions. “When I'm bored, I just go around the house opening drawers and find things to get rid of” (P10). Another participant used the one in, one out rule. One

participant reviewed their children's rooms every four months, and asked them what they don't play with anymore, but "I can never force them to get rid of anything" (P4). Most gave items away because they wanted to be generous and share what they did not need (see Generosity and disposal below).

All participants reported acquiring less by shopping less often. Some noted since adopting minimalism they no long practised recreational shopping (n=5): "I don't see shopping as a hobby or entertainment anymore" (P15) and did not buy things just "because they were on sale" (P7). A few had never been interested in shopping: "I don't know that I've ever just wandered the shops, actually I can't think of anything worse" (P3). Some preferred experiences to shopping, "now we go to the park" (P1), and gave experiences as presents (n=7). To limit the temptation to shop, some eschewed advertising and social media by closing social media accounts, or specifically avoided going to shopping centres (n=4). Most participants asked friends and family to adhere to gift policies to reduce the influx of goods into the house (see Section 4.3.1.5).

Most participants reported prolonging product life by reusing and repairing items to keep items in circulation (n=10). One participant picked up a $1000 coffee machine on Buy Nothing and fixed the steam wand, "it's not that complicated... the previous owner probably didn't want to deal with it" (P10). Another noted that while it cost money to fix things, they would rather fix it than "just throw it out and go and get a brand new one" (P6). With clothes or items that deteriorate over time participants were keen to use them "until it's dead, dead, dead" (P3). Product-life was extended when participants chose to give away or sell items no longer needed, rather than send it to landfill (see Generosity and disposal section below).

Participants reported practicing mindful acquisition when deciding what to own and when to upgrade, and only purchased things "if absolutely necessary" (P4). "I will wait until it's actually broken, then I will reluctantly upgrade" (P15). Before obtaining a new or second-hand object participants considered their needs or even doing without, "it's not often I'll buy something just on a whim" (P14). Buying second-hand or obtaining free items

from Buy Nothing was often a priority (n=5). Some purchased new or refurbished electronics, but other goods were largely second-hand (n=4). Three participants normally purchased new quality goods. If participants did buy new, “often we wait first” (P3) and would research new items beforehand (n=3). Some mentioned the importance of quality items (n=7) with long warranties, which P2 called “buy it for life”. Five participants mentioned borrowing items such as toys, books, and tools. The end of life of items was also a consideration: “when I buy things, I nearly always think where this will go at the end of its life” (P12).

Discarding goods was often generous and thoughtful; “it gives me a lot of pleasure to help people” (P2). Most participants preferred giving things away (n=12) than selling, “so they can get some money for their charity, but also so people can buy affordable things” (P4). One participant noted previously she recorded who she lent books to, but now “if I'm going to lend a book to someone, they can just have it” (P15). A few reported they preferred to give items while it still had value, another asked people in their community if they would like the item; “I don't need any money for it” (P6). One participant considered charity shops a place of storage and noted you never really own something, “even if you keep it for 20 years” (P9). Another noted “because people are so generous [in her Buy Nothing group] it encourages you to be generous as well. People are giving away really expensive, nice stuff” (P10).

For many, minimalism had tuned them onto the problem of disposal, which they had previously not been particularly aware of: “if we can stop all consumption from where it began, we wouldn't have this issue with waste” (P7). If items no longer had value, most took pains to recycle or dispose of it properly. Some used speciality recycling services (n=4) such as Terracycle – an organisation that recycles small items like pens. A participant who worked as a professional organiser noted “people with a lot of clutter don't dispose of things thoughtfully because they don't have the headspace to” (P3).

Environmental practices varied. For most participants it was a secondary motivation. “I didn't [become] minimalist because I was thinking about the environment. I just really want to have less stuff” (P10). Almost all participants reported being concerned with the

environmental impact of consuming goods and their disposal. Buying less, purchasing second-hand goods and waste reduction were the most frequently mentioned environmental behaviours. Some reported reducing food waste, composting or using a worm farm (n=5), and a few purchased from bulk food shops. Participants also reported making do, buying multipurpose goods, buying quality, repair, and reuse, and keeping goods in circulation. Some were concerned about what happened to goods at end of life (n=6); "whenever I purchase something …I think about the life cycle of the object a lot" (P14).

Other environmental practices did not appear directly related to minimalism. Ten participants mentioned plant-based diets or meat minimalism, but reported it was for ethical, health or environmental reasons and not inspired by minimalism. A few grew food (n=3) and one had chickens. Five participants mentioned energy efficiency: four had installed doubled-glazed windows and insulation or solar panels and one owned a 5-star green-rated apartment. A few mentioned sustainable transport: one walked or took public transport because they did not drive; one liked living in the city centre because they could walk everywhere; and another previously cycled or took public transport to work, but now worked at home.

Most participants noted the benefits of minimalism included a calm and tidy home, but not necessarily the clinical aesthetic often portrayed on social media. "*I don't want a completely white house that is impossible to maintain, but aesthetic minimalism in the sense of a sense of calm*" (P5). Another reported not wanting a home like Joshua Becker (minimalist blogger) "*where there is pretty much nothing*" (P6). Some liked plants, art, and colour (n=7): "*I definitely have a few plants scattered around so I wouldn't say I'm super minimal … but I am pretty minimal compared to most*" (P14), while another noted "*I don't think anyone would walk in and say, it's aesthetically minimalist, because there's colour….but there's not stuff on flat surfaces"* (P3).

Participants appeared to **influence others** by talking about and modelling minimalism. Some reported not wanting to evangelise (n=8) but were happy to help anyone who asked

about minimalism or decluttering. Participants appeared to influence friends and family via gift-giving policies (n=9) and participating in Buy Nothing and Freecycle groups (n=6), and by modelling minimal homes and wardrobes. "*I don't influence my friends, but I do try to influence my partner, because we live in the same house …we also recommend* Buy Nothing *to friends*" (P10). Another noted both her children had become minimalists, and one participant had influenced her sister and friends but commented she would "*never force it on someone*" (P4). Another said, "*I have to remind myself the best way to influence people is just to be yourself, do your thing, and that in itself is setting an example*" (P12). Another hoped others would conclude from her home that you can "*live in a beautiful home and not have too much stuff and still be happy*" (P14), but she did not want to preach minimalism. One participant reported that people noticed their choices; a new friend visited and said "*Have you just moved in? Where is all your stuff?*" (P8). They were also influenced by a children's party invite that said, "*we love second-hand presents*", prompting her to do the same at her child's party.

Participants seemed to influence others by sharing information and via career choices[10]. Three were professional organisers and a fourth was about to start an organising business. One professional organiser noted while he did not tell people to become a minimalist "*I do educate over the benefits of less*" (P7). Two participants blogged and had written books about minimalism and decluttering, and one was a Councillor, elected on a sustainability platform. Two participants influenced the organisation of a conference by recommending against "*a conference bag full of junk …no one wants a sticker*" (P15).

4.3.1.4 Values

Commonly expressed values throughout the interviews included a 'sense of enough', reduced concern for social norms, and a dislike of consumerism.

Most participants commented on the concept of '**enough**' (n=11); "*I just have basic stuff that I need, and that's about it*" (P4). Participants questioned how much they had; "*Do I*

[10] Given bloggers and professional organisers were targeted as part of the study recruitment method, this may have contributed to these findings.

really need this much stuff? There are other people who need things" (P5), and were discerning about needs versus wants, as one noted, "*I just need one set of sheets for visitors… because I can wash them*" (P6). Another admitted they wanted a full set of art pens; "*it would be nice to complete the set, but I don't need them. I've got enough*" (P15). Two participants were confident if they got rid of something and later needed it, it would turn up, or someone would gift it to them. A few chose to live in smaller homes, in part because of financial benefits, but also because they felt it was enough. "*This apartment is small… but … I feel like I've got enough. Everything I want to do in it, I ca*n" (P7). One noted "*enough was the issue*" for previous generations, but now "*you can buy anything, at any time, literally 24/7*" (P9), while another reported "*there's so much wealth [in Australia] compared to my country*" (P13).

Participants reported which basic goods they did not own, including televisions, microwaves, coffee tables, and even a bed (n=5). Participants were aware they were unusual in this respect; "*much to my mother's horror, we don't have a microwave*" (P8). Some reported not owning positional/status goods such as air fryers, a Thermomix (multipurpose cooker), or fancy TVs (n=4). Some owned old phones and felt no need to upgrade (n=4); "*some people need to have the latest iPhone. I don't care about all those things*" (P1). They expressed disdain about status goods, noting basic goods could often achieve the same result. However, there were some exceptions. One participant admitted they had the latest iPhone which they hoped to keep for a long time after getting frustrated with the battery failing in their Fairphone, but acknowledged her friends disapproved. Two people owned a Thermomix, with one noting their mother-in-law owned numerous small appliances and had probably spent more than they had on "*a single quality appliance*" (P9).

Most participants seemed not especially concerned with **social norms** around consumption (n=10) but were aware they were different. One participant reported if her mother was still alive, she would probably judge her, "*but that doesn't worry me*" (P1). One was not interested in "*keeping up with the Joneses*" (P15), and another was "*quite proud to be a second-hand Vinnies girl*" (P10). Some participants were more concerned

about norms when they were younger (n=5). A few reported going against social norms could be uncomfortable, "*you're the odd one*" (P14), while another reported their partner faced social pressure at work when colleagues talked about investment portfolios and cars, but their friends were different, "*the people we know talk about tomatoes*" (P9). Another participant reported that, when people talked about new possessions at parties, he would say "*I don't own these things, but this is by choice, not because I'm poor or don't have money*" (P2). A few reported how social pressures to consume had increased; "*I'm terrified for when my daughter starts high school*" (P4). Ultimately, all participants felt it was worth going against norms; "*the enjoyment for us in reducing the quantity of possessions outweighed the pull*" (P3).

Consumerism was strongly critiqued by most participants (n=11), and the pressures of living in a consumerist society were often mentioned; "*everything is geared around a profit for somebody*." (P12). Participants disliked going to shopping centres because "*it sucks you in subliminally to spend*". One was shocked at the phenomenon of 'Christmas mums' (P14), who purchase matching Christmas pyjamas for family members yearly. Another reported "*everything being cheap means people don't use things for an extended period of time*" (P5). A few recognised it was counter-cultural to be minimalist; "it's *almost rebellious ... [its] against the capitalist idea of life*" (P6), and some boycotted multinationals like Temu and Amazon. (Advertising is discussed in Section 4.3.1.5).

4.3.1.5 Challenges of minimalism

Most reported it was challenging to reduce the influx of goods into the home, which was influenced by gift-giving rituals, other people's possessions, and consumerism. Some found decluttering challenging.

Managing the influx of goods into the home was a challenge, especially ***gift-giving rituals*** which some participants found socially awkward. One participant recounted an occasion where she was asked not to bring presents, and everyone but her brought one; "*I was like, oh, did I just make a social boo-boo?*" (P3). One participant's daughter married into a family that spent big on presents, which she found difficult, while (P15) reported

gift-giving instils a sense of obligation. Participants noted gift-giving was especially challenging with children; "*I don't want to be strict with that sort of stuff. I don't want to tell people, she can't have plastic toys*," (P8). Yet most refused to participate in the gift economy; "*I can't remember the last time we just bought a thing for someone.... I can't do it anymore*" (P3). Another said about Christmas gifts, "*just getting together and having a meal together is enough*" (P12). Most had come to an agreement with family members about gift-giving, such as only giving children presents, buying children second-hand gifts, or giving handmade items, consumables, or experiences.

Other people's possessions, especially those belonging to partners and/or children,[11] presented a challenge for participants via increased volume of possessions in the home (n=6). "*A little person has so much stuff .... you need a booster chair, the highchair, the car seat*" (P8). Others found their partners had different values (n=4); including an ex-husband who was a hoarder. However, participants reported it was important to give partners and children space to live life their way; "*of course, I'm not going to throw out all their toys, they're kids ... I have to be okay with it because it's their things*" (P4).

Most participants mentioned the influence of ***social media and advertising*** (n=11). "*The shops, the advertising, the peer pressure, the marketing, everything in the world we live in, including governance systems is geared to keep [us] buying things*" (P12). A participant who previously worked in graphic design recognised "*part of my profession is manipulative*" (P15). Another reflected on the influence of tailored advertising; "*I'm taken in by the marketing, even though I'm not a big shopper ... I'm still susceptible to that stuff*" (P8). Another participant did not want to be a "*prisoner to consumption*" but technology upgrades made it difficult; "*technically you don't need Air Pods ... but now it's really hard ... to go back to wired earphones*" (P2). Two participants responded to advertising by deleting social media accounts. Participants noted the time cost of social media and 'fake' friends, although a few participants said they found out about minimalism via social media or used Facebook for Buy Nothing (n=2).

[11] Ten of the 15 participants had partners and six had children.

Decluttering was challenging for one third of participants. Two participants found it difficult get rid of items because they "*might need it one day*" (P12. A few found sentimental items hard to deal with, although conversely a few reported not being sentimental. Another noted decluttering decision-making could be overwhelming. A few found minimising books, shoes, and art supplies especially difficult.

4.4 Discussion

We set out to investigate motivations, triggers, practices, and challenges of minimalism. We also investigated if and when minimalists are interested in sustainability benefits of minimalism, and how minimalists might influence others. Consistent with previous research, we found participants were motivated by greater wellbeing, financial benefits, more time and space, and ethical considerations. Novel findings included concern about the environmental cost of disposing goods and the centrality of generous and thoughtful disposal to minimalist practice. We confirmed and expanded triggers for adopting minimalism, finding a dislike of consumerism, households merging or splitting (due to relationship breakdown or formation, moving, or managing deceased estates), learning about minimalism, cluttered childhoods, and a gradual realisation in response to minimalist literature or social media, were all important triggers for adopting minimalism. Novel findings concerned how participants were able to adopt minimalism despite challenges. Our findings also revealed participants appeared to exert social influence on others by modelling minimalism behaviours, careers and promoting norms around gift giving, despite not wanting to push minimalism onto others.

4.4.1 Challenges

Our results provide insight into ways people can reduce consumption and maintain this reduction despite pervasive influence of advertising and social norms. Challenges with adopting minimalism included the influence of consumerism, and for some detaching from sentimental items, confirming findings of Mendonça et al. (2021). Additional challenges included household members' possessions and negotiating norms around gift-giving. Unlike Mendonça et al. (2021), our participants did not report feeling

constrained by rules imposed by other minimalists, or question whether it was possible to be both a minimalist and wealthy. Participants resisted consumerism in three ways. First, participants tried to shift gift-giving norms of friends and family. Declaring minimalist intentions helped to change family and friendship culture, thus eliminating the expectation of gift-giving. Second, changing or reinforcing values, moving from more extrinsic values about norms and status to more intrinsic values. This included being clear about their point of enough; including foregoing goods many would consider necessary, such as televisions (99% of Australians own a television (ABS, 2001)), or high status (e.g. an iPhone). This willingness to forego consumer goods suggests a lack of concern for social status, or alternatively, wanting to practise conspicuous non-consumption, a different signifier of status (Sen et al., 2024). Third, participants reduced the influx of goods into the home. They avoided shopping, limited social media, avoided advertising and boycotted multinationals such as Amazon, and retained items by reusing and repairing. These findings support research by (Blackburn et al., 2025; Herziger et al., 2020) who found minimalists are low in materialism, although the causal direction is unclear – whether participants were always low in materialism or did materialism declined after adopting the lifestyle.

4.4.2 Minimalist environmental behaviours

Our interviews revealed insights into possible explanations for lower footprint (Blackburn et al., 2025). Participants described environmental behaviours, including reducing the influx of goods into homes and thoughtful disposal behaviours. They also practised reuse and repair and purchased second-hand goods, behaviours reported by Martin-Woodhead (2022) and Kang et al. (2021) but differing from Wilson et al. (2022). Participants also reported sustainable behaviours which appeared unrelated to minimalism, such as switching to plant-based diets, using green transport, and adopting energy-efficient practices, Given this is an explorative qualitative study further research is required. A longitudinal study might explore whether adopting minimalism ‘spills over’ to other environmental behaviours, and if that does occur, over what timeframe and what are the causal mechanisms.

The environment was a secondary motivator for most participants, also found by Martin-Woodhead (2022), but contrasting with Wilson et al. (2022) who consider environmentalism unnecessary for minimalism. Most adopted minimalism to feel calmer, more organised, and have more time and money, but the process of reducing consumption prompted an awareness of the lifecycle of goods, resulting in generous and thoughtful disposal. Participants reported wanting items back in circulation rather than being unused and losing value, and gave away items rather than selling. Given that minimalism may be individualistic (Meissner, 2019; Rodriguez, 2017; Uggla, 2019), this theme of generosity and community-minded environmental practices is surprising. More complex motivations around disposal, such as wanting to alleviate guilt due to purchasing are also possible. Further research could probe psychological functions served by searching for alternatives to disposal.

The findings on disposal contrast with a critique by Sandlin et al. (2022), who speculated that minimalism encourages churn and wasteful disposal. Given participants were careful to avoid acquiring items, engaged in repair and reuse, purchased second-hand goods, and indicated their preference for sparse aesthetics was primarily about clean and tidy and not 'Instagram minimalism', churn seems unlikely. These results give credence to the idea proposed by (Blackburn et al., 2023) that minimalists could be grouped as either 'eco-minimalists', who are primarily concerned with reducing consumption for environmental reasons, or 'aesthetic minimalists', who are primarily concerned with appearances. This division perhaps explains the mixed findings in the literature on environmentalism including Wilson et al. (2022) who thought repair and reuse and purchasing second-hand furniture was not part of minimalism. The different behaviours of eco-minimalists and aesthetic minimalists could be further explored in a quantitative study.

4.4.3 Social influence

Another novel finding from this study is participants appeared to influence others to adopt minimalist practices, potentially revealing ways for minimalist practices to spread, although the effectiveness of this influence is unclear. Participants thought it

inappropriate to force their ideas on others but were pleased if others were influenced. Participants observed friends and family either becoming more minimal, or at least, acknowledging the possibility of living differently. They appeared to influence family, friends, and their community more broadly by participating in the circular economy, for example supporting Buy Nothing groups and second-hand shops, demonstrating that it is not necessary to buy new. Some participants seemed to influence others by promoting minimalism in the workplace. Future quantitative studies could trace the level of impact of social processes by measuring the extent to which minimalists were influenced by others' practices. These findings, when combined with those on environmental behaviours, suggest reconsidering the idea that minimalism is purely individualistic.

4.4.4 Theoretical implications - self-determination theory

We found some qualitative evidence that suggests minimalism may meet all three needs articulated in SDT (Ryan et al., 2000), including, for the first time, relatedness. Feelings of *competence* seemed to arise from feeling better organised and less overwhelm due to owning less. Competence might also arise when fixing or repairing things such as a $1000 coffee maker. Feelings of *autonomy* seemed to arise from better control over finances, giving participants freedom to start a business, pay off mortgages, or be debt-free despite a low income. Another source of autonomy may arise from feeling able to escape the hedonic treadmill of consumerism. There was mixed evidence for relatedness. On the one hand some participants noted that minimalism was a nonnormative behaviour (for example not giving physical gifts), although participants also reported that adopting minimalism resulted in more time with family and friends due to less time spent shopping and cleaning. Participants reported they enjoyed sharing skills and possessions with others, activities which may increase relatedness. Some participants were asked by friends and family for advice or help with decluttering, while others shared skills via their career. Participants also reported they enjoyed sharing possessions by giving items away, which may contribute to feeling part of a community. Community groups such as Buy Nothing were reported as important for finding 'people like me'. Although, some reported that Buy Nothing was for transactional purposes only - useful to find information and

dispose of possessions. Together these findings indicate there is some exploratory qualitative evidence that minimalism may increase feelings of competence, autonomy and possibly relatedness. However future quantitative research is essential to determine the nature of these relationships.

4.4.5 Implications and limitations

Based on themes from participant conversations, we propose several areas where structural changes could support sufficiency practices and lower consumption. First, governments, industry, and civil society could encourage take-up of minimalism by publicising the benefits of embracing minimalism. For example, smaller homes could be encouraged via a downsizer tax rebate available in Australia (ATO, 2024). Second, participants noted it was not always easy or cheap to repair items. A crucial impediment is the inadequacy (or absence) of right-to-repair legislation, and lack of mandated minimum warranty periods. While the European Union recently adopted right-to-repair legislation (European Parliament, 2024, April 23), many other countries do not have such legislation. Governments could also bolster support for communities to reuse and repair goods by funding repair cafes, tool libraries, and expand the role of public libraries. Third, participants mentioned a lack of speciality recycling services such as textile recycling. Governments could support the growth of speciality recycling and require products are made with recyclable materials. To make recycling easier, industry could design furniture, clothing, and electricals for end-of-life recovery (Borg et al., 2024). Fourth, participants highlighted how advertising and social media encourage consumption. This could be addressed via policy and legislation that enable greater privacy controls, such as leadership shown by the European Union via its *General Data Protection Regulation 2016* and *The Digital Services Act 2022*. Industry could assist by ensuring opt-out provisions are easy to find, and by providing short, easy-to-read explanations of how data is used.

We acknowledge several limitations with our research. Given the limits to generalisability posed by a small convenience sample with self-reported data, findings from this study should be validated via different approaches, including quantitative methods. Moreover,

our interviewees were predominantly female. Males may be attracted to minimalism for different reasons and have different practices to females. Relatedly, given the median time as a minimalist was 10 years, participants may have had difficulty remembering their initial motivations and early challenges with adopting minimalism. Minimalist bloggers and professional organisers were targeted in the study recruitment which may have made some findings, such as influencing others via their career, more prominent than had the sample been recruited via a different method. Future research should aim to achieve a more even gender balance and recruit those who have recently adopted minimalism, and who are less expert in minimalist practices than bloggers or organisers may be. Another area for future research is to investigate how participants were able to negotiate shared spaces; while participants accepted partner and children's behaviour, it was not clear how they negotiated for minimalism in communal areas.

4.5 Conclusion

People who voluntarily adopt a minimalist lifestyle offer insights into how to reduce consumption despite structural and social consumptive forces existing in the Global North. Our exploratory qualitative study suggests that participants proactively sought to reduce the volume of goods coming into the home by avoiding shopping and advertising and changing social norms amongst family and friends to reduce gift-giving. Participants expressed lifestyle benefits such as increased wellbeing, more time with friends and family, saving money, and a better alignment with values including environmental motivations. Importantly, our data suggests that minimalism may enable people to meet basic psychological needs of autonomy, competence, and possibly relatedness. Future quantitative research is necessary to determine this relationship. While there were challenges with adopting minimalism, the benefits were thought to outweigh costs. Surprisingly, our participants mentioned environmental practices seemingly unrelated to minimalism. Minimalism appears to be related to environmentalism. Further quantitative research might explore the direction of causality. We found no evidence for aesthetically-driven churn of goods; rather, aesthetic considerations were about 'tidy and calm' homes. Moreover, many attitudes, behaviours, and values expressed by participants

countered the notion that minimalism is individualistic. Participants appeared interested in influencing others via modelling and providing advice, while eschewing some social norms. We propose that promoting the psychological benefits of minimalism, pushing for tighter controls on advertising and right-to-repair legislation, and greater support for repair cafes, will help a greater range of people adopt, maintain, and promote minimalist lifestyles which offer the double dividend of greater wellbeing and a lower footprint.

Chapter 5: Minimalism, wellbeing, and social influence

The place of Chapter 5 in this thesis

Chapter 5 aims to address:

Research Aim 4. Determine how minimalists might influence others and how minimalists are influenced

RQ 4.1 Do minimalists influence others to adopt minimalism?
RQ 4.2 What is the role of social influence in encouraging people to become minimalist?

Research Aim 5. Explain minimalist motivations

RQ 5.1 Why is minimalism associated with positive wellbeing outcomes? Could the three basic psychological needs of autonomy, competence and relatedness outlined by self-determination theory, help explain the positive wellbeing outcomes?

The qualitative investigation in Chapter 4 supported the notion that the main motivation for adopting minimalism was greater wellbeing. The data also suggested that minimalism might enable participants to have their basic psychological needs met - competence, autonomy, and relatedness - as outlined by self-determination theory. In this chapter I aim to further interrogate this proposition via mediation analysis. In Chapter 4, I also found participants seem to influence others via modelling a minimalist home and wardrobe, changing gift-giving norms among family and friends, and in the workplace. In this study I aim to explore quantitatively the prevalence of minimalist social influence via modelling minimalist behaviours and collective action. This chapter has been submitted to the *Journal of Happiness Studies* for publication and is presented as it was submitted to the journal.

Abstract

Consumption by the global top decile of income earners is disproportionately responsible for climate change emissions. But despite having greater financial capability and awareness of climate change, research suggests the wealthy fail to reduce consumption because they associate it with sacrifice and reduced wellbeing. Yet one

group of people - minimalists, who voluntarily reduce consumption of material goods - are associated with a lower carbon footprint and wellbeing benefits. In this study of adult Australians (N=359), we explore why minimalists have greater wellbeing, by examining whether basic psychological needs mediate between minimalism and wellbeing. We also explore the potential for minimalism to spread among the community. Consistent with previous research, we found that minimalism is positively associated with wellbeing outcomes. Moreover, autonomy, relatedness, and competence (basic psychological needs articulated in self-determination theory) mediated the relationship between minimalism and several positive wellbeing outcomes, with competence being a consistent mediator. Surprisingly, minimalists were not influenced by social norms. However, despite claims minimalists are individualistic, we found high levels of minimalism were associated with attempts to influence others via exemplifying minimalist practices, as well as collective actions such as talking to others about minimalism, using online tools to raise awareness, and making changes at work. Our findings suggest that minimalism may offer a viable and scalable strategy for reducing consumption.

Key words: minimalism, wellbeing, self-determination theory, social influence, social norms

5.1 Introduction

Achieving a balance between ‘the good life’ and lower emissions is an imperative for reaching net zero emission targets. However, improved efficiency of technology will need to be combined with reduced consumption to lower emissions and this will depend on cooperation from the wealthy (Wiedmann et al., 2020). Consumption by the global wealthy, the top decile of income earners, is disproportionately responsible for climate change (Chancel et al., 2022), but this group associate reduced consumption with lower wellbeing (Moorcroft et al., 2025). Research involving the wealthiest decile of UK households found they were more influential regarding climate change than other groups; they were more knowledgeable and aware of climate change, had financial resources to adopt green technology, supported climate policies, and were influential in

their professional and personal networks (Moorcroft et al., 2025). However, they were not motivated to reduce their consumption because they equated it with sacrifice and reduced wellbeing. Yet there is a group of people - minimalists – who have voluntarily adopted a lifestyle of reduced consumption despite the structural and social forces that encourage the reverse. Minimalism is a lifestyle characterised by owning few possessions, mindful acquisition, and a focus on aesthetics (Kang et al., 2021; Wilson et al., 2022). It is also a lifestyle associated with greater wellbeing and lower ecological footprint (Blackburn et al., 2025). Minimalists might offer insights on how individuals can reduce consumption without sacrifice. This study addresses the question of why minimalism is associated with positive wellbeing outcomes, using self-determination theory to investigate possible psychological mechanisms. It also investigates the potential pathways through which minimalism may diffuse throughout the community.

5.1.1 Minimalism, wellbeing, and self-determination theory

Greater wellbeing has been identified as both a motivation for and an outcome of adopting minimalism, via both quantitative and qualitative research. Previous research identifies positive associations between minimalism and flourishing (Kang et al., 2021; Shafqat et al., 2023), between minimalism and positive and negative affect and, for younger people, between minimalism and life satisfaction (Blackburn et al., 2025). In a similar vein, Herziger et al. (2020) found stress reduction was ranked first when participants were asked why they adopted minimalism. Several qualitative studies have also observed a link between minimalism and greater wellbeing (Lloyd et al., 2020; Martin-Woodhead, 2022; Vladimirova, 2021). Together, these studies provide promising evidence for the minimalism-wellbeing link; however, to our knowledge, factors that mediate this relationship have not been quantitatively investigated. Self-determination theory, an overarching theory of motivation, may offer insights into the mechanisms through which adoption of minimalist practices contributes to positive wellbeing outcomes.

Self-determination theory states that when three basic psychological needs of autonomy (ability to act or choose), competence (feeling capable), and relatedness (feeling connected) are met, the more self-determined an individual is, and the more intrinsic their motivation, which in turn leads to greater wellbeing (Ryan & Deci, 2000). Preliminary research suggests minimalism might be able to meet these needs. Based on qualitative evidence drawn from interviews with 15 minimalists, Blackburn et al. (under review) propose that feelings of autonomy might occur by feeling able to resist capitalism's push to consume, feelings of competence might accrue from being more organised (because there are fewer items to manage), and feelings of relatedness may result from having more time to socialise.

Researchers have used self-determination theory to explain the adoption of pro-environmental behaviour, and voluntary simplicity - a low-consumption lifestyle related, though distinct from minimalism (Cooke et al., 2015; Rich et al., 2016; Taljaard et al., 2019). Cooke et al (2015) found self-determined motivation was related to carrying out more pro-environmental behaviours, including behaviours perceived as difficult such as reducing meat consumption (Cooke et al., 2015). A study of voluntary simplicity found greater psychological need satisfaction, especially autonomy, was related to simplifying behaviours and greater wellbeing (Rich et al., 2016). Another study considered self-determined motivation and adoption of voluntary simplicity clothing practices such as purchasing clothes made from organic cotton (Taljaard et al., 2019). They found intrinsic motivation was the strongest predictor of voluntary simplicity clothing practices with competence the strongest predictor, followed by relatedness and then autonomy.

In addition to these quantitative studies, two qualitative studies have investigated the relationship between psychological need satisfaction and minimalism. In addition to Blackburn et al.'s study described above, Lloyd et al. (2020), in a study of 10 minimalists, found minimalism offered experiences of autonomy (due to not feeling obligated to follow societal expectations), competence (feeling less overwhelmed), as well as more mental space, mindfulness, and positive emotions, although relatedness did not appear to be included in the study.

5.1.2 Minimalism, social influence, and collective action

If minimalism does indeed enhance wellbeing and reduce environmental footprint, then understanding how it might achieve broader societal uptake is worthwhile. How other people behave can significantly affect our own behaviour (Nolan et al., 2008). People may become minimalists because of internal processes (beliefs, values, autonomy etc) but they may also become minimalists because of the external influence of others. Social influence is defined as "when an individual changes thoughts, feelings or behaviour due to interacting with others" (Turner, 1991, p. 1). Normative social influence, a subset of social influence, occurs when a person conforms to social norms to be accepted or avoid rejection, reflecting the basic human need to be socially accepted (Cialdini et al 1991). Social norms are rules or standards of behaviour expected by a group (McDonald & Crandall, 2015), such as being quiet in a library or waiting your turn in a queue. Norms can be categorised as either descriptive – beliefs about what most people do – or injunctive – beliefs about what society says one ought to do (Cialdini et al 1991).

Normative influence has been effectively used to increase uptake of environmentally-relevant behaviours, including green purchasing, energy and water conservation, plant-based diets, and recycling (Cialdini & Jacobson, 2021). Another example is the 'neighbourhood effect' seen with solar panel installations (Inhoffen et al., 2019), which demonstrates how individuals can trigger (and be triggered) by broader changes in a community (Wolske et al., 2020). Surprisingly, individuals do not often recognise how social influence shapes their behaviour (Nolan et al., 2008). Recent qualitative research on minimalist practices found most participants reported not being influenced by other people, although they reported being influenced more broadly via books, movies, and social media (Blackburn et al., under review). This research will investigate if, despite their stated views, descriptive and injunctive norms are predictive of minimalist practices.

Our understanding of how minimalists might influence others is limited. One qualitative study found minimalists influence others via modelling minimalist behaviours, changing gift-giving norms, and promoting minimalism via their interactions in the workplace or

choice of career (Blackburn et al., under review). Like those who install solar panels and inspire others to do the same, minimalists may influence others to adopt minimalist practices. Understanding the pathways through which minimalists might do this is key to understanding and promoting the diffusion of low-consumption lifestyles in the broader community. Relatedly, our understanding of minimalist collective action is limited. Blackburn et al. (2025) found that minimalism and especially 'ecominimalism' was associated with environmental concern and reduced environmental footprint. Potentially 'eco minimalists' might be interested in promoting the lifestyle via collective action. Interview data revealing minimalists' discomfort with prevailing social systems (Blackburn et al., under review), suggests they may be interested in creating social change, thus collective action might be an important pathway in spreading the lifestyle. The dissatisfaction with social systems is consistent with theories of social action like Social Identity Model of Collective Action (SIMCA) (van Zomeren et al., 2008) which proposes that collective action arises when social systems are seen as unfair and unjust. Conversely, some have speculated minimalism will never amount to a social movement, because minimalism is a fundamentally individualist pursuit (Meissner, 2019; Rodriguez, 2017). To our knowledge, whether minimalists are engaged or not in collective action has not been studied. Collective action is distinct from individual action because the intention is to exert broader social change. Environmental action can be grouped into private sphere behaviours and public sphere civic behaviours, which Stern (2000) divides into activist and non-activist actions. However, a more recent study suggests non-activist and activist public sphere behaviours should be seen as a continuum of environmental action (Alisat & Riemer, 2015). They propose that collective action ranges from relatively low-key participatory actions such as talking to others about issues, to more politically active actions such as leading in the organisation of a protest march. In this study, we quantitatively investigate whether minimalists are influenced by others to adopt the lifestyle and, in turn, how minimalists might influence others to adopt the lifestyle, considering both influence and participatory collective action practices.

5.1.3 About this study

Here, we investigate how minimalists influence others, whether minimalists are themselves influenced by others, confirm minimalism's association with greater wellbeing, and explore whether having basic psychological needs met, as described by self-determination theory, explains this association. Our hypotheses are as follows:

Hypothesis 1 – Consistent with previous research, we expect levels of minimalism will be significantly and positively associated with greater wellbeing (as measured by flourishing, life satisfaction, and positive and negative affect).

Hypothesis 2 – The basic psychological needs of autonomy, competence, and relatedness will mediate the relationship between minimalism and greater wellbeing.

Hypothesis 3 – Positive descriptive norms and injunctive norms about minimalist practices will significantly predict levels of minimalism.

Hypothesis 4 – Higher levels of minimalism will be associated with attempting to influence others' behaviours (as measured by the extent to which individuals exemplify minimalist practices).

Hypothesis 5 – Higher levels of minimalism will be associated with higher levels of collective action to promote minimalism as a tool to move towards a circular economy.

5.2 Method

5.2.1 Participants and procedure

The survey was administered to 359 participants online between the 9th and 12th of December 2024. A target sample size of 327 was calculated based on the most power-intensive analysis in this study - a parallel mediation using a Monte Carlo simulation app Marlab (Schoemann et al., 2017) with 5000 replications. As we had three mediators, we

used a Bonferroni-corrected confidence level of 98.3%. We used standardised regression coefficients with effect sizes of .2. This gave us a sample size of 327 with a power of .8. We added 10% to our target to account for the potential of invalid surveys, giving a target sample size of 360.

Participants were recruited via Prolific. Screening ensured participants were from Australia and aged 18 and over. Prior to the survey, participants agreed to participate via an online consent form. This included reading an information sheet explaining the research aimed to investigate the relationship between minimalism, wellbeing, and social action. All participants passed an attention check. The sample had an even gender split but was significantly more educated and had higher incomes than the Australian average (Table 5.1). Ethics approval for the study was granted by the university Human Ethics Committee (protocol H/ 2024/1136).

Measures

Participants were asked questions relating to their wellbeing, basic psychological needs, minimalism, influence and collective action, social norms, time as a minimalist, and demographics. Cronbach alphas for scales ranged between .75 and .93 (see below for details).

Wellbeing was assessed via three measures: the Flourishing Scale (Diener et al., 2010) , the Satisfaction with Life Scale (Diener et al., 1985), and the Positive and Negative Affect Schedule (PANAS) Short Form International Scale (Thompson, 2007) (E. L. Deci & J. B. Ryan, 2000; Gagné, 2003). For the Flourishing scale, participants were asked seven[12] questions about meaning, relationships, and contribution (e.g., I lead a purposeful and meaningful life), with responses recorded on a 5-point Likert scale from 1 - strongly disagree to 5 - strongly agree (α = .89). The PANAS scale consisted of 10 questions (5

[12] This scale has eight questions, but a technical error resulted in seven being included in the survey.

positive and 5 negative) asking participants how they normally felt (e.g., Thinking about yourself and how you normally feel, to what extent do you feel… interested). Responses were recorded on a 5-point Likert scale from 1 - never to 5 - always (positive affect α = .75; negative affect α = .83). The Satisfaction with Life Scale consisted of five questions asking participants about their overall assessment of life (e.g., The conditions of my life are excellent). Responses were recorded on a 7-point Likert scale from 1 - strongly disagree to 7 - strongly agree (α = .91).

Basic psychological needs relating to self-determination were measured using the Basic Psychological Need Satisfaction Scale (Edward L Deci et al., 2000; Gagné, 2003). Participants were asked 21 questions about their needs for autonomy (e.g., I generally feel free to express my ideas and opinions), competence (e.g., I have been able to learn interesting new skills lately), and relatedness (e.g., People in my life care about me), with responses recorded on a 7-point Likert scale from 1 - not at all true to 7 - very true (α = .91). Alphas for self-determination sub-scales were α = .79 for competence, α = .81 for relatedness, and α = .77 for autonomy.

Minimalism was measured using the 12-item Minimalist Consumer Scale (Wilson et al., 2022). Participants were asked questions about the number of possessions owned (e.g., I restrict the number of things I own), preference for sparse aesthetics (e.g., I keep the aesthetic in my home very sparse), and mindful curation (e.g., I am mindful of what I own), with responses recorded on a 7-point Likert scale (1 - strongly disagree to 7 - strongly agree) (α = .91). Alphas for minimalism subscales were α = .88 for ‘few belongings’ minimalism, α = .88 for ‘mindful’ minimalism, and α = .85 for ‘aesthetic’ minimalism.

To explore the characteristics of people who describe themselves as minimalists, we included a minimalist identity question (CivicScience, 2018), which asked participants to select which statement best describes their experience with minimalism: I consider myself a minimalist; I am actively working towards becoming a minimalist; I want to be a minimalist one day; I have no desire to become a minimalist.

Time as a minimalist: participants who considered themselves as a minimalist or were actively working towards minimalism were asked to indicate how long they had been a minimalist in years.

Minimalist collective action was measured using a modified version of the environmental action scale (Alisat et al., 2015) with 21 items covering leadership and participatory actions. Scale items were adapted to refer to actions specifically about minimalism and low consumption (i.e., In the last year how often have you engaged in the following: talking to others about minimalism). Responses were recorded on a 5-point Likert scale from 1 - never to 5 - nearly all the time ($\alpha = .93$). In addition to the 18 questions in the original environmental action scale, we added three questions concerning voting, shareholder activism, and ethical investment (all scale items are Appendix D).

Social norms concerning low consumption behaviour were measured by asking questions about descriptive norms (e.g., Most people I know are… not minimal in their consumption) and injunctive norms (e.g., My friends and family think it's acceptable to… reduce the consumption of material goods?). Participants ticked a box if the question was true. The results were added together to create two indexes: Descriptive norms and Injunctive norms. Descriptive norms were reverse scored, such that higher scores denoted more positive descriptive norms.

Social influence was assessed using three measures. First, participants were asked whether they set an example for their family, friends, and colleagues across eight minimalist practices, (e.g., I set an example for my family, friends, and colleagues to … reduce their consumption of material goods). Second, participants were asked whether they felt they had been influenced by others to adopt the same eight minimalist practices (e.g., Has a family member or friend influenced you to …reduce your consumption of material goods?). For both questions, participants were asked to indicate which practices applied. The results were added together to create two indexes: ' Stated

influence' and 'Outside influence' respectively[13]. The third question asked participants if they personally knew someone who had reduced their consumption. Responses to this question were recorded as either 'yes' or 'no'.

Table 5.1 Demographics of survey participants compared to the Australian average

Demographics	Survey participants	Australian average*
Gender		
Female	50.1%	50.7%
Male	48.5%	49.3%
Non-binary/third gender	.8%	Not recorded
Prefer not to say	.6%	Not recorded
Median age	37.7	38
Education		
Not finished school	1.7%	24.5%
High school Year 12	13.4%	15.7%
Vocational	16.5%	24.6%
University degree	43.2%	17.1%
Postgraduate	25.1%	6.5%
Total annual household income before tax $AUD		
$1-$15 599 ($1-$299 per week)	6.1%	10%
$15 600-$25 999 ($300-$499 per week)	8.4%	18%
$26 000 - $41 599 ($500 - $799 per week)	9.2%	17%
$41 600 - $64 999 ($800 - $1249 per week)	17.5%	20%
$65 000 - $90 999 ($1250 - $1749 per week)	17.5%	15%
$91 000 - $155 999 ($1750 - $2999 per week)	24.8%	14%
$156 000 - $207 999 ($3000 or more per week)	8.3%	6%
Prefer not to say	8.1%	
Total	100%	100%
Median income	$77,999	$53,933**
Mean income	$75,142	$60, 700**

Note. * (ABS, 2021) ** (Wilkins et al., 2020)

5.3 Analyses

Data cleaning is described in Appendix D. Preliminary analyses involved confirming the three-factor structure of the Consumer Minimalism Scale (Wilson et al., 2022), using confirmatory factor analysis. Relationships between minimalism and wellbeing, modelling behaviours and collective action were investigated using correlation and hierarchical regression. Parallel mediation analyses between minimalism and wellbeing outcomes were performed, with autonomy, competence, and relatedness as mediators.

[13] Given the potential overlap between Stated influence and Minimalist Collective Action, and Social influence and social norms, collinearity was checked via a correlation matrix (see Appendix D, Table D.1). There was no evidence of multi-collinearity, with the highest correlations being .25**

SPSS Version 30.0.0.0 was used for most of the analysis, except for the factor and mediation analyses which were conducted in JASP Version 19.2.

5.4 Results

Descriptive statistics for the minimalism, wellbeing, self-determination, and environmental action scales are outlined in Table 5.2.

Table 5.2 Descriptive statistics for minimalism, wellbeing, self-determination, and environmental action scales

Scale	M	SD	Min score	Max score	Cronbach Alpha	Possible range
Minimalism	4.71	1.05	1.75	7.00	.91	1-7
PANAS positive	3.39	.58	1.60	5.00	.75	1-5
PANAS negative	2.40	.67	1.00	4.60	.83	1-5
Life satisfaction	4.35	1.39	1.00	7.00	.92	1-7
Flourishing	3.79	.74	1.14	5.00	.89	1-7
Minimalism collective action	1.45	.52	1.00	3.81	.93	1-5
Self-determination	4.79	.85	2.43	6.95	.91	1-7
Autonomy	4.76	1.08	1.57	7.00	.77	1-7
Competence	4.63	1.06	1.33	7.00	.79	1-7
Relatedness	4.95	.79	2.38	7.00	.81	1-7

5.4.1 Characteristics of self-described minimalists

A total of 41.2% of participants either identified as a minimalist (16.4%) or were actively working towards becoming a minimalist (24.8%). Slightly less than one third wanted to be a minimalist one day (29.8%), and the remaining 29% had no desire to become a minimalist. Using ANOVA, we compared these self-descriptions with scores on the minimalism scale (Table 5.3).

Table 5.3 Identity and minimalism

		%	Mean minimalism scale M(SD)
Which of the following best describes your experience with minimalism?	I consider myself a minimalist	16.4	5.71_{a*} (0.78)
	I am actively working towards becoming a minimalist	24.8	5.31_{b} (0.67)
	I want to be a minimalist one day	29.8	4.53_{c} (0.91)
	I have no desire to become a minimalist	29.0	4.03_{d} (0.95)
Total %		100.00	
F test	F(3, 359)=65.62, p=<.001		
Eta squared	.36		

Note. * Different subscripts denote groups are significantly different from one another

All four identity groups differed significantly on the minimalist scale; those who consider themselves a minimalist had the highest minimalism score, followed by those who were actively working towards becoming a minimalist, and then those who wanted to be a minimalist one day. Those who had no desire to become a minimalist had significantly lower minimalism scores than all other groups.

Time as a minimalist ranged between 0 to 30 years, with a mean of 6.27 years and median of 5 years. Around half (56%) of participants personally knew someone who had reduced their consumption. Minimalism was significantly correlated with being female and having a higher income, although the effects were small. Minimalism was unrelated to age or education (Table 5.4).

Table 5.4 Minimalism correlated with age, gender, income, and education

	1	2	3	4	5
1. Minimalism	1				
2. Age	.06	1			
3. Gender	-.12*	-.05	1		
4. Income	.12*	.10	-.10*	1	
5. Education	.09	.10	<.01	.26**	1

N=359,* p < .05,** p < .01,
Gender 1=males, 2 =females.

5.4.2 Validation of the consumer minimalism scale using Australian data

The dimensionality of minimalism is important, as previous research has found associations between different sub-dimensions and wellbeing vary (Blackburn et al., 2025). As the Minimalism Consumer Scale is relatively new, we conducted a confirmatory

factor analysis (See Appendix D, Table D2) to confirm the validity of the three-factor structure defined by Wilson et al. (2022). The three factor structure proposed by Wilson et al. (2022) was supported.

5.4.3 Hypothesis 1– Minimalism will be positively associated with and predict wellbeing

To test our hypothesis that levels of minimalism will be positively associated with wellbeing, we correlated overall minimalism and its three sub-dimensions with three measures of wellbeing - flourishing, life satisfaction, and the PANAS (Table 5.5). Significant and positive associations were found between minimalism, the minimalism sub-dimensions, and positive wellbeing measures (life satisfaction, flourishing and PANAS positive). Significant and negative correlations were found for PANAS negative, except for 'mindful' minimalism, which was uncorrelated with PANAS negative.

Table 5.5 Correlations between minimalism and minimalism sub-dimensions and wellbeing variables

	1	2	3	4	5	6	7	8
1 Minimalism	1							
2 'Few belongings' minimalism	.89**	1						
3 'Mindful' minimalism	.74**	.50**	1					
4 'Aesthetic' minimalism	.83**	.63**.	.38**	1				
5 Life satisfaction	.22**	.20**	.17**	.17**	1			
6 Flourishing	.31**	.27**	.26**	.23**	.72**	1		
7 PANAS positive	.28**	.21**	.27**	.21**	.43**	.59**	1	
8 PANAS negative	-.18**	-.20**	-.07	-.16**	-.43**	-.45**	-.25**	1

N=359,* p < .05,** p < .01.

Further analysis controlling for age, income, gender, and time as a minimalist showed minimalism predicted positive wellbeing outcomes (9% for flourishing, 4% for life satisfaction, 6% for PANAS positive), above and beyond demographic factors (Tables 5.6, 5.7) lending further support to H1. Minimalism explained 1% additional variance in PANAS negative, but was non-significant (Table 5.7).

5.4.4 Hypothesis 2: Basic psychological needs will mediate the relationship between minimalism and wellbeing

Parallel mediation analyses were performed to test the hypothesis that the three psychological needs outlined in self-determination theory – autonomy, competence, and

relatedness – would mediate the relationship between minimalism and positive wellbeing (as measured by life satisfaction, flourishing, and PANAS positive[14]). We found competence positively mediated the positive effect of minimalism on all three wellbeing measures. Relatedness was a significant mediator for life satisfaction and flourishing, but not for PANAS positive. Autonomy was a significant mediator for life satisfaction, but not for flourishing and PANAS positive (Table 5.8, Table 5.9 and Figure 5.1).

[14] PANAS negative was not included in the mediation analysis as when regressed the relationship between PANAS negative and minimalism was not significant.

Table 5.6 Hierarchical regression: minimalist practices predicting flourishing and life satisfaction

	Flourishing					Life satisfaction				
	B	SEB	Beta	t	Sig	B	SEB	Beta	t	Sig
Constant	22.08	.03		11.04	<.001	19.05	2.79		6.82	<.001
Age	.01	.04	.03	.35	.728	-.03	.05	-.06	-.61	.543
Income	.56	.21	.22	2.73	.007	.76	.276	.225	2.737	.007
Gender	.19	.78	.02	.24	.809	.112	1.04	.009	.11	.914
Time as a minimalist	-.02	.08	-.02	-.21	.838	-.01	.11	-.01	-.06	.949
				R^2= .05					R^2= .05	
Constant	15.01	2.91		5.16	<.001	12.14	3.81		3.19	.002
Age	.03	.04	.07	.78	.438	-.02	.05	-.03	-.38	.704
Income	.47	.20	.19	2.34	.021	.67	.27	.20	2.46	.015
Gender	.50	.75	.05	.67	.507	.41	1.03	.03	.40	.691
Time as a minimalist	-.10	.08	-.11	1.21	.227	-.09	.11	-.74	-.79	.431
Minimalism	.13	.04	.31	3.70***	<.001	.12	.05	.22	2.60*	.010
				R^2 Δ = .09***					R^2 Δ =.04*	
				FΔ = 15.41					FΔ = 6.88	
				R^2=.15* **					**R^2=.10***	

N=359
*p<.05
** p < .01
***p<.001

Table 5.7 Hierarchical regression: minimalist practices predicting the PANAS

	PANAS positive					PANAS negative				
	B	SEB	Beta	t	Sig	B	SEB	Beta	t	Sig
Constant	14.99	1.17		12.80	<.001	11.56	1.32		8.76	<.001
Age	.02	.02	.09	.86	.394	-.02	.02	-.09	-1.03	.303
Income	.29	.12	.21	2.50	.014	-.09	.13	-.05	-.66	.508
Gender	-.15	.44	-.03	-.34	.733	1.45	.49	.24	2.96	.004
Time as a minimalist	.01	.05	.02	.25	.804	-.07	.05	-.12	-1.36	.177
				R^2= .06					R^2= .10**	
Constant	11.49	1.58		7.27	<.001	13.38	1.82		7.31	<.001
Age	.02	.02	.11	1.17	.244	-.03	.02	-.10	-1.17	.246
Income	.25	.11	.18	2.18	.031	-.06	.13	-.04	-.49	.624
Gender	.00	.425	.00	.00	.998	1.38	.49	.22	2.79	.006
Time as a minimalist	-.03	.05	-.06	-.64	.521	-.05	.05	-.08	-.91	.366
Minimalism	.06	.02	.27	3.18**	.002	-.03	.02	-.12	-1.44	.154
				R^2 Δ =.06**					R^2 Δ =.01	
				FΔ =10.13**					FΔ =2.06	
				R^2=.12**					**R^2=.11**	

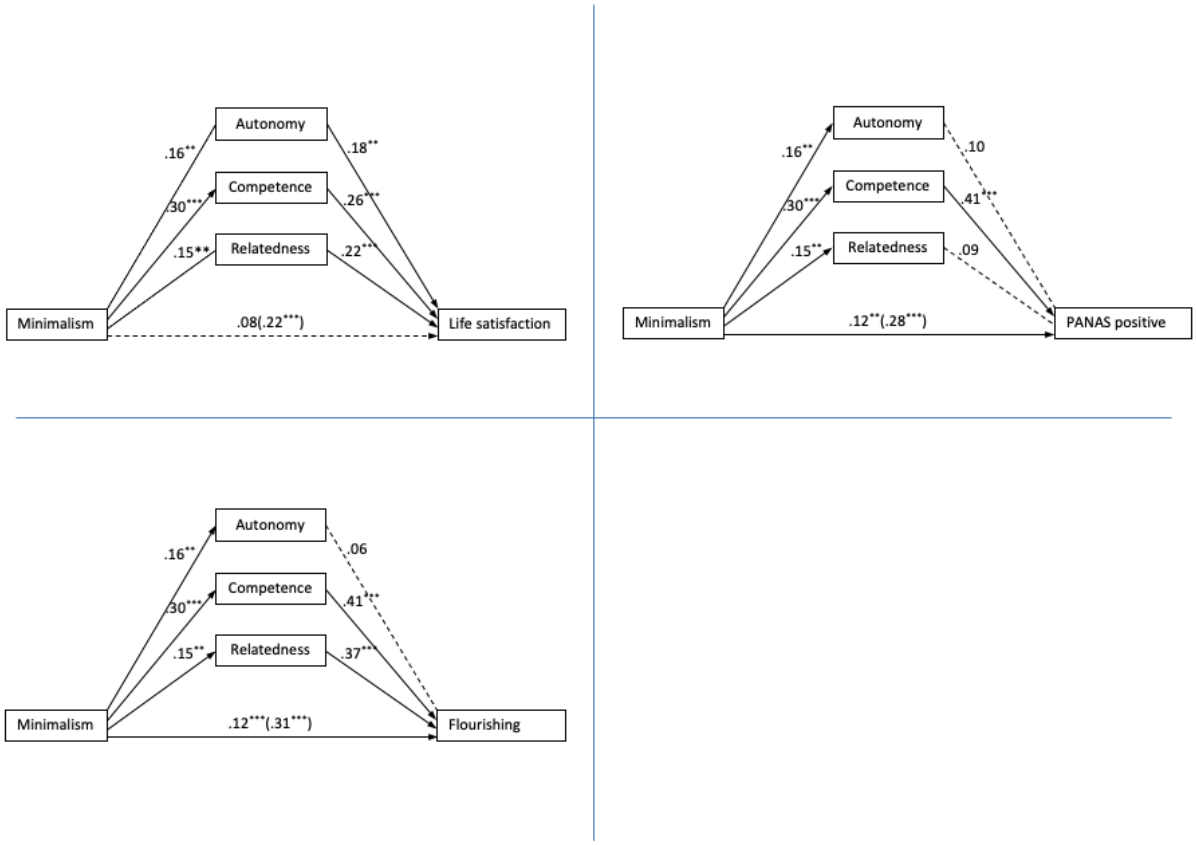
N=359
*p<.05
** p < .01
***p<.001

Table 5.8 Summary of mediations between minimalism and wellbeing

Mediator	Std estimate	Unstandardised estimate	SE	p	95% confidence interval	
					Lower	Upper
Life satisfaction						
Min→Aut	.16	.08	.05	.002	.06	.26
Aut→LS	.18	.20	.06	.004	.05	.31
Min→Rel	.15	.09	.05	.005	.04	.25
Rel→LS	.22	.21	.06	<.001	.10	.34
Min→Comp	.30	.15	.05	<.001	.21	.40
Comp→LS	.26	.28	.06	<.001	.14	.38
Min→LS direct	.08	.04	.04	.074	-.01	.17
Min→LS total indirect	.14	.08	.03	<.001	.08	.20
Min→LS total	.22	.12	.05	<.001	.12	.32
Min→Aut→LS indirect	.03	.02	.01	.036	<.01	.06
Min→Comp→LS indirect	.08	.04	.02	<.001	.04	.12
Min→Rel→LS indirect	.03	.02	.01	.027	<.01	.06
Flourishing						
Min→Aut	.16	.08	.05	.002	.06	.26
Aut→Fl	.06	.05	.05	.222	-.04	.16
Min→rel	.15	.09	.05	.005	.04	.25
Rel→Fl	.37	.26	.05	<.001	.28	.46
Min→Comp	.30	.15	.05	<.001	.21	.40
Comp→Fl	.41	.34	.05	<.001	.32	.50
Min→Fl Direct	.12	.05	.03	<.001	.06	.19
Min→Fl total indirect	.19	.08	.04	<.001	.11	.26
Min→Fl Total	.30	.13	.05	<.001	.22	.40
Min→Aut→FL indirect	.01	<.01	.01	.255	-.01	.03
Min→Comp→FL indirect	.12	.05	.02	<.001	.08	.17
Min→Rel→FL indirect	.05	.02	.02	.007	.02	.09
PANAS positive						
Min→Aut	.16	.08	.05	.002	.06	.26
Aut →PANP	.10	.04	.06	.126	-.03	.22
MIn→Rel	.15	.09	.05	.005	.04	.25
Rel→PANP	.09	.04	.06	.158	-.03	.21
Min→Comp	.30	.15	.05	<.001	.21	.40
Comp→PANP	.41	.19	.06	<.001	.29	.53
Min→PANP direct	.12	.03	.05	.006	.04	.21
Min→PANP total indirect	.15	.04	.03	<.001	.09	.21
Min→Fl Total	.28	.06	.05	<.001	.18	.37
Min→Aut→PANP indirect	.02	<.01	.01	.170	-.01	.04
Min→Comp→PANP indirect	.12	.03	.03	<.001	.07	.18
Min→Rel→PANP indirect	.01	<.01	.01	.207	-.01	.03

Notes: We used standardised estimates estimator is ML, CI are based on standard method, Std=standard, SE = standard error, Min= minimalism, Comp=competence, Rel=relatedness, Aut= autonomy, FL= flourishing, LS=life satisfaction, PANP= PANAS positive.

Figure 5.1 Mediation between minimalism and wellbeing



Notes: For the C path, estimate in parentheses indicates total effect, the estimate outside parentheses indicates c' direct effect. Dashed lined = non-significant effect. Path coefficients are standardised. *p<.05,**p < .01, ***p<.001.

Mediations were repeated for the three minimalist subdimensions (See Table 5.9 for an overview of findings, and Appendix D for analyses: Tables D3-D5, and Figures D1-D3). A similar pattern emerged, whereby competence was a consistently significant mediator. By contrast, while autonomy was a significant mediator in some cases, it was the least consistent. Life satisfaction was mediated by all three basic needs, except for in the case of 'aesthetic' minimalism, where autonomy and relatedness did not significantly mediate. Flourishing was mediated by competence and relatedness for all types of minimalism except for 'aesthetic' minimalism and relatedness, and autonomy did not significantly mediate. PANAS positive was mediated by competence, but relatedness and autonomy did not significantly mediate, except for 'few belonging' minimalism and relatedness.

Table 5.9 Summary of mediations between minimalism and minimalism sub-dimensions, and wellbeing

	Autonomy	Competence	Relatedness
Minimalism total	Life satisfaction	Life satisfaction	Life satisfaction
	Flourishing	Flourishing	Flourishing
	PANAS +ve	PANAS +ve	PANAS +ve
'Few belongings' minimalism	Life satisfaction	Life satisfaction	Life satisfaction
	Flourishing	Flourishing	Flourishing
	PANAS +ve	PANAS +ve	PANAS +ve
'Mindful' minimalism	Life satisfaction	Life satisfaction	Life satisfaction
	Flourishing	Flourishing	Flourishing
	PANAS +ve	PANAS +ve	PANAS +ve
'Aesthetic' minimalism	Life satisfaction	Life satisfaction	Life satisfaction
	Flourishing	Flourishing	Flourishing
	PANAS +ve	PANAS +ve	PANAS +ve

Green= mediation found
Pink = no mediation found

5.4.5 Hypothesis 3: Social norms will predict levels of minimalism

To test our hypothesis that social norms will predict levels of minimalism, we regressed minimalism onto descriptive and injunctive norm beliefs about minimalist practices. Contrary to our hypothesis, social norms did not explain a significant amount of variance in levels of minimalism, F(2, 348)=1.78, p=.170 (Table 5.10).

Table 5.10 Regression of norms predicting minimalism

	B	SEB	Beta	t	Sig
Constant	59.59	2.26		26.32	<.001
Descriptive norm	-.62	.34	-.10	-1.81	.072
Injunctive norm	.07	.30	.01	.23	.821
				R2= -<.01	

N=359
*p<.05
** p < .01
***p<.001.

The percentage of participants who indicated a behaviour was acceptable to their family and friends (injunctive norm) is outlined in Appendix D, Table D6. The behaviours perceived as most acceptable were reducing food waste (79%) and buying second-hand goods (70%), and those perceived as least acceptable were not giving adults physical presents (30%) and having a limited number of clothes (41%).

5.4.6 Hypothesis 4 – Minimalism will be associated with influencing others' behaviour

We hypothesised that high levels of minimalism would be associated with attempts to influence others. Supporting our hypothesis, minimalism, and the 'few belongings' minimalism and 'mindful' minimalism sub-dimensions, were positively and moderately associated with the Stated Influence index, while 'aesthetic' minimalism showed a small positive association (Table 5.11). We also expected that minimalism would be associated with the Outside influence index, however this was not supported. Associations with individual behaviours are in the Appendix D (Table D7).

Table 5.11 Correlations between minimalism, example setting and collective action

	1.	2.	3.	4.	5.	6.	7
1.Minimalism	1						
2. 'Few belongings'	.89**	1					
3. 'Mindful' minimalism	.74**	.50**	1				
4. 'Aesthetic' minimalism	.83**	.63**	.38**	1			
5. Stated Influence index	.31**	.29**	.29**	.19**	.1		
6. Outside influence index	.04	.04	.04	.02	.38**	1	
7. Minimalist collective action	.18**	16**	.12*	.16**	.17**	.20**	1

N=359. Spearman's rho was used for binary variables used to create the Stated Influence index
* p < .05
** p < .01

Frequencies of behaviours ranged between 44% and 75%. The most common exemplifying behaviours were not giving physical gifts (75%), repairing goods (71%), purchasing quality (64%), buying second hand (63%), and reducing the number of clothes owned (63%), see Appendix D (Table D8).

5.4.7 Hypothesis 5 -Minimalism will be associated with collective minimalist action

Supporting our hypothesis that high levels of minimalism would be associated with higher engagement in collective action, we found minimalism and its three subdimensions were significantly and positively associated with engaging in collective minimalist action (see Table 5.11). Minimalism and the three subdimensions were significantly associated with 9 of the 21 individual items in the scale (see Appendix D, Table D9), most of these were participatory actions. Minimalism, 'few belongings' minimalism, and 'mindful' minimalism were positively associated with showing support

for minimalism via voting. Minimalism, and 'few belongings' minimalism, were associated with using online tools to raise awareness and making changes at work. 'Aesthetic' minimalism was associated with working in minimalism related roles, shareholder activism, and using traditional tools e.g., letter writing to raise awareness about minimalism. The three most frequent actions were talking about minimalism (71%), educating self (61%), and planting trees (44%), while the three least frequent actions were organising a community event (8%), contacting a politician (10%), and organising a protest (10%) – see Appendix D, Table D10).

5.5 Discussion

We had two broad aims for this study, to investigate how minimalism relates to wellbeing and what might explain that relationship, and to investigate the potential for minimalism to spread. With regards to the first aim, we found minimalism and its sub-dimensions were positively associated with all four wellbeing measures, supporting our hypothesis that minimalism and wellbeing are associated. Additionally, we found minimalism practices significantly predicted three of the four wellbeing measures after controlling for age, gender, income, and time as a minimalist, providing further support for the minimalism-wellbeing association. Moreover, we found psychological needs satisfaction, in most circumstances, mediated the link between minimalism and wellbeing. Regarding the second aim, we found minimalists attempt to influence others via exemplifying minimalist behaviours and participating in collective action. However, our hypothesis that minimalists would be influenced by social norms was not supported.

We found a solid interest in minimalism, with 16.4% of participants already considering themselves a minimalist, and a further 24.8 % actively working towards it. These findings are similar to Blackburn et al. (2025), and are broadly in line with US survey results (CivicScience, 2021; YouGov, 2023). This categorical minimalist identity item showed strong between-group differences on the Minimalism Consumer Scale, suggesting it may serve as a useful proxy for the full 12-item scale. Consistent with Wilson et al. (2022), we confirmed a three-factor structure for minimalism consisting of 'Few belongings' minimalism, 'Mindful' minimalism and 'Aesthetic' minimalism.

5.5.1 Minimalism, wellbeing, and self-determination theory

We expected minimalism to be significantly and positively associated with wellbeing outcomes, given previous research (Blackburn et al., 2025; Kang et al., 2021; Shafqat et al., 2023). We found all three measures of wellbeing (flourishing, life satisfaction, and the PANAS) were associated with wellbeing, confirming our hypothesis. The same was also found for the minimalism subdimensions, except that 'mindful' minimalism was uncorrelated with PANAS negative. The medium correlation between minimalism and flourishing is notable, and suggests minimalism is not just associated with positive wellbeing but also positive relationships, purpose, and optimism, which are key elements of the flourishing scale (Diener et al., 2010). We also found an association with life satisfaction, unlike Blackburn et al. (2025) who only found an association for young people[15]. We believe this is the first time all three measures have been included in one study. We also found, for the first time, that minimalism is associated with flourishing, and that minimalism predicts wellbeing (excluding PANAS negative) even after controlling for demographic variables and time as a minimalist.

Self-determination theory posits the more needs for autonomy, competence and relatedness are met, the greater people's wellbeing. We found the association between minimalism and wellbeing was explained by the three basic psychological needs (autonomy, competence, and relatedness), mediating the relationship between minimalism and positive wellbeing, although there were some variations between the mediators. Overall, competence was the strongest mediator, mediating between minimalism (including the three subdimensions) and wellbeing across all four wellbeing measures. This is perhaps not so surprising given previous qualitative research by Blackburn et al. (under review) where study participants reported that minimalism reduced overwhelm, improved organisation, helped with managing household inventories, and resulted in better control over finances. In short minimalism provides a way to manage and circumvent the stressors of living in a fast paced overwhelming

[15] These differences including weaker effects between minimalism and wellbeing overall found by Blackburn, R., Leviston, Z., & Walker, I. (under review). Calm, mindful and generious: minimalist environmental practices, wellbeing and potential for social influence. *Journal of Environmental Psychology*. may be attributable to the timing of the two studies; the previous study was conducted during the COVID 19 pandemic which may have reduced overall levels of wellbeing.

consumerist society by slowing down consumption, giving them time to dedicate to other facets of their life. Relatedness was also a significant mediator for life satisfaction and flourishing but not positive affect. Feelings of relatedness may arise because time not used for shopping and cleaning can be spent with family and friends . Finally, autonomy was a significant mediator for life satisfaction and negative affect but not flourishing and positive affect. A sense of autonomy may arise due to not feeling societal expectations around consumption and feeling less compelled to be part of the hedonic treadmill. These results suggest that a minimalist lifestyle helps meet basic psychological needs, and that this in turn has benefits for wellbeing. These wellbeing benefits provide a strong motivation for maintaining a minimalist lifestyle. This is supported by previous research finding that having self-determined motivation increases persistence in education (Vallerand et al., 1997). In this study the median time as a minimalist was five years, and the maximum time was 30 years. A future longitudinal study could be used to track the longevity of the lifestyle.

5.5.2 Minimalism, social influence, and collective actions

Based on previous qualitative research (Blackburn et al., under review), we expected those high on the minimalist scale would influence others via exemplifying minimalist practices. Consistent with expectations, we found high levels of minimalism were positively associated with the prevalence of influencing behaviours, including consuming fewer material goods and clothes, decluttering, buying quality goods (except for 'aesthetic' minimalists), and not giving physical gifts. Only 'mindful' minimalism was associated with reducing food waste and there was no association between minimalism and exemplifying behaviours of repairing goods and purchasing second-hand items, despite participants indicating they practised these activities (Blackburn et al., under review). However, when participants were asked how acceptable these behaviours were to their family and friends, most thought reducing food waste and buying second-hand was acceptable. So perhaps the fact that minimalism was not associated with influencing others with respect to these practices can be attributed to a perception that they are already seen as acceptable, thus encouragement or coercion is less necessary.

Researchers have speculated that minimalism is an individual pursuit, and that participants are not interested in creating social change (Meissner, 2019; Rodriguez, 2017), but these speculations were not based on empirical research. We tested if minimalism was associated with collective action via a minimalism collective action scale, a measure which included leadership and participatory actions. Collective actions or public-sphere actions are distinguished from individual actions or private-sphere actions, as they are focused on system level change (Alisat et al., 2015). We found minimalism was associated with 9 of the 21 collective action behaviours including: raising awareness about minimalism in person and online, making changes at work, environmentally directed voting, choosing a bank or superannuation fund based on environmental policies, and shareholder activism. However not all types of minimalism were associated with all types of actions. Most of these behaviours are participatory. There were exceptions however: letter writing, which Alisat et al. (2015) classified as a leadership behaviour, and shareholder activism, one of the additional items added to the scale, which could also be argued as a leadership behaviour. Participatory actions are low commitment actions, while leadership actions are more political and require more commitment and skills (Alisat et al., 2015). That minimalists were more likely to be involved in participatory actions was borne out by a qualitative study by Blackburn et al. (under review) where participants reported they were happy to encourage others or be an example, but they were not interested in proselytizing or forcing others to change. While talking about and educating themselves about minimalism were performed by most, some actions were only practised by a third or less of self-identified minimalists. Overall, these results suggest minimalists do practise collective actions, including the more politically oriented leadership actions, but the level of engagement is low.

In summary, we found minimalists influence others both at an individual level with family and friends via exemplifying behaviours, and via collective civic actions. This might indicate potential for a social movement to evolve, but further research would be needed to confirm this.

5.5.3 Social norms

Social norm theory suggests individuals are strongly influenced by the norms of those around them. Contrary to our expectations, we found minimalism did not seem to be dependent on perceptions of what others did, or what others thought one ought to do. Perhaps this null finding is less surprising when considering minimalism involves the adoption of counter normative behaviours and practices. This is borne out in a qualitative study by Blackburn et al. (under review), where participants were asked what had triggered them to adopt minimalism. Participants identified being positively influenced by bloggers, books, and movies, but did not mention friends and family. Relatedly just over half (56%) of all participants in this study personally knew someone who had reduced their consumption, yet participants indicated they themselves were not influenced. However, participants may not have recognised the ways in which they were influenced by other people, including individuals in their personal networks, an observation described by Nolan et al. (2008). Or our method of assessing social normative influence may have been too crude to detect these influences. Alternatively, they may have been the ones influencing friends or family members to reduce their consumption. A future study is needed to establish the direction of influence. Social network analysis could be useful to identify key nodes of influence – such as minimalist bloggers or other influential figures.

5.5.4 Limitations

This study recruited participants via an online panel provider without strict quotas on inclusion, which limits its generalisability. While the sample was broadly representative across gender, it was significantly more educated and wealthier than the Australian average, which may have implications for generalisability and replicability. Future studies could aim to replicate these studies with a highly representative sample. As the study is cross-sectional, causality must only be assumed. It is possible that people who feel competent or have high levels of relatedness or autonomy are more comfortable not participating in normative consumption – and these are the types of people who adopt minimalism. Causality could be tested via longitudinal research or even an experiment

where satisfaction of basic psychological needs are measured before and after a program to encourage adoption of minimalism (Norberg et al., 2024).

5.6 Conclusion

To conclude, we suggest that self-determination theory provides a plausible explanation for the positive relationship between minimalism and wellbeing. Specifically, our data suggest that engaging in minimalist practices increases people's basic psychological needs of autonomy, relatedness and, particularly, competence, and thus wellbeing. This is promising because reducing consumption is often associated with sacrifice and reduced wellbeing (Moorcroft et al., 2025). Moreover, having these psychological needs met means minimalist behaviours are more likely to be sustained, as they are intrinsically motivated. Promoting the wellbeing benefits of a minimalist lifestyle provides an incentive for the global wealthy to reduce their consumption.

We also investigated the role of social influence in adopting and promoting minimalism. We found minimalist practices did not appear to be influenced by social norms (consistent with the idea that ongoing behaviours will be intrinsically rather than extrinsically driven), although they may be influenced via online communities, books, and movies, which is an area of potential future research. Minimalism was however associated with influencing behaviour. Despite speculation in the literature that minimalism is an individualistic lifestyle, we found minimalism was associated with exemplifying minimalist practices and collective actions. The combination of influencing behaviours and participating in collective actions suggest minimalists could indeed influence others to adopt the lifestyle. Influencing from the bottom-up might encourage more people to adopt a minimalist lifestyle, but this will need to be combined with top-down policy interventions such as reducing the influence of advertising, to achieve significant changes to consumption levels amongst the wealthy.

Chapter 6: Discussion and conclusions

This chapter summarises the main findings of the thesis, synthesising results from the four studies. First, the chapter outlines the key research outcomes. Then there is a discussion of the major themes arising from the thesis, which are: the environmental impact of minimalism, minimalism-wellbeing associations, and the possibility of social influence. The chapter concludes with a summary of major contributions, policy implications, limitations of the study, and pathways for future research.

6.1 Key research findings

Reaching net zero emissions goals will require a reduction in consumption, in addition to increased efficiency, but this will require significant changes to the lifestyles of the wealthy (Wiedmann et al., 2020). Yet there is a lack of research in understanding how to achieve sufficiency at an individual and community level – that is, how to achieve sufficient consumption which supports wellbeing but is within environmental limits (Jungell-Michelsson et al., 2022). Thus, the overarching aim of this thesis was to develop a better understanding of minimalism – a lifestyle that appears to result in flourishing while consuming less. The first research aim was to conduct a literature synthesis to define the research agenda for the thesis (Research Aim 1). The second research aim was to clarify if minimalism is associated with a lower ecological footprint and offers the dual benefit of greater wellbeing and lower footprint (Research Aim 2). Next, I sought to understand how minimalists manage to reduce their consumption despite the social and structural forces of a consumptogenic society (Research Aim 3). Then, I examined whether there is potential for minimalism to spread (Research Aim 4). The final aim was to investigate what might explain the association between minimalism and wellbeing (Research Aim 5).

Research Aim 1: Conduct a literature synthesis to define the research agenda for the thesis

RQ 1.1 What is the state of the literature on minimalism?

RQ 1.2 Do minimalists have a lower impact on the environment?

RQ 1.3 Could minimalism deliver the dual benefit of reduced carbon emissions and increased wellbeing?

A systematic review of minimalism was conducted to establish gaps in the literature and define a research agenda for the thesis (Chapter 2, published in *WIREs Climate Change*). The review aimed to identify any previous research on the environmental impact and wellbeing benefits of minimalism. This was done to understand if minimalism was a low consumption lifestyle, and therefore worth investigating further.

There are five key outcomes:

Outcome 1.1

While some research pointed to a link between minimalism and environmental concern, no research had established the environmental impact of minimalism. Research into other low consumption lifestyles (voluntary simplicity, tightwadism, and frugalism) indicated that these lifestyles had a lower environmental footprint, suggesting that a minimalist lifestyle might be similar.

Outcome 1.2

Minimalism was found to provide wellbeing benefits based on preliminary correlational and qualitative research.

Outcome 1.3

Minimalism was found to be conceptually related to voluntary simplicity, but it was unclear which behaviours were exclusive to each.

Outcome 1.4

Research on the link between minimalism and environmental concern was inconclusive. This led to the proposition that there are two broad categories of minimalism – eco-minimalism and minimalists primarily concerned with aesthetics.

Outcome 1.5

Minimalism may offer the dual benefit of greater wellbeing and lower footprint, but empirical research on ecological footprint has, to the author's knowledge at the time of the review, had not been conducted.

Research Aim 2: Ascertain the environmental impact and wellbeing benefits of minimalism

RQ 21. Do minimalists have a lower impact on the environment?
RQ 2.2 Do minimalists have greater wellbeing?

Chapter 2 identified that the relationship between minimalism and ecological footprint was unexplored. To address this gap, the ecological footprint of minimalism and the relationship between minimalism and wellbeing (measured via the PANAS and the Satisfaction with Life scales) were investigated in Chapter 3 (published in *Journal of Environmental Psychology*).

There were five key outcomes:

Outcome 2.1

Minimalism was found to be negatively associated with ecological footprint. Minimalism was also negatively associated with number of clothes, number of pets, and waste, and positively associated with energy efficiency.

Outcome 2.2

Minimalism was found to be associated with positive wellbeing, being positively associated with positive affect, and negatively associated with negative affect. However, minimalism was not significantly associated with life satisfaction, except for young people aged between 18-27 years.

Outcome 2.3

Ecological footprint and wellbeing associations varied between the sub-dimensions of minimalism. 'Few belongings' minimalism and 'mindful' minimalism were associated with lower footprint, but 'aesthetic' minimalism was not. 'Few belongings' minimalism and 'mindful' minimalism were positively associated with PANAS positive, while 'aesthetic' minimalism was not significantly associated. 'Aesthetic' minimalism was negatively associated with PANAS negative, while the other dimensions were not significantly associated.

Outcome 2.4

Minimalism and its sub-dimensions were correlated with higher environmental concern, except for 'aesthetic' minimalism, which showed no significant association.

Outcome 2.5

Minimalism and its sub-dimensions were negatively correlated with materialism, with 'few belongings' minimalism showing the strongest effect.

Research Aim 3: Investigate the motivations, barriers and enablers and environmental practices of minimalists

RQ 3.1 What motivates people to adopt minimalism?

RQ 3.2 What are the barriers and enablers to becoming a minimalist?

RQ 3.2 What environmental behaviours define minimalism?

Chapter 4 is a qualitative study exploring the motivations, barriers, enablers, and environmental practices of minimalists based on interview data. Collecting interview data was a necessary next methodological step to gain an in-depth understanding of how and why minimalism is adopted.

There were four key outcomes of the study:

Outcome 3.1

Participants reported proactively reducing their consumption by avoiding shopping both in person and online, limiting time on social media to avoid advertising, trying to change gift giving norms amongst friends and family, and practising reuse and repair.

Outcome 3.2

Participants reported engaging in other environmental practices apparently unrelated to minimalism, including striving for energy efficient homes, eating plant-based diets, and using green transport.

Outcome 3.3

The interview data provides preliminary qualitative evidence that minimalism may meet all three basic psychological needs of autonomy, competence and, for the first-time, possibly relatedness, as described by self-determination theory.

Research Aim 4: Determine how minimalists might influence others and how minimalists are influenced to adopt the lifestyle

RQ 4.1 How do minimalists influence others to adopt minimalism?

RQ 4.2 How were minimalists influenced to adopt minimalism?

The role of social influence in adopting minimalism was investigated in Chapter 4 (interview data) and Chapter 5 (quantitative data). In Chapter 4 participants were asked what triggered them to adopt the lifestyle and how they might influence others. In Chapter 5 participants were surveyed about exemplifying minimalist behaviours and if they participated in collective action.

There were four key outcomes:

Outcome 4.1

Interview participants (Chapter 4) reported that they influence others via modelling minimalist behaviours, encouraging others to join digital gift economies such as Buy Nothing, changing gift giving norms, and by making changes at work or by taking up professions related to minimalism such as working as a professional organiser.

Outcome 4.2

In the quantitative study (Chapter 5) participants indicated that they influenced others via exemplifying minimalist practices such as decluttering and gift-giving norms.

Outcome 4.3

High levels of minimalism was associated with collective actions such as talking to others about minimalism, voting on environmental issues, making changes at work, writing letters, and using online tools to raise awareness (Chapter 5).

Outcome 4.4

Minimalists did not appear to be influenced by social norms (Chapter 5).

Research Aim 5: Explain minimalist motivations

> RQ5.1 Can the three basic psychological needs of autonomy, competence, and relatedness outlined by self-determination theory, help explain why minimalism is associated with greater wellbeing outcomes?

The final study (Chapter 5) re-investigated the associations between minimalism and wellbeing, and examined whether the basic psychological needs of autonomy, competence, and relatedness, mediated these associations.

There were two key outcomes:

Outcome 5.1

Supporting and building on prior findings, minimalism and its subdimensions were found to be positively associated with three wellbeing outcomes (measured via life satisfaction, the PANAS and flourishing). Of note, there was a medium positive association between minimalism and flourishing.

Outcome 5.2

There were significant mediation effects for the basic psychological needs of autonomy, relatedness and especially competence, between minimalism and wellbeing associations. A similar pattern emerged for the minimalism sub-dimensions, where competence was consistently a significant mediator.

6.2 Discussion of key research findings

6.2.1 Environmental impact of minimalism

While minimalism is rarely portrayed on social media as an overtly environmental behaviour, a key outcome of this thesis is finding that minimalism is associated with a lower ecological footprint. However, associations were clearer for some sub-dimensions of minimalism than others, with 'few belongings' minimalism and 'mindful' minimalism showing an association, but not 'aesthetic' minimalism. This pattern was repeated when investigating environmental concern: minimalism and its subdimensions showed a

positive association, except for ‘aesthetic’ minimalism, which showed no association. Qualitative data (Chapter 4) lent further support to the findings on environmental impact and environmental concern. The interviews revealed that most adopted minimalism for wellbeing reasons, with environmental reasons reported as a secondary motivation.

These findings support the proposition in Chapter 2 that are two broad categories of minimalism - eco-minimalism and aesthetic minimalism. This dimensionality is not currently measured by the consumer minimalism scale and future research should investigate this (this is expanded upon below).

6.2.2 Wellbeing

One of the overarching questions for this thesis was, can minimalism offer the dual benefit of lower environmental footprint and greater wellbeing? The systematic review (Chapter 2) identified that minimalism was linked with greater wellbeing based on several correlational and qualitative studies. The first empirical study (Chapter 3) found somewhat mixed evidence for the minimalism-wellbeing association: a significant correlation between minimalism and positive and negative affect were found, but not between minimalism and life satisfaction (except for young people). The interview data (Chapter 4) supported the minimalism-wellbeing association, with participants reporting that they felt less overwhelmed, more organised and in control, more independent of the consumerist treadmill, and because they spent less time cleaning and shopping, they enjoyed having more time to spend with family and friends. The final study (Chapter 5) provided more robust evidence for the association between minimalism and wellbeing – most notably flourishing, which showed a medium-sized correlation. Moreover, minimalism was found to predict wellbeing after controlling for age, gender, income, and time as a minimalist. The inconsistency of results across the two quantitative studies may be attributable to the timing of the two studies, with the first conducted during the COVID-19 pandemic, and the second post COVID-19 pandemic. COVID-19 had such a profound effect on peoples wellbeing (Zaninotto et al., 2025) that it may have produced ‘noise’ in the results, limiting the likelihood of detecting small effects between

minimalism and wellbeing. The relationship with flourishing is also notable, because flourishing is not just about wellbeing but also purpose and meaning (Diener et al., 2010).

The next major question for the thesis concerned what might explain the minimalism-wellbeing link. In Chapter 2 it was proposed that the minimalism-wellbeing association might be because lower levels of subjective clutter is associated with greater wellbeing (Rogers et al., 2021). Interview participants in Chapter 3 reported feeling that minimalism reduced overwhelm; they felt more organised and more in control, and it was suggested that this increased feelings of competence. Roster and Ferrari (2022) investigated how reducing clutter increases wellbeing, finding that the level of wellbeing depended on the motivation for reducing clutter. Those who decluttered for intrinsic reasons had greater wellbeing, but those who reduced clutter for extrinsic reasons, such as wanting to appear tidy for others, did not report improved wellbeing.

Another explanation for the minimalism-wellbeing association proposed in Chapter 2 was that minimalists are likely to not be materialistic, and low levels of materialism is associated with greater wellbeing (Dittmar et al., 2014). As expected, minimalism and the three sub-dimensions were negatively associated with materialism (Chapter 3). Low levels of materialism were associated with intrinsic rather than extrinsic values, which links with the third explanation for the minimalism-wellbeing relationship: that minimalism enabled basic needs of autonomy, competence, and relatedness to be met. This was supported by data from both the qualitative and quantitative studies (Chapters 4 and 5). Having basic psychological needs met increases intrinsic motivation. What we do not know is which way the causation works – are less materialistic people attracted to minimalism, or does minimalism encourage less materialistic traits?

Together, the evidence across the studies detailed in this thesis suggest that minimalism is an intrinsically motivated lifestyle which meets the basic psychological needs of autonomy, competence, and relatedness. It helps individuals feel calmer, more organised, and more in control, have more time with friends and family and less influenced by the consumption pressures of late-stage capitalism.

6.2.3 Social influence - how minimalism spreads

Given that minimalism was found to offer the double dividend of both lower footprint *and* greater wellbeing, the next key question relates to how minimalism could potentially spread. A related, though separate question which may shine light on this is understanding what (or *who)* triggered minimalists to adopt the lifestyle in the first place. Interview data in Chapter 4 identified several triggers, including: consolidating or splitting households, cluttered childhoods, dislike of consumerism, and learning about minimalism via movies, blogs, books, and social media, but most did not mention being influenced by others in their social circle. To interrogate the claim that others in the social circle did not influence minimalist practices, in Study 4 (Chapter 5), I examined the association between minimalism and both injunctive and descriptive norms; however, no significant association was found. Perhaps this is not surprising given the lifestyle is not normative. Future research could involve using social network analysis to identify nodes or key points of influence; it is possible that minimalist influencers are at the centre of these nodes.

Another question was do minimalists influence others to adopt the lifestyle? While some researchers have speculated that minimalism is an individualistic lifestyle (Meissner, 2019; Rodriguez, 2017), data from Chapters 4 and 5 do not support this. Interview data found participants reported that that, while they did not want to force the lifestyle on anyone, they were pleased to help friends or family if they wanted advice or support and were delighted if others were influenced by them. Participants reported that they influenced others via changing gift-giving norms, promoting digital gift giving economies such as Buy Nothing, modelling minimalism, and via career choices. Chapter 5 found that minimalism was associated with exemplifying behaviours such as decluttering and giving non-material gifts.

Collective action was also found to be associated with minimalism (Chapter 5), including talking to others about minimalism, and environmentally directed voting. While most actions were participatory, meaning they were lower effort and less political, some also participated in leadership activities such as letter writing and shareholder activism.

Notably, the participation levels in collective actions were quite low, apart from talking about minimalism.

The combination of exemplifying behaviours and collective actions indicate that minimalists do influence others at a range of levels including family and friends, but also in the workplace, and communicating to politicians and leaders. However, whether these actions are frequent enough or potent enough to result in social change is unknown. Potentially, network analysis could identify more clearly who influences people to adopt minimalism. While minimalists do seem to influence from the bottom up, this is unlikely to be sufficient in isolation for broad adoption; top-down change will also be necessary.

6.2.4 Alternative explanations for adopting minimalism

Understanding motivations for behaviours is complex and it is possible there are other explanations for why people adopt minimalism. One possible reason for adopting minimalism is performative morality or virtue signalling (Berio, 2025), meaning minimalism is adopted because the person wants to be seen as morally virtuous by living with fewer things. According to Kurz et al. (2020) this may result in fewer people practising the behaviour. Kurz et al. (2020) propose that some practices, such as being vegan or cycling to work, are 'moralised minority practices'. These types of groups discourage others from adopting the practice because the non-practising majority feel that their moral self-concept has been threatened. Kurz et al. (2020) argue that practice-based identity – where engaging in specific behaviours is required for group membership (e.g., vegans not eating animal products) - differ from opinion-based groups, such as environmentalists and feminists, which are defined more by shared beliefs than clearly defined practices. To encourage others to adopt sustainable behaviours, (Kurz et al., 2020) recommend against clear group boundaries; groups should encourage others to aspire to that lifestyle rather than having to meet a specific standard of behaviour. If minimalism is a moralised minority practice, then performative morality may be the motivation. However, I argue that minimalism does not have specific standards like veganism, rather it is an opinion-based group akin to environmentalism or eating less meat (as opposed to no meat). Minimalism is a broad term that does not demand specific

standards of behaviour or practice. For example, participants in the qualitative study (Chapter 4) reported that minimalism was a 'work in progress'. Also, one of the main influencers, Joshua Becker, calls his channel "Becoming Minimalist", hinting that it is a process rather than an absolute standard. While fifteen years ago some influencers focused on how many items they owned (Bruno, 2010), as the movement matured it would seem the focus of influencers is now more about developing a personal definition of minimalism. This was observed in the qualitative interviews (Chapter 4) where participants reported they did not have 'Instagram' style minimalist homes; rather their homes were tidy with nothing on surfaces, but might include art, plants, and colour.

Another reason that minimalism is unlikely to be adopted due to performative morality is because unlike veganism and cycling, minimalism is largely a behaviour practised in private. For example, some homes could superficially appear to be similar to minimalist homes, but the cupboards may be stuffed with things, while a minimalist home might have nearly empty cupboards, but no one would know. Performative morality is practised for external validation, reflecting extrinsic values. However, the mediation analyses in Chapter 5 suggest intrinsic motivations. It is possible that 'aesthetic' minimalists might be more inclined to adopt performative morality, as they seemed to be more concerned with appearance -presumably an extrinsic value. However, even 'aesthetic' minimalism related to higher satisfaction of basic needs.

A further possible motivation is people with intolerance of uncertainty (Buhr & Dugas, 2001) and need for control adopt minimalism to feel more control over their environment. Three of the fifteen participants in the qualitative interviews (Chapter 4) indicated that they adopted minimalism at least in part because they wanted to escape cluttered childhood homes. Minimalism may have enabled participants to increase their level of control over their environment. Intolerance of uncertainty is associated with poor wellbeing outcomes such as anxiety and depression (Bottesi et al., 2020), and is linked with perceived need for control (Einstein, 2014). Adopting minimalism is likely to have increased a sense of autonomy and wellbeing outcomes, as seen in this thesis, however it is difficult to explain why their wellbeing exceeded those with fewer minimalist

practices. Moreover, intolerance of uncertainty can make decision-making difficult (Appel et al., 2024), so it is also possible that would mean not being able to make decisions about possessions, and therefore not being able to adopt minimalism. Intolerance of uncertainty and needing control may have in part contributed to why some participants (such as those with cluttered childhoods) adopted minimalism. Given we do not know how many adopted minimalism due to cluttered childhoods, future research might explore the role of different dispositions, childhood experiences, and mental health in adopting minimalism via quantitative methods.

6.3 Theoretical contributions

6.3.1 Definition of minimalism and its relationship with environmental practices and aesthetics

My conceptual understanding of minimalism evolved during the process of conducting this research. During the thesis it became evident that the sub-dimension of 'aesthetic' minimalism was distinct to the others, particularly in relation to environmental impact and environmental concern. In Chapter 2 I reported that some researchers identified an aesthetic element as being essential to minimalism (Wilson et al., 2022), while others did not (Kang et al., 2021). In this thesis most interview participants reported that aesthetics was important to them (Chapter 4), in that they preferred calm and tidy environments; however, they qualified this by noting they liked colour, art, and plants and were not interested in the spartan white spaces seen in Instagram images of minimalism. Survey data (Chapter 3) found a correlation between ecological footprint and 'mindful' minimalism and 'few belongings' minimalism, but not for 'aesthetic' minimalism, and the same pattern was seen for ecological concern. Wellbeing associations were also different, with 'aesthetic' minimalism showing a stronger negative association with PANAS negative. As proposed in the systematic review (Chapter 2), these results suggest there may in fact be two broad groups of minimalists: eco-minimalists, and a separate group more concerned with Instagram aesthetics, with the two groups differing in environmental impacts, wellbeing benefits and intrinsic motivation. This dimensionality is not captured in the Consumer Minimalism Scale (Wilson et al., 2022). Further conceptual work (including scale development) might help clarify this environmental

dimension. Environmental behaviour data collected in the qualitative study could be used to help construct survey items that tap into an eco-minimalist dimension (Chapter 4), which could then be confirmed using factor analysis on these new items when used in conjunction with the existing consumer minimalism scale. Given that aesthetic minimalists are likely to be more extrinsically motivated, levels of motivation from amotivation to extrinsic to intrinsic as described by self-determination theory, should be measured.

Subject to further scale development I propose an expanded definition of minimalism:

> Minimalism is a lifestyle that focuses on owning less, being thoughtful about what to keep or let go, and a preference for sparse aesthetics[16]. Practitioners prefer quality over quantity when obtaining goods. Practitioners may also differ across two dimensions: eco-minimalism and aesthetic minimalism. Those high in eco-minimalism become increasingly concerned with environmental impacts of consumption after adopting the lifestyle, although they do not necessarily adopt minimalism for that reason. Key practices include repairing, reusing, buying second-hand goods, and giving away items that are no longer needed. While eco-minimalists prefer a tidy and uncluttered aesthetic, they are uninterested in extreme minimalism. Those high in aesthetic minimalism tend to be more extrinsically motivated. Aesthetic minimalists are interested in a very minimal aesthetic but are unconcerned with environmental issues and practices.

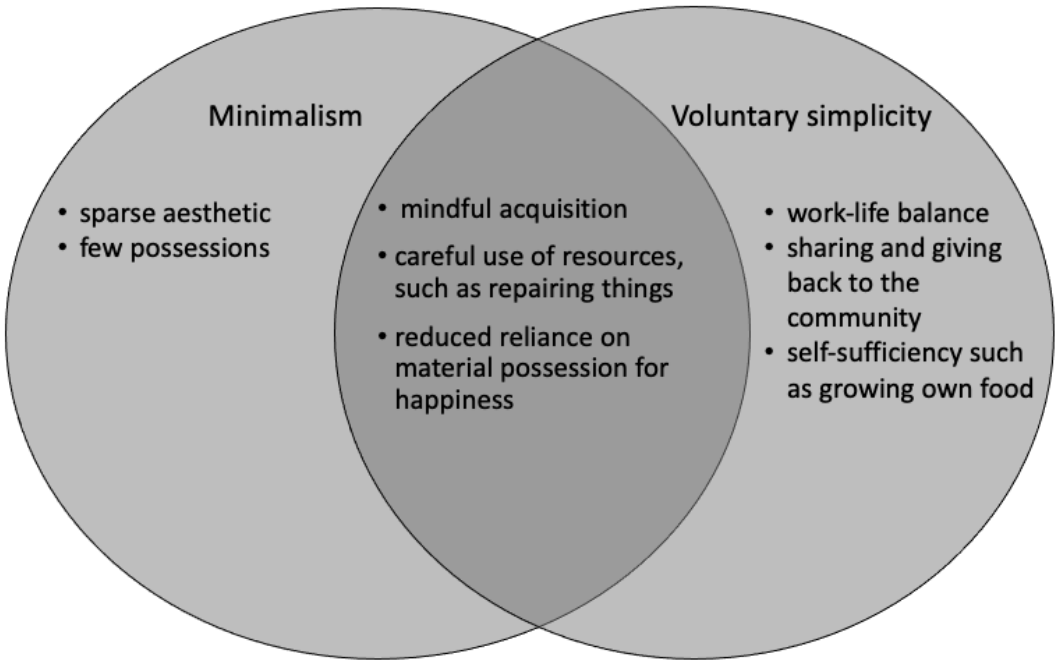
6.3.2 Difference between minimalism and voluntary simplicity

The work contained in the thesis has also helped clarify the distinction between minimalism and voluntary simplicity. In Chapter 2 it was suggested that some elements of these two lifestyles overlap but there are traits and practices unique to each lifestyle. Few possessions and mindful acquisition were thought to be part of both lifestyles, while careful use of resources such as repairing things was uncertain (see Chapter 2, Figure

[16] This component is consistent with the conceptualisation by Wilson, A. V., Bellezza, S., Campbell, M. C., & McFerran, B. (2022). Consumer minimalism. *Journal of Consumer Research*, *48*(5), 796-816. https://doi.org/10.1093/jcr/ucab038 conceptualisation.

2.1). Minimalism was thought to be distinct because it includes an aesthetic element and reduced reliance on material possessions for happiness, while voluntary simplicity was considered to include work-life balance, sharing, giving back to the community, and self-sufficiency in terms of growing one's own food. In Figure 6.1 I represent the distinction between the two lifestyles. Repairing items and buying second-hand was identified as minimalist behaviours in the qualitative study (Chapter 4), and the final quantitative study (Chapter 5), confirming the idea that these behaviours are found in both lifestyles. However, it is possible that having few possessions was incorrectly included as applying to both lifestyles. Few possessions is a defining feature of minimalism, which was seen in all three empirical studies, but voluntary simplicity research does not suggest that having few possessions is essential to the lifestyle (Rich et al., 2019). Further conceptual work could measure the differences between these two lifestyles. However the need for this type of research is perhaps less pressing as some argue that voluntary simplicity has now morphed into minimalism, a process that was enabled by the development of blogging and social influencers (Zavestoski et al., 2022).

Figure 6.1 Characteristics of minimalism and voluntary simplicity revised



6.4 Summary of contributions

Several new findings have originated from this thesis:

Definitional: The definition of minimalism has been clarified. This includes a better understanding of the role of aesthetics and environmental concern in minimalism and whether minimalists adopt repair and reuse behaviours, although the environmental dimension probably requires further work and scale development. A new expanded definition of minimalism has been proposed (see Section 6.3.1). The relationship between minimalism and VS has also been further clarified.

Environmental impact of minimalism: For the first time we have information on the ecological footprint of minimalists. We also have a more in-depth understanding of minimalist environmental practices – new minimalist practices have been identified, such as how minimalists dispose of waste, and their repair and reuse behaviours.

Minimalist motivations and outcomes: Minimalist motivations was explored, and we now have insights into the mechanisms through which minimalist practices are associated with enhanced wellbeing. These mechanisms are that important psychological needs are met, and these needs are an indicator that minimalist practices are probably internally motivated. This internal motivation would also help explain why external social norms seemed to have little or no influence on people adopting and maintaining the lifestyle (which is recognised by those who practise minimalism as a non-normative lifestyle).

Social influence of minimalism: Minimalists influence others through a range of behaviours, but the strength of this influence needs further exploration.

Replication and methods: Supporting and building on previous research, a more comprehensive set of wellbeing measures was used to understand minimalism's impact on wellbeing, in that three wellbeing scales was used concurrently (flourishing, life satisfaction, and the PANAS) (Chapter 5).

6.5 Policy implications

6.5.1 Encouraging the adoption of minimalism

Given minimalism increases flourishing, programs to encourage the lifestyle could be targeted at people who want to improve their wellbeing. It was identified in Chapter 4 that participants often adopted minimalism after a trigger such as managing a deceased estate, or a relationship coupling or breakdown. Thus, adoption of minimalism could be targeted at times of life change e.g., moving or buying a home, career change, having a baby, retirement, and/or starting university. Two programs that encourage the adoption of minimalism are described below.

One promising example of how to encourage the adoption of minimalism is a pilot web-based program 'Breaking up with belongings' (Norberg et al., 2024). This was a three-month web program based on video modules and a workbook. The program found that participants were more successful at eliminating clutter and cautious shopping than the control group. Only 25% of participants completed the program but this is common with self-guided web-based interventions (Beatty & Binnion, 2016). Participants also did not improve their wellbeing, which is surprising given the results of seen in this thesis. The researchers proposed that three months was insufficient time to see a result and lack of improved wellbeing may have depended on whether the participant thought decluttering was enjoyable or not. This is an interesting observation given participants in the studies in this thesis appeared to demonstrate intrinsic values, which contributed to wellbeing outcomes. The researchers intend to use feedback generated by the pilot to improve the program and run a larger randomised control program, which may provide clearer guidance on whether self-guided web-based interventions could be successful.

Another example is the 'Take your house back' (www.takeyourhouseback.com) which teaches decluttering and organising. The program is run by three of the biggest decluttering/minimalist influencers, Dawn Madden from 'Minimal Mom', Cassandra Aarssen from 'Clutterbug' and Dana K White from 'A slob comes clean', who collectively have over 2 million subscribers on YouTube (as of July 2025). The program includes videos, live recordings, and a private Facebook group. As far as I am aware the

effectiveness of this program has not been evaluated. An evaluation program could consider a longitudinal approach where participants levels of wellbeing and minimalism are measured at the start of the program and re-evaluated six to 12 months later. An evaluation program could measure if the motivations are intrinsic and how this affects the longevity of minimalism.

Both programs might benefit from the findings from this thesis especially the finding that minimalism increases wellbeing and lowers ecological footprint which might motivate participants to adopt minimalism. Furthermore, participants are more likely to sustain minimalism if the motivation is intrinsic, rather than for show. Participants could also be informed that wellbeing benefits might not occur if they focus on Instagram style minimalism instead of a calm and tidy aesthetic that appeals to them i.e., it might include art, plants, and colour.

6.5.2 Structural changes to support sufficiency practices

While it is important to understanding individual psychology underpinning consumption, corporations and governments are also significant contributors to climate change and bear responsibility for many of the structural changes needed to achieve meaningful reductions. It was briefly mentioned in Chapter 1 that more equal societies are less consumerist. Thus, arguably the most significant change that needs to occur is appropriate taxation of the wealthy and redistribution to create more equal societies (Wiedmann et al., 2020).

Specific changes which address challenges with adopting and maintaining minimalism (identified via interview data in Chapter 4) are summarised below (see Chapter 4 discussion for more detail).

- **Offer benefits when embracing minimalism**: One example is the downsizer tax benefits provided by the Australian government (ATO, 2024).
- **Encourage repair and reuse**: Governments could offer right-to-repair legislation, and support repair cafes and reuse centres such as tip shops or centres which

support recycling of factory offcuts such as Reverse Garbage (https://reversegarbage.org.au) in Australia. Second-hand department stores such as Retuna, in Sweden also need support (Hedegård et al., 2019).

- **Support sharing and swapping**: Governments can support the development of tool libraries and expand the role of public libraries.
- **Provide better disposal options**: Governments can provide speciality recycling services such as textile recycling. Industry needs to design for reuse and repair, and recycling (Borg et al., 2024),
- **Better control of advertising:** Governments could control advertising by limiting advertising in schools, on public infrastructure such as bus shelters, and government run television channels.
- **Implement better privacy standards and privacy education:** To reduce targeted advertising, better privacy standards are required. Industry is also implicated – they will need to make privacy options easy to read and allow customers to view what data is held by them.

It is beyond the scope of this PhD to investigate these options, but further research could provide more nuanced and locally relevant advice.

6.6 Limitations and implications

There were several limitations for the studies conducted for this thesis. One limitation for all three studies was research was conducted in a western, educated, industrialised, rich, democratic (WEIRD) country. The top decile of global income earners are not confined to WEIRD countries; they are found all over the world (Capstick et al., 2021). The constructs tested in this thesis may not translate to non-western individuals. There might also be different rules, conventions, and rewards around conspicuous consumption that impose culture-specific barriers. Further research is required to understand if these findings also apply in non-WEIRD countries.

Sampling limitations affected all three studies. In the qualitative study (Chapter 4) the median time as a minimalist was 10 years, so they may not have been able to remember the challenges with adopting minimalism. The sample was also predominantly female, and males may have a different lived experience of becoming minimalist than females

(however, the quantitative surveys in Chapters 3 and 5 do not suggest that minimalists are predominantly female). Future qualitative studies could try recruiting from minimalism social media platforms where there are likely to be more people who have recently adopted the lifestyle, have a broader range of careers, and a more even mix of genders. Both Studies 2 and 4 (Chapters 3 and 5) relied on a convenience sampling, which limits the generalisability. The sample for Study 4 (Chapter 5) was wealthier and more educated than the Australian average (although it did have an even gender balance). This is one of the limitations of using panel data; possibly using a different provider such as CloudResearch could provide a more representative sample.

Another limitation concerning the two quantitative studies (Chapter 3 and Chapter 5), is their cross-sectional nature, thus any discussions about causality are assumptions only. Counter arguments about causality may also be valid e.g., that high levels of wellbeing *precede* minimalism. Similarly, the observed association between need satisfaction and minimalism could be explained by an unmeasured third variable not accounted for in this research. Some inferences about causality can be based on the interview data (Chapter 4), where participants reported they were happier *as a result of* their minimalist practices, but future research might employ, for example, longitudinal methods to test some of the causal assumptions in the thesis.

A study-specific limitation was the challenge of measuring environmental impact (Chapter 3). While some aspects of the ecofootprint calculation method are available (Lin et al., 2018), the calculator is not public and its algorithms are proprietary. Survey data must be entered manually into the calculator, making it more difficult to replicate studies due to the time-intensive nature. However, given the limitations of using direct report of unquantifiable and low impact behaviours, such as frequency of showers, which are often used in environmental psychology (Lange et al., 2023), using the footprint calculator was preferable because it is arguably more precise. Potentially, an even more accurate method for measuring environmental impact that could be used in future studies, is to request participants record actual usage such as annual electricity consumption, although this method maybe more time consuming and therefore costly.

Another possibility is to request this data directly from the electricity retailer, although this may have limitations due to privacy concerns. However, neither of these methods cover the breadth of environmental impact available in a footprint calculator e.g., food consumption. Another option might be diary studies, where participants are asked to record their consumption based on electricity bills etc, alongside their wellbeing.

Some of the limitations of the studies were overcome by subsequent studies in the thesis. For example, in Study 2 (Chapter 3), measuring wellbeing was potentially complicated by the COVID-19 pandemic (Zaninotto et al., 2025) as it may have impacted some more than others, such as those who live in apartments. The validity of 'wellbeing' as an outcome was also limited by using only two measures of wellbeing (the PANAS and life satisfaction). Using at least three measures of wellbeing is recommended for accurate measurement of wellbeing (VanderWeele et al., 2020). The limitations from Study 2 were overcome in the final study (Chapter 5) which was conducted post pandemic, and flourishing was included as an additional measure of wellbeing. Another example is the qualitative study (Chapter 4) which was a small convenience sample. Some of the results from the qualitative study, such as wellbeing benefits, and working in minimalist related careers were validated in the subsequent quantitative study using well-powered sample (Chapter 5). For example, minimalist bloggers and professional organisers were targeted in the recruitment method of the qualitative study so it was not surprising that participants reported influencing others via their career. However, the follow-up quantitative study (Chapter 5) found that a quarter of self-identified minimalists worked in a minimalist-related career, supporting the legitimacy of this finding. Another area to investigate in the future is how minimalists negotiate communal spaces with other family members who are not interested in becoming minimalist.

6.7 Concluding remarks

The findings in this thesis suggest that minimalism is a lifestyle that results in a reduced ecological footprint and improves wellbeing. These wellbeing benefits appear to arise because the lifestyle supports the satisfaction of basic psychological needs. This suggests that minimalism can offer the double dividend, which is especially promising as

reducing consumption can be perceived as involving sacrifice that impacts wellbeing (Moorcroft et al., 2025). Promoting the benefits of a minimalist lifestyle could change this perception, but this will need to occur not just at the individual and community level but also at the structural level

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Appendix A: Supplementary materials for Chapter 2

1. Method for the literature search: minimalism and minimalist lifestyles

The literature search was conducted following PRISMA guidelines. Web of Science Core Collection and Scopus databases were searched in February 2023. The last search of Scopus was on 11 February 2023 and the last search of Web of Science was on the 13 February 2023.

The research question was "Could a minimalist lifestyle reduce carbon emissions and increase wellbeing?"

Title and abstract screening

Publications in Web of Science were selected and added to the marked list. This list automatically removed duplicates.

Publication in Scopus were selected and downloaded into excel, sorted and duplicates removed.

Full text selection

The two data sets were merged and duplicated removed in excel.

Exclusions and inclusions

To be included papers needed to be about the minimalist lifestyle, in English, peer reviewed, conceptual, or empirical. Grey literature, books and dissertations were excluded. Papers about hoarding and digital minimalism were also excluded.

Search terms

The terms “minimalism”, “minimalist lifestyle”, “decluttering” and “Marie Kondo” were searched by themselves.

We also used strings involving a minimalism variant (X) such as “minimalism”, or “minimalist lifestyle” and a type of carbon emissions (Y). The strings were connected with Boolean operator “AND’”. Carbon emission variants included: “carbon footprint”, “footprint”, “ecological footprint”, “emissions”, “sustainable”, “GHG emissions”, “environmental impact” and “carbon emissions”.

We also used strings involving a minimalism variant (X) and wellbeing variant (Z). The strings were connection with Boolean operator “AND”. Wellbeing variants included: “wellbeing”, “well-being”, “well being”, “happiness” and “life satisfaction”.

All fields were searched for all search terms except for “minimalism” because this term generated thousands of responses.

The search for “minimalism” was refined for Web of Science using the following filters:

"minimalism" (Topic) and 6.69 Language & Linguistics or 10.99 Literary Theory or 10.240 Music or 1.7 Neuroscanning or 4.47 Software Engineering or 4.116 Robotics or 4.48 Knowledge Engineering & Representation or 1.34 Orthopedics or 2.1 Synthesis or 2.209 Spectrometry & Separation or 2.53 Polymers & Macromolecules or 3.60 Herbicides, Pesticides & Ground Poisoning or 1.129 Back Pain or 1.134 Trauma & Emergency Surgery or 1.136 Autism & Development Disorders or 1.150 Hearing Loss or 1.155 Medical Ethics or 1.257 Birth Defects or 2.123 Protein Stucture, Folding & Modelling or 10.279 Soviet, Russian & East European History or 4.13 Telecommunications or 1.307 Laboratory Medicine or 1.37 Cardiology - General or 1.52 Neurodegenerative Diseases or 1.54 Molecular & Cell Biology - Genetics or 1.79 Molecular & Cell Biology - Physiology or 1.82 Gait & Posture or 1.95 Gastrointestinal & Esophageal Diseases or 2.145 Biosensors or 2.160 Microfluidic Devices & Superhydrophobicity or 2.165 Nanofibers, Scaffolds &

Fabrication or 2.170 Nucleic Acids Chemistry or 2.176 Drug Delivery Chemistry or 2.244 Chemometrics or 2.39 Polymer Science or 2.76 2d Materials or 3.16 Phytochemicals or 3.275 Crop Protection or 3.45 Soil Science (Exclude – Citation Topics Meso) and Music or Language Linguistics or Literature or Computer Science Theory Methods or Theater or Computer Science Information Systems or Automation Control Systems or Construction Building Technology or Physics Applied or Telecommunications or Chemistry Multidisciplinary or Computer Science Cybernetics or Dance or Biochemical Research Methods or Biodiversity Conservation or Biology or Imaging Science Photographic Technology or Water Resources or Acoustics or Cell Biology or Critical Care Medicine or Dermatology or Engineering Chemical or Fisheries or Food Science Technology or Forestry (Exclude – Web of Science Categories) and SYNTHESE or ART IN AMERICA or NEUROSURGERY or ARTS MAGAZINE or ARTNEWS or JOURNAL OF VISUAL CULTURE (Exclude – Publication Titles) and Law (Exclude – Web of Science Categories)

The search for "minimalism" in Scopus was refined using the following:

Your query : (TITLE-ABS-KEY("minimalism") AND (EXCLUDE (SUBJAREA,"COMP") OR EXCLUDE (SUBJAREA,"MEDI") OR EXCLUDE (SUBJAREA,"BIOC") OR EXCLUDE (SUBJAREA,"MATE") OR EXCLUDE (SUBJAREA,"CENG") OR EXCLUDE (SUBJAREA,"EART") OR EXCLUDE (SUBJAREA,"ENGI") OR EXCLUDE (SUBJAREA,"CHEM") OR EXCLUDE (SUBJAREA,"PHYS") OR EXCLUDE (SUBJAREA,"IMMU") OR EXCLUDE (SUBJAREA,"DECI") OR EXCLUDE (SUBJAREA,"PHAR") OR EXCLUDE (SUBJAREA,"MATH") OR EXCLUDE (SUBJAREA,"NEUR") OR EXCLUDE (SUBJAREA,"NURS") OR EXCLUDE (SUBJAREA,"AGRI") OR EXCLUDE (SUBJAREA,"DENT") OR EXCLUDE (SUBJAREA,"VETE")) AND (LIMIT-TO (LANGUAGE,"English")) AND (EXCLUDE (EXACTKEYWORD,"Syntax") OR EXCLUDE (EXACTKEYWORD,"Semantics") OR EXCLUDE (EXACTKEYWORD,"Nonhuman") OR EXCLUDE (EXACTKEYWORD,"Contextualism") OR EXCLUDE (EXACTKEYWORD,"Truth") OR EXCLUDE (EXACTKEYWORD,"Priority Journal") OR EXCLUDE (EXACTKEYWORD,"Genetics") OR EXCLUDE (EXACTKEYWORD,"Linguistics") OR EXCLUDE (EXACTKEYWORD,"Deflationism") OR EXCLUDE (EXACTKEYWORD,"Ellipsis") OR EXCLUDE (EXACTKEYWORD,"Metabolism") OR EXCLUDE (EXACTKEYWORD,"Minimalist Program") OR EXCLUDE (

EXACTKEYWORD,"Universal Grammar") OR EXCLUDE (EXACTKEYWORD,"Phylogeny") OR EXCLUDE (EXACTKEYWORD,"Bacterial Genome") OR EXCLUDE (EXACTKEYWORD,"Language Acquisition") OR EXCLUDE (EXACTKEYWORD,"Cartography") OR EXCLUDE (EXACTKEYWORD,"Genome, Bacterial") OR EXCLUDE (EXACTKEYWORD,"Code-switching") OR EXCLUDE (EXACTKEYWORD,"Distributed Morphology") OR EXCLUDE (EXACTKEYWORD,"Wh-movement") OR EXCLUDE (EXACTKEYWORD,"Physiology") OR EXCLUDE (EXACTKEYWORD,"Biolinguistics") OR EXCLUDE (EXACTKEYWORD,"Evolution") OR EXCLUDE (EXACTKEYWORD,"Information Structure") OR EXCLUDE (EXACTKEYWORD,"Left Periphery") OR EXCLUDE (EXACTKEYWORD,"Morphology") OR EXCLUDE (EXACTKEYWORD,"Evolution, Molecular") OR EXCLUDE (EXACTKEYWORD,"Genome") OR EXCLUDE (EXACTKEYWORD,"Nucleotide Sequence") OR EXCLUDE (EXACTKEYWORD,"Second Language Acquisition") OR EXCLUDE (EXACTKEYWORD,"Bacterium") OR EXCLUDE (EXACTKEYWORD,"Prochlorococcus") OR EXCLUDE (EXACTKEYWORD,"Bacteria (microorganisms)") OR EXCLUDE (EXACTKEYWORD,"Eukaryota") OR EXCLUDE (EXACTKEYWORD,"Molecular Sequence Data")) AND (EXCLUDE (SRCTYPE,"b") OR EXCLUDE (SRCTYPE,"k") OR EXCLUDE (SRCTYPE,"d") OR EXCLUDE (SRCTYPE,"p"))

The search for “decluttering” was refined in SCOPUS using:

"decluttering" AND (EXCLUDE (SUBJAREA , "COMP") OR EXCLUDE (SUBJAREA , "ENGI") OR EXCLUDE (SUBJAREA , "MATH") OR EXCLUDE (SUBJAREA , "PHYS") OR EXCLUDE (SUBJAREA , "EART") OR EXCLUDE (SUBJAREA , "MEDI") OR EXCLUDE (SUBJAREA , "CHEM") OR EXCLUDE (SUBJAREA , "BIOC") OR EXCLUDE (SUBJAREA , "DECI") OR EXCLUDE (SUBJAREA , "CENG") OR EXCLUDE (SUBJAREA , "PHAR") OR EXCLUDE (SUBJAREA , "IMMU"))

2. Additional search for papers covering low-consumption lifestyles and environmental impact

Environmental impact

Scopus and Web of Life Core Collection were searched on 16 February 2023. Search strings involved a low consumption lifestyle (X), and a type of environmental impact (Y). The strings “were connected with Boolean operator “AND’”.

Low consumption lifestyles included “voluntary simplicity”, “frugal” and “tightwad”.

Environmental impact variants included: “environmental impact”, “carbon emissions”, “emissions”, “footprint”, “ecological footprint”, “carbon footprint”, “sustainable”.

Wellbeing

Scopus and Web of Life Core Collection were searched on 16 February 2023. Search strings involved a low consumption lifestyle (X), and wellbeing (Y). The strings “were connected with Boolean operator “AND’”.

Low consumption lifestyles included “voluntary simplicity”, “frugal” and “tightwad”.

Wellbeing variants included: “wellbeing”, “well being”, “well-being” “life satisfaction”, “happiness”.

Appendix B: Supplementary materials for Chapter 3

Measures

Ecological footprint calculator questions

We used the WWF Ecological Footprint Calculator https://wwf.org.au/get-involved/ecological-footprint-calculator/, which was created by the Global Footprint Network https://www.footprintnetwork.org/ to collect the footprint data. Survey data was manually entered into the online footprint calculator. The services footprint was excluded from the analysis given it is largely sourced from the other sub-dimensions. The questions are listed in Table B1.

Table B1 Ecological footprint questions

Questions	Scale
Food	
How often do you eat animal-based products? • Beef • Pork • Chicken • Fish • Eggs and dairy products)	never, every few weeks, 1-2 times per week, every day, every meal
How much of the food that you eat is fresh, unpackaged?	Indicate % using a sliding scale
How much of your diet is locally grown or produced?	Indicate % using a sliding scale
Housing	
Which housing type best describes your home	• House, no running water • House, running water • Flat/unit building • Duplex, townhouse • Penthouse
What material is your house constructed with	• Straw/bamboo • Brick/concrete • Steel/other • Wood • Adobe
How many people live in your household?	• Just me • 2 people, • 3 people, • 4-5 people • 6 or more people
What is the size of your home?	• Very small, bedsit/studio (<17m2) • Small, 1 bedroom apartment (17-49 m2)

	• Medium, 1-3 bedroom apartment or townhouse (50-132 m2) • Large, 3 bed house, large apartment or large townhouse (133-462m2) • Very large, 4 beds or more with extra living spaces, house (>463m2)
How energy efficient if your home?	• Very inefficient (poor insulation, few LED lamps, heating/cooling used often) • Below average (inefficient lighting, standard appliances) • Average (modern appliances, climate controls • Above average (well insulated, efficient lighting and appliances, careful use) • Efficiency-centered design (passive heating/cooling, advanced temperature control and ventilation, low electricity use)
What percentage of your home's electricity comes from renewable sources?	Indicate % using a slider
Consumption	
Compared to your neighbours how much rubbish do you generate?	• Much less – I practise zero waste • Less – I recycle everything I can and compost my food scraps • Same – I always put out my bin on collection day, the slide shuts easily • More – my bin is always packed and sometimes the lid doesn't close • Much more – my bin is always overflowing, I frequently take rubbish to the tip or organise a special collection
What comes closes to your monthly new clothing, footwear and/ or sporting goods purchase	• A lot, several new outfits and shoes every month • Above average, shoes, pants, shirts, socks, and underwear every month • Average, 2-3 items of clothing per month • Not much, maybe one item • Minimal to none
How often do you purchase new household appliances such as a fridge or dishwasher?	• Very often, I always have the latest appliances • Often, I replace most of my appliances with the latest model • Occasionally, I sometimes replace out of date appliances with new models • Infrequently, I only replace broken appliances when needed • Never/rarely, I don't purchase new appliances, I purchase second hand.
How often do you purchase new electronics and gadgets?	• Very often, I always have the latest greatest gadget • Often, I own many of the newest gadgets on the market • Occasionally, I replace out of date models and occasionally buy a new gadget

	• Infrequently, I generally only replace broken TV's and computers • Never/rarely, I upgrade my mobile phone every few years.
How often do you purchase books, magazines, and newspapers?	• Very often, I get a daily newspaper and buy books and magazines several times a week • Often, I often get a newspaper and buy books or magazines every week or two • Occasionally, I read some news online and subscribe to a couple of magazines or newspapers • Infrequently, I read online and borrow many of the books and magazines I read • Never/rarely, I buy newspapers, magazines, or a new book at most a few times per year
How much do you spend annually on new furnishings? Exclude second-hand furniture	• A lot, I completely refurbish my living room, it's my annual ritual • Above average, a couch or new bedroom set, I like to change it up • Average, new bedding and a lamp and a table just to spruce things up • Not much – I haven't decorated in years, maybe new towels, and sheets • Minimal to none
How much do you recycle? (%) • Paper • Plastic	Indicate % using a sliding scale
Travel	
How far do you travel by car or motorcycle each week? (as driver or passenger) (Km)	Indicate Km using a sliding scale
What is the average fuel economy of the vehicles you most often use?	Indicate litres/100km on a sliding sale
When you travel by car, how often do you carpool?	Indicate % on a sliding scale
How far do you travel of public transport each week? (Km)	Indicate km using a sliding scale
How many hours do you fly each year (hours)	Indicate hours using a sliding scale

Analyses

Data Cleaning

Data screening was conducted prior to analysis of results. IBM SPSS was used to identify missing values, outliers, skewness, and kurtosis. Descriptives were run for ecological footprint, wellbeing, materialism, lifestyle scales and extra questions about minimalism and environmental impact. Minimum and maximum values, range, means and standard deviation and outliers were checked. Skewness and kurtosis and missing values were checked.

Ecological footprint data

Missing values were found for two questions in the ecological footprint; both questions had a not applicable (NA) option. The question about fuel efficiency had 114 missing values. These participants ticked NA for fuel efficiency but indicated a weekly mileage. Participants were asked via Prolific messaging to provide their fuel efficiency. Sixty-four participants replied, the remaining 50 participants did not reply. For those who replied, their fuel efficiency was added to the dataset. Thirty-one participants (7% of the sample of 444) had a weekly mileage under 10 km and did not reply to the Prolific request. For these participants fuel efficiency was recorded as zero as the participant probably intended to mark the mileage as zero. (Mileage was measured on a Qualtrics slider which forces the participant to move the slider from and back to its original position for their response to be recorded. Thus, any imprecision in moving the slider back to its original position may have been recorded as a small mileage total, e.g., 4km). The remaining 19 participants (4.3% of the entire sample) who travelled more than 10 km per week were given the sample median fuel efficiency of 8 l/km. Note this is better than the Australian average fuel efficiency for passenger vehicles which is 11.1 l/km (ABS, 2020). This suggests that there might have been consistent under reporting of fuel efficiency for the whole data set, however it makes sense to maintain this approach for the 19 participants that didn't record fuel efficiency.

The question on access to public transport had 191 missing values, representing 43% of the sample. These participants ticked the not applicable box to indicate they did not have access to public transport. This is not an unreasonable figure as only 58% of Australian's use public transport (Roy Morgan 2020). These missing values were replaced with a zero in the dataset, as the participants did not travel any distance on public transport.

Six high *extreme outliers were identified* in the ecological footprint data via box plots in SPSS. SPSS defines extreme outliers using Tukey's hinges. Any value outside the following ranges is considered to be an extreme outlier: 3rd quartile +3*interquartile range and 1st quartile-3*interquartile range. Extreme outliers were removed for the ecological footprint score and the subdomain scores, leaving 438 participants for the ecofootprint

analysis. This number is still within the minimum sample size of 403 identified in the apriori G*Power analysis.

Skewness and kurtosis. According to (Tabachnick & Fidell, 2014, p. 114), a reasonably large sample size (greater than 200), will not make a "substantive difference to the analysis" for skewness. The same applies for kurtosis. Our sample at 438 participants is reasonably large, thus skewness and kurtosis were not considered.

Main results with outliers included

We repeated the main analysis with the full dataset, six outliers included (Tables B2-4). Correlating the four low consumption lifestyles with ecological footprint and demographics with outliers made no meaningful change to the outcome (Table B2).

Table B2 Low consumption lifestyles correlated with ecological footprint and demographics including outliers

	1	2	3	4	5	6	7	8	9
1. Minimalism	1								
2. Voluntary simplicity	.44**	1							
3. Frugalism	.44**	.52**	1						
4. Tightwadism	.31**	.23**	.46**	1					
5. Ecological footprint	-.16**	-.16**	-.11*	-.13**	1				
5. Age	.06	.07	.17**	-.01	.09*	1			
7. Gender	-.02	.10*	.02	-.19**	-.02	-.09	1		
8. Income	.06	.00	.06	.01	.05	-.03	-.09	1	
9. Education	.01	.01	.08	.04	.02	.17**	-.04	.27**	1

N=444, except for gender N=428, income N=403, Gender: 1=males, 2=females
* $p < .05$
** $p < .01$

Including outliers when correlating the lifestyles with additional environmental measures made no meaningful change to the outcome (Table B3).

Appendix B

Table B3 *Low consumption lifestyles correlated with additional environmental measures with outliers*

		1	2	3	4	5	6	7	8	9	10
1.	Minimalism	-									
2.	Voluntary simplicity	.44**	-								
3.	Frugalism	.44**	.52**	-							
4.	Tightwadism	.31**	.23**	.46**	-						
5.	House size – house FP	-.14**	.00	.01	-.06	-					
6.	Household size -house FP	-.10*	.01	-.03	.01	.50**	-				
7.	Energy efficiency – house FP	.10*	.19**	.11*	.07	.15**	.09	-			
8.	Waste – goods FP	-.15**	-.32**	-.25**	-.18**	.05	.19**	-.09	-		
9.	New clothes	-.16**	-.21**	-.26**	-.37**	.12*	-.07	-.03	.17**	-	
10.	Pets	-.11*	.01	-.03	-.04	.27**	.21**	.09	.05*	-.17**	-

N= 444
* $p < .05$
** $p < .01$

When we included outliers in a hierarchical regression with the four lifestyles predicting ecological footprint and controlling for age, income, and gender, voluntary simplicity was no longer significant (Table B4).

Table B4 Hierarchical regression of the four lifestyle variables predicting ecofootprint with outliers

	B	SEB	Beta	t	Sig
Constant	5.55	.95		6.87	<.001
Age	.03	.01	.10	1.89	.060
Gender	-.06	.36	-.01	-.17	.863
Income	.06	.06	.05	.99	.325
				R^2= .01	
Constant	10.36	1.61		6.42	<.001
Age	.03	.01	.11	2.09	.037
Gender	-.10	.37	-.01	-.28	.781
Income	.07	.06	.06	1.14	.254
Minimalism	-.35	.20	-.10	-1.78	.077
Voluntary simplicity	-.52	.31	-.10	-1.66	.099
Frugalism	.03	.30	.01	.10	.924
Tightwadism	-.07	.05	-.08	-1.37	.173
				R^2 Δ = .04; FΔ = 4.43**	
				R^2=.06**	

N=444 footprint, lifestyle and age, N=403 income, N=434 gender
*p<.05, ** $p < .01$, ***p<.001

ANOVA comparing minimalist identity with minimalism consumer scale

A one-way ANOVA was used to compare minimalist identity questions with levels of minimalism based on the Minimalism Scale (Table B5).

Table B5 Identity and minimalism

		%	Mean minimalism scale M(SD)
Which of the following best describes your experience with minimalism?	I consider myself a minimalist	15.5	5.47_{a*} (.82)
	I am actively working towards becoming a minimalist	23.4	5.01_{b} (.87)
	I want to be a minimalist one day	27.5	4.55_{c} (.86)
	I have no desire to become a minimalist	33.6	3.98_{d} (.98)
Total %		100.00	
F test	F(3, 440)=53.18, p=<.001		
Eta squared	.27		

Note. * Different subscripts denote groups are significantly different from one another

Associations between minimalism and ecological footprint and minimalism and wellbeing based on income, age and gender

Split file analyses were used to explore whether the associations between minimalism and ecological footprint, and the associations between minimalism and wellbeing, were the same for different income groups, age groups, and gender (Table B6). Groups for income and age were based on creating three approximately even groups.

Table B6 Correlations between minimalism, footprint and wellbeing, for different income, age, and gender categories.

		Correlation with minimalism			
		Ecological footprint (n=438)	Life satisfaction (n=444)	PANAS positive (n=444)	PANAS negative (n=444)
Income	Low (n=133, n=136)†	-.16	.06	.16	-.05
	Medium (n=150, n=151)†	-.15	.05	.09	-.17*
	High (n=115, n=116)†	-.19*	< .01	.18	-.10
Age	18-27 yrs (n=149, n=149)†	-.02	.18*	.29**	-.20*
	28-38 yrs (n=143, n=146)†	-.26**	-.01	<.01	-.07
	39-84 yrs (n=146, n=149)†	-.20*	.01	.10	-.02
Gender	Female (n=247, n=250)†	-.14*	.07	.14*	-.13*
	Male (n=181, n=184, n=)†	-.20**	.04	.14	-.05

Note. * $p < .05$; ** $p < .01$ †Group sizes differed slightly depending on whether outliers were removed (as for the ecological footprint scale), or whether the while sample was retained (as for the wellbeing measures).

Influence of sociodemographic factors on ecological footprint

Research on the determinants of ecological footprints is mixed, although there seems to be an indication that larger footprints are associated with higher income (Huddart Kennedy et al., 2015; Jack & Ivanova, 2021; Moser, 2018; Salo et al., 2021; Vita et al., 2020). Table B7 summarises the research.

Table B7 Determinants of ecological footprints

Determinant	Lower footprint	Higher footprint	Not significant or negligible association
Higher income		(Bleys et al., 2018; Huddart Kennedy et al., 2015; Jack et al., 2021; Moser, 2018; Salo et al., 2021; Vita et al., 2020)	
Older people	(Moser, 2018)	(Bleys et al., 2018; Jack et al., 2021)[1]	(Huddart Kennedy et al., 2015; Salo et al., 2021)[2]
Higher education		(Huddart Kennedy et al., 2015; Salo et al., 2021)	(Bleys et al., 2018; Moser, 2018)
Gender	(Huddart Kennedy et al., 2015; Moser, 2018) for women		(Bleys et al., 2018)
More people in home	(Bleys et al., 2018; Moser, 2018; Verhofstadt et al., 2016)	(Huddart Kennedy et al., 2015)[3]	
Smaller home	(Salo et al., 2021; Verhofstadt et al., 2016)		
Home ownership	(Bleys et al., 2018; Verhofstadt et al., 2016)	(Moser, 2018)	
Environmental concern	(Huddart Kennedy et al., 2015; Verhofstadt et al., 2016)		
Environmental identity		(Moser, 2018)	

Notes: [1]Middle aged 25-64 years, [2] (Huddart Kennedy et al., 2015) based on a partial footprint, which excluded material goods [3] Total household size, not per capita.

ANOVA comparing age groups and new clothes purchases

A one-way ANOVA was performed to compare the effect of age on levels of

minimalism (Table B8). Post hoc comparisons using the Tukey HSD test indicated that the mean scores for 18-27 year-olds was significantly higher than the 39-84 year-olds.

Table B8 One way analysis of variance in new clothes purchases

	Age groups	Mean minimalism scale M(SD)
Number of new clothes purchased	18-27 years	3.38_{a*} (1.21)
	28-38 years	3.20_{ab} (1.26)
	39-84 years	2.87_{b} (1.22)
F test	F(2, 442)=6.59, p=<.001	
Eta squared	.03	

Note. * Different subscripts denote groups are significantly different from one another

Appendix C: Supplementary materials for Chapter 4

Interview guide

Overarching goals for the interview

- What attracted participants to minimalism?
- What motivated participants to keep living as a minimalist?
- Do they become more minimal over time? Is it an evolving process?
- Are they content with their life?
- Are they more content than before adopting minimalism?
- Do minimalists start with environmental motivations?
- Do they gain interest in environmental benefits of minimalism over time?
- Do they adopt other environmental behaviours such as eat less animal products, driving electric vehicles and improving the energy efficiency of their homes?
- Are they more interested in experiences than acquiring possessions?
- How do they dispose of their goods? Is it sustainable?
- Have they reduced their living space due to minimalism?
- Are they concerned about aesthetics?
- Is status a concern?
- Does minimalism help participants to feel more capable?
- Has minimalism changed their relationships?
- Do minimalists feel more able to avoid consumerism?

Interview guide for semi-structured interviews

1. **Definition of minimalism**

   "How do you define minimalism?"

2. **Becoming a minimalist**

   "What promoted you to become a minimalist? Was there a specific event or inspiration such as books or social media? Did friends or family influence you?"

   "How long have you been a minimalist?"

   "Was it difficult to become a minimalist?"

   "What motivates you to keep living as a minimalist?"

3. **Benefits, challenges, and future goals**

   "What are the benefits of being a minimalist?"

   "What are the challenges of being a minimalist?"

   "How has your life changed since adopting minimalism in terms of your relationship with material goods (Consumption, disposal and how long you hang onto goods)?"

   "What are you goals with minimalism?"

4. **Environment**

   "Was concern for the environment a motivation?"

   "Since adopting minimalism has your attitude towards the environment changed?"

   "Since adopting minimalism have you adopted any environmental behaviours such as plant-based diet, energy efficiency, EV, or solar panels?"

   "If you need to replace an item or need a new item, how do you go about it?"

   "What do you do with items you no longer want?"

   "Do you practise zero waste?"

"Since becoming a minimalist do you have more space (have you reduced the size of your home)?"

5. **Wellbeing**

   "Has adopting minimalism made you more content?"

   "Has minimalism made a difference to your wellbeing?"

6. **Relationship with others**

   "How has minimalism changed how you relate to other people such as your family or friends?"

   "Are you worried about what they think?

   "Does it affect gift giving or other social occasions?

   "Have you influenced them?

   "Would you like to influence others to become minimalist or is this a personal pursuit?"

7. **Extreme minimalism**

   "Have you ever thought you have cut back too much in terms of stuff, have you ever thought you are too minimal?"

8. **Consumerism and status**

   "Before adopting minimalism did you care about what others thought about your clothes, house and car? How has this changed since becoming a minimalist?"

   "Do you feel more able to avoid the pressures of consumerism now you are a minimalist?"

9. **Aesthetics**

   "Is the aesthetic minimalism important to you?"

10. Belonging to groups

"Do you belong to a minimalist group online or in person? If not, would you like to belong to a group?"

"How does belonging to a group make you feel?"

Appendix D: Supplementary materials for Chapter 5

Measures

Collective minimalist action

The Collective Minimalist Action Scale was based on the 18-item Environmental Action Scale (Alisat et al., 2015). Environmental actions were modified to be specifically about minimalism and low consumption and three more questions about participating in a repair café or library, working in a community garden voting, shareholder activism and ethical investment, were added making it a 21-item scale. Participants were asked:

Over the last year how often if at all have you engaged in the following minimalism activities (minimalists avoid clutter and have few possessions).

1. Educated myself about environmental issues (e.g., through media, television, internet, blogs)
2. Talked with others about minimalism (e.g., spouse, partner, parent(s), children, or friends
3. Used online tools (e.g., YouTube, Facebook, blogs) to raise awareness about minimalism
4. Used traditional methods (e.g., letters to the editor, articles) to raise awareness about minimalism
5. Personally wrote to or called a politician/government official about an environmental issue
6. Participated in a minimalist event (e.g., workshop) related to the environment
7. Financially supported a protest/rally about minimalism or overconsumption.
8. Took part in a protest/rally about minimalism or overconsumption.
9. Organized a protest/rally about minimalism or overconsumption
10. Organized a boycott against a company engaging over-consumption practices
11. Organised a petition or a minimalism related caused e.g., controls on advertising
12. Made time to work part time or fulltime on minimalism, decluttering or over-consumption
13. Participated in a community event which focused on minimalism, low consumption or low waste.
14. Organized a community event which focused on minimalism, low consumption or low waste.
15. Tried to make changes relating to minimalism and over-consumption at your work e.g., not over-ordering stock
16. Planted trees with others
17. Participated in a repair café or library
18. Worked in a community garden
19. Shown your support for minimalism or low-consumption by the way you vote
20. Engaged in shareholder activism (buying shared to enable voting at shareholder meetings) to promote minimalism or low-consumption
21. Chosen a bank or superannuation fund base on their environmental or social practices.

Influence

Influence of minimalist friends and family

- Do you personally know people (e.g., friends, family, or work colleagues) who have reduced their consumption of goods such as clothes, furniture, electronics, books, toys etc? yes/no

Has a family member or friend or colleague influenced you to: (tick all that apply)

- reduce your consumption of material goods overall
- reduce the number of clothes you own
- buy second-hand goods
- purchase quality goods instead of more goods
- repair goods
- reduce how often you give physical gifts to adults (excluding consumables such as wine and chocolate)
- declutter your home
- reduce food waste
- no option applies

Influence of minimalists on friends and family – questions for self-identified minimalists

For this question tick all that apply. I set an example for my family, friends and colleagues to:

- reduce their consumption of material goods overall
- reduce the number of clothes they own
- buy second-hand goods
- purchase quality goods instead of more goods
- repair goods
- reduce how often they give physical gifts to adults (excluding consumables such as wine, chocolate and flowers)
- declutter their home
- reduce food waste
- no option applies

Social norms

Personal norms

Please tick all that apply to your home or possessions
My home is uncluttered
My home is peaceful and clam
I have a limited number of clothes in my wardrobe
I don't think we need to give adults physical presents (excluding consumables such as wine, chocolate or flowers)
I have enough material goods to meet my needs
No option applies

Descriptive

For the following question tick all that you think are true. Most people I know:

- Are not minimal in their consumption (they buy lots of things including clothes, furniture, electronics)
- Have a closet stuffed full of clothes
- Do not buy second-hand goods
- Buy lots of goods, instead of fewer quality goods
- Rarely repair goods
- Give adults physical presents (excluding consumables such as wine or chocolate or flowers)
- Have a moderately cluttered home
- Waste a fair bit of food
- No option applies

Injunctive

For the following question tick all that you think are true. My family and friends consider it acceptable to:

- Reduce the consumption of material goods
- Have a limited number of clothes
- Buy second-hand goods
- Buy fewer quality goods instead of lots of poorer quality goods
- Repair goods
- Not give adults physical presents (except for consumables such as wine, chocolate and flowers)
- Declutter your home
- Reduce food waste
- No options apply

Table D.1 *Collinearity check for stated influence, collective action and social norm measures*

	1.	2.	3.	4.	5.
1. Descriptive norm	1				
2. Injunctive norm	.18**	1			
3. Stated Influence index	.24**	.25**	1		
4. Outside influence	.10	.37**	.38**	1	
5. Minimalist collective action	-.16**	-.09	,20**	.17**	1

N=359.

* p < .05

** p < .01

Analyses

Data cleaning included checking: times participants took to complete the survey, attention checks, out of range data, number of missing cases. Relevant scale items were reverse coded and maximum and minimum values for scales were checked.

Results

Validation of the consumer minimalism scale using Australian data

Wilson et al. (2022) used principal components analysis, followed by confirmatory factory analysis to identify three dimensions: mindful curation, few belongings and sparse aesthetics. Similar to Wilson et al. (2022) we used maximum likelihood (ML) estimator and full information maximum likelihood (FIML) for missing values. (Table D2)

Table D2 *Confirmatory factor analysis of minimalism*

	Factor loading estimates			AVE
	Factor 1	Factor 2	Factor 3	
Few belongings minimalism				.65
I avoid accumulating lots of stuff	.83			
I restrict the number of things I own	.82			
Less is more when it comes to owning things	.71			
I actively avoid acquiring excess possessions	.84			
Aesthetic minimalism				.60
I am drawn to visually sparse environments		.75		
I prefer simplicity in design		.72		
I keep the aesthetic in my home very sparse		.80		
I prefer leaving spaces visually empty over filling them		.81		
Mindful minimalism				.66
I am mindful of what I own			.71	
The selection of things I own has been carefully curated			.82	
It is important to me to be thoughtful about what I choose to own			.81	
My belongings are mindfully selected			.89	
X_2, df	193.57, 51, <.001			
Comparative fit index (CFI)	0.94			
Tucker-Lewis index (TLI)	0.80			
Goodness of fit index (GFI)	0.99			
SRMR	0.06			
RMSEA ($Cl_{90\%}$)	0.09 (.08-.10)			

N=359
AVE = average variance extracted

The factor loadings ranged between .71 and .89, which is similar to .72 to .83 found by Wilson et al. (2022). Fit indices including Tucker-Lewis Index, Comparative Fit Index, Goodness of Fit Index and Standardised Root Mean Square were acceptable. However the Root Mean Square Error of Approximation was .09 and according to Brown et al. (1992), values between .08 and .01 are marginal. However, given the acceptable values for all the other indices the overall model fit was considered to be acceptable.

Appendix D

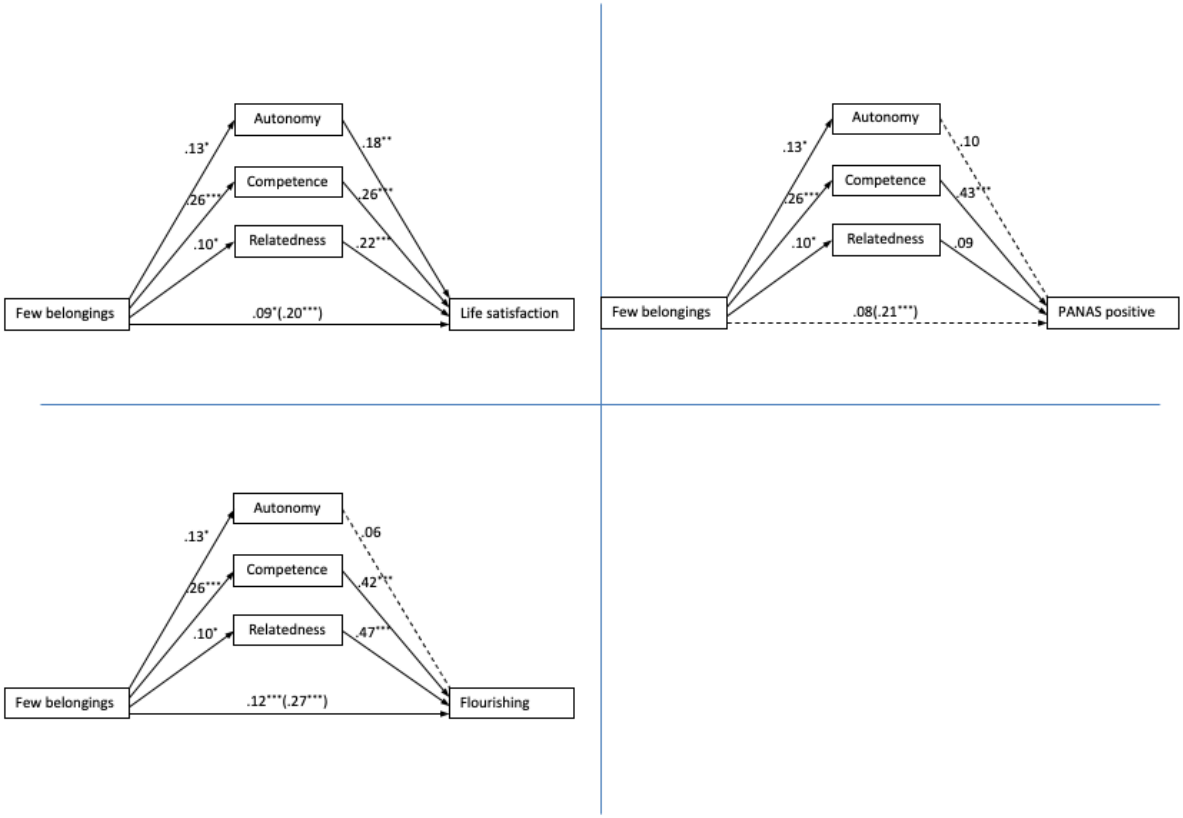
Mediation analysis: Minimalism sub-dimensions and wellbeing

Table D3 *Summary of mediations between 'few belongings' minimalism and wellbeing*

Mediator	Std estimate	Unstandardised estimate	SE	p	95% confidence interval	
					Lower	Upper
Life satisfaction						
FBMin→Aut	.13	.15	.05	.010	.03	.24
Aut→LS	.18	.19	.06	.004	.06	.30
FBMin→Rel	.10	.14	.05	.047	.001	.206
Rel→LS	.22	.21	.06	<.001	.10	.34
FBMin→Comp	.26	.29	.05	<.001	.16	.36
Comp→LS	.26	.28	.06	<.001	.14	.38
FBMin→LS direct	.09	.11	.04	.045	<.01	.17
FBMin→LS total indirect	.11	.14	.03	<.001	.05	.17
FBMin→LS total	.20	.25	.05	<.001	.10	.30
FBMin→Aut→LS indirect	.02	.03	.01	.055	<.01	.05
FBMin→Comp→LS indirect	.07	.08	.02	<.001	.03	.11
FBMin→Rel→LS indirect	.02	.03	.02	.081	<-.01	.05
Flourishing						
FBMin→Aut	.13	.15	.05	.010	.03	.24
Aut→Fl	.06	.05	.05	.246	-.04	.15
FBMin→rel	.10	.14	.05	.047	<.01	.21
Rel→Fl	.38	.26	.05	<.001	.28	.47
FBMin→Comp	.26	.29	.05	<.001	.16	.36
Comp→Fl	.42	.34	.05	<.001	.33	.51
FBMin→Fl	.12	.11	.03	<.001	.05	.19
RBMin→Fl total indirect	.16	.14	.04	<.001	.08	.23
FBMin→Fl Total	.27	.25	.05	<.001	.18	.37
FBMin→Aut→FL indirect	.01	.01	.01	.289	-.01	.02
FBMin→Comp→FL indirect	.11	.10	.02	<.001	.06	.15
FBMin→Rel→FL indirect	.04	.04	.02	.05	<.01	.08
PANAS positive						
FBMin→Aut	.13	.15	.05	.010	.03	.24
Aut →PANP	.10	.04	.07	.143	-.03	.22
FBMIn→Rel	.10	.14	.05	.047	<.01	.21
Rel→PANP	.09	.04	.06	.160	-.04	.21
FBMin→Comp	.26	.29	.05	<.001	.16	.36
Comp→PANP	.43	.20	.06	<.001	.31	.55
FBMin→PANP	.08	.04	.04	.074	-.01	.17
FBMin→PANP total indirect	.13	.07	.03	<.001	.07	.19
FBMin→Fl Total	.21	.11	.05	<.001	.11	.31
FBMin→Aut→PANP indirect	.01	.01	.01	.202	-.01	.03
FBMin→Comp→PANP indirect	.11	.06	.03	<.001	.06	.16
FBMin→Rel→PANP indirect	.01	.01	.01	.251	-.01	.03

Notes: estimator is ML, we used standardised estimates, CI are based on standard method, Std=standard, SE=standard error, comp=competence, rel=relatedness, aut= autonomy, FBMin = 'few belongings' minimalism, FL= flourishing, LS=life satisfaction, PANP= PANAS positive,

Figure D1 Mediation between 'few belongings' minimalism and wellbeing



Notes: For the C path, estimate in parentheses indicates total effect, the estimate outside parentheses indicates c' direct effect. Dashed lined = non-significant effect. Path coefficients are standardised. *p<.05,**p < .01, ***p<.001.

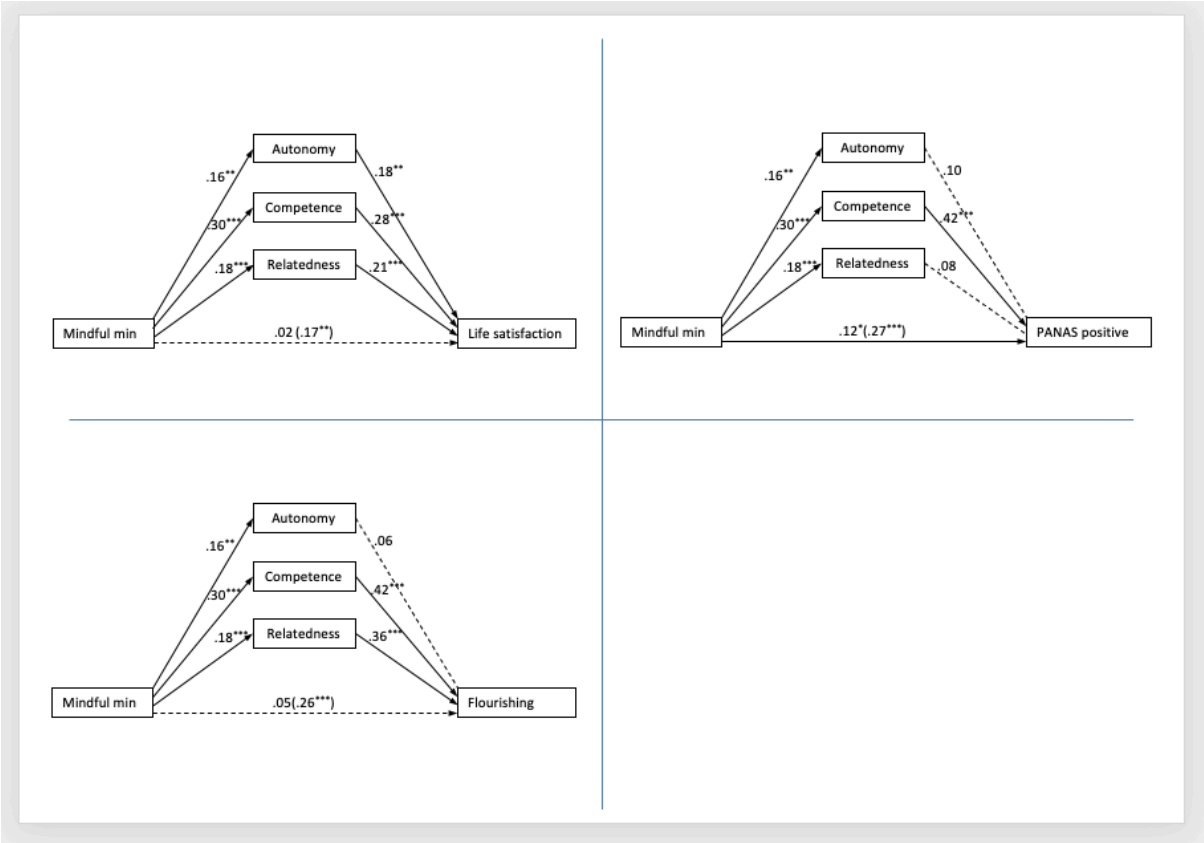
Appendix D

Table D4 *Summary of mediations between 'mindful' minimalism and wellbeing*

Mediator	Std estimate	Unstandardised estimate	SE	p	95% confidence interval	
					Lower	Upper
Life satisfaction						
Mind Min→Aut	.16	.23	.05	.002	.06	.26
Aut→LS	.18	.19	.06	.005	.06	.30
Mind Min→Rel	.18	.29	.05	<.001	.08	.28
Rel→LS	.21	.20	.06	<.001	.09	.34
Mind Min→Comp	.30	.42	.05	<.001	.20	.39
Comp→LS	.28	.31	.06	<.001	.17	.40
Mind Min→LS	.02	.02	.04	.737	-.07	.10
Mind Min→LS total indirect	.15	.23	.03	<.001	.09	.21
Mind Min→LS total	.17	.25	.05	.001	.07	.27
Mind Min→Aut→LS indirect	.03	.04	.01	.037	<.01	.06
Mind Min→Comp→LS indirect	.08	.13	.02	<.001	.04	.13
Mind Min→Rel→LS indirect	.04	.06	.02	.015	<.01	.07
Flourishing						
Mind Min→Aut	.16	.23	.05	.002	.06	.26
Aut→Fl	.06	.05	.05	.241	-.04	.16
Mind Min→rel	.18	.29	.05	<.001	.08	.28
Rel→Fl	.36	.26	.05	<.001	.27	.46
Mind Min→Comp	.30	.42	.05	<.001	.20	.39
Comp→Fl	.44	.36	.05	<.001	.35	.53
Mind Min→Fl	.05	.06	.03	.127	-.02	.12
Min→Fl total indirect	.20	.23	.04	<.001	.13	.28
Min→Fl Total	.26	.29	.05	<.001	.16	.35
Min→Aut→FL indirect	.01	.01	.01	.272	<-.01	.03
Min→Comp→FL indirect	.13	.15	.03	<.001	.08	.18
Min→Rel→FL indirect	.06	.07	.02	.001	.03	.10
PANAS positive						
Mind Min→Aut	.16	.23	.05	.002	.06	.26
Aut →PANP	.10	.05	.06	.117	-.03	.23
Mind MIn→Rel	.18	.29	.05	<.001	.08	.28
Rel→PANP	.08	.03	.06	.203	-.04	.20
Mind Min→Comp	.30	.42	.05	<.001	.20	.39
Comp→PANP	.42	.19	.06	<.001	.30	.53
Mind Min→PANP	.12	.07	.04	.010	.03	.20
Min→PANP total indirect	.15	.10	.03	<.001	.10	.21
Min→Fl total	.27	.17	.05	<.001	.17	.37
Min→Aut→PANP indirect	.02	.01	.01	.161	-.01	.04
Min→Comp→PANP indirect	.12	.08	.03	<.001	.07	.18
Min→Rel→PANP indirect	.01	.01	.01	.232	-.01	.04

Notes: estimator is ML, we used standardised estimates, CI are based on standard method, Std=standard, SE= standard error, comp=competence, rel=relatedness, aut= autonomy, Mind Min = 'mindful' minimalism, FL= flourishing, LS=life satisfaction, PANP= PANAS positive.

Figure D2 Mediations between 'mindful' minimalism and wellbeing



Notes: For the C path, estimate in parentheses indicates total effect, the estimate outside parentheses indicates c' direct effect. Dashed lined = non-significant effect. Path coefficients are standardised. *p<.05,**p < .01, ***p<.001.

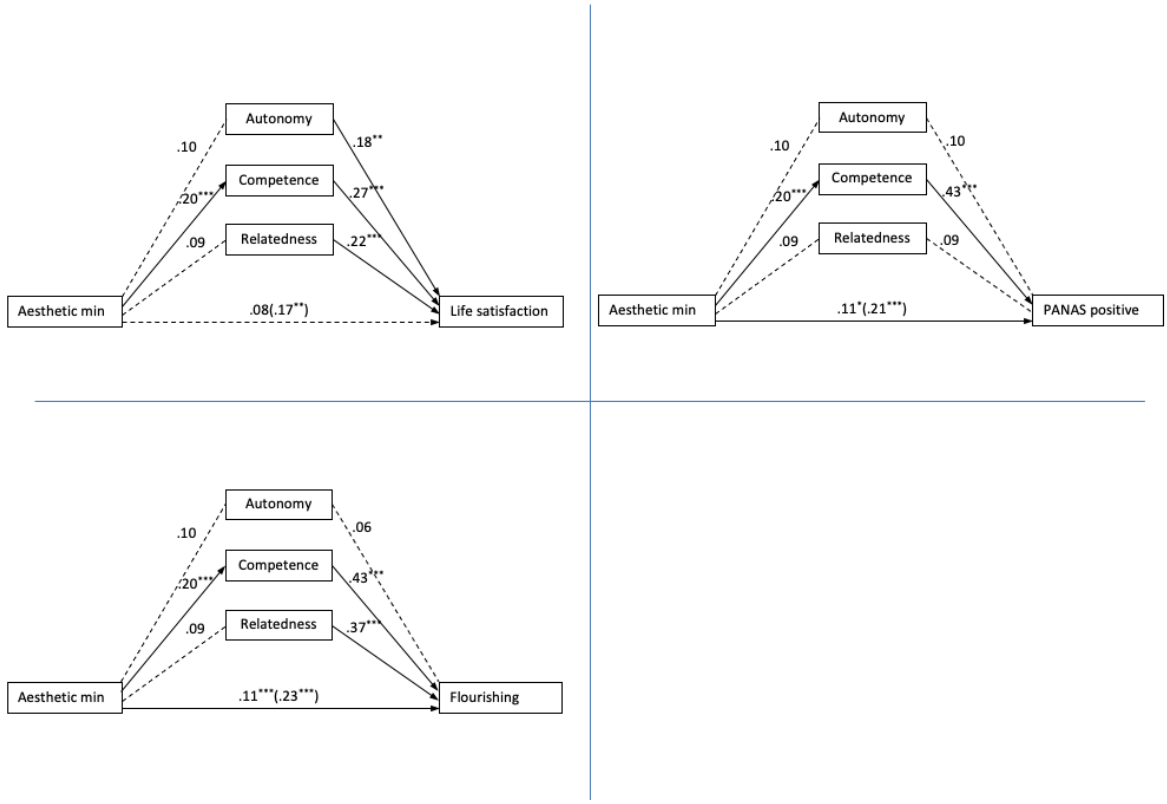
Appendix D

Table D5 *Summary of mediations between 'aesthetic' minimalism and wellbeing*

Mediator	Std estimate	Unstandardised estimate	SE	p	95% confidence interval	
					Lower	Upper
Life satisfaction						
A Min→Aut	.10	.13	.05	.055	-.002	.203
Aut→LS	.18	.19	.06	.004	.06	.30
AMin→Rel	.09	.12	.05	.099	-.02	.19
Rel→LS	.22	.20	.06	<.001	.10	.34
AMin→Comp	.20	.24	.05	<.001	.10	.29
Comp→LS	.27	.30	.06	<.001	.16	.39
AMin→LS	.08	.10	.04	.071	-.01	.16
AMin→LS total indirect	.09	.12	.03	.004	.03	.15
AMin→LS total	.17	.22	.05	.001	.06	.27
AMin→Aut→LS indirect	.02	.02	.01	.111	<-.01	.04
AMin→Comp→LS indirect	.05	.07	.02	.003	.02	.09
AMin→Rel→LS indirect	.02	.03	.01	.134	-.01	.04
Flourishing						
AMin→Aut	.10	.13	.05	.055	<-.01	.20
Aut→Fl	.06	.05	.05	.242	-.04	.15
AMin→rel	.09	.12	.05	.099	-.02	.19
Rel→Fl	.37	.26	.05	<.001	.28	.46
AMin→Comp	.20	.24	.05	<.001	.10	.29
Comp→Fl	.43	.35	.04	<.001	.34	.52
AMin→Fl	.11	.11	.03	<.001	.05	.18
AMin→Fl total indirect	.12	.12	.04	.002	.04	.20
AMin→Fl total	.23	.23	.05	<.001	.14	.33
AMin→Aut→FL indirect	.01	.01	.01	.317	-.005	.017
AMin→Comp→FL indirect	.08	.08	.023	<.001	.04	.13
AMin→Rel→FL indirect	.03	.03	.02	<.103	-.01	.07
PANAS positive						
AMin→Aut	.10	.13	.05	.055	<-.01	.20
Aut →PANP	.10	.04	.06	.137	-.03	.22
AMIn→Rel	.09	.12	.05	.099	-.02	.19
Rel→PANP	.09	.03	.06	.168	-.04	.21
AMin→Comp	.20	.24	.05	<.001	.10	.29
Comp→PANP	.43	.20	.05	<.001	.32	.54
AMin→PANP	.11	.06	.04	.015	.02	.19
AMin→PANP total indirect	.10	.06	.03	<.001	.04	.16
AMin→Fl total	.21	.12	.05	<.001	.11	.31
AMin→Aut→PANP indirect	.01	.01	.01	.239	-.01	.03
AMin→Comp→PANP indirect	.08	.05	.03	<.001	.04	.13
AMin→Rel→PANP indirect	.01	<.01	.01	.289	-.01	.02

Notes: estimator is ML, we used standardised estimates, CI are based on standard method, Std=standard, SE=standard error, comp=competence, rel=relatedness, aut= autonomy, Amin= 'aesthetic' minimalism, FL= flourishing, LS=life satisfaction, PANP= PANAS positive.

Figure D3 *Mediation between 'aesthetic' minimalism and wellbeing*



Notes: For the C path, estimate in parentheses indicates total effect, the estimate outside parentheses indicates c' direct effect. Dashed lined = non-significant effect. Path coefficients are standardised. **p*<.05,***p* < .01, ****p*<.001.

Social norms

Table D6 *Injunctive norm – percentage responses*

My family and friends think it's acceptable to:	%
reduce food waste	79
buy second-hand goods	70
reduce the consumption of material goods	63
declutter your home	61
repair goods	61
buy fewer quality goods instead of lots of poorer quality goods	59
have a limited number of clothes	41
not give adults physical presents (except for consumables)	30

N= 359

Appendix D

Hypothesis 3 – Minimalism will be associated with influencing others' behaviour

Minimalism and the sub-dimensions were positively associated with setting an example for family and friends in the practices of consuming fewer material goods and clothes, decluttering, and not giving physical gifts. Minimalism, few belonging minimalism, and mindful minimalism were positively associated with exemplifying buying quality goods, but aesthetic minimalism was not. Only mindful minimalism demonstrated a small positive correlation with setting an example by reducing food waste. There was no association between minimalism and subdimensions with setting an example by repairing goods and purchasing second-hand items.

Table D7 *Correlations between minimalism and setting an example to others*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1.Minimalism	1											
2. Few Belongings	.89**	1										
3. Mindful minimalism	.74**	.50**	1									
4. Aesthetic minimalism	.83**	.63**	.38**	1								
5. Consume less goods	.30**	.31**	.26**	.19**	1							
6. Fewer clothes	.27**	.24**	.21**	.23**	.49**	1						
7. Buy second-hand	.01	.08	-.01	-.06	.17**	.25**	1					
8. Buy quality	.18**	.15**	.23**	.10*	.30**	.34**	.14**	1				
9. Repair goods	.04	.03	.07	<.01	.21**	.21**	.33**	.26**	1			
10. Give consumables	.22**	.23**	.21**	.13*	.40**	.27**	.18**	.29**	.13*	1		
11. Declutter home	.36**	.31*	.29**	.32**	.38**	.35**	.12*	.28**	.23**	.22**	1	
12. Reduce food waste	.10	.08	.15**	.04	.24**	.24**	.22**	.19**	.25**	.18**	.28**	1

N=359. Spearman's rho was used for binary variables (the 'setting an example' items 5-12).
* p < .05
** p < .01

Table D8 Frequency of setting an example for those who consider themselves a minimalist

I set an example for my family, friends and colleagues to	Min	%
To reduce how often they give physical gifts to adults (except consumables)	74.6	25.3
Repair goods	71.2	34.8
Purchase quality goods instead of more goods	64.4	34.8
Buy second-hand goods	62.7	44.3
Reduce the number of clothes they own	62.7	26.7
To declutter their home	55.9	32.0
To reduce food waste	47.5	52.4
Reduce their consumption of material goods	44.1	28.4

N=59

Minimalism correlated with individual items from the minimalist collection action scale

The Bonferroni-corrected critical alpha was identified as .002

Table D9 *Minimalism correlated with individual items from the minimalism collective action scale*

	1.	*2.*	*3.*	*4.*	*6.*	*7.*	*8.*	*9.*	*10.*	*11.*	*12.*	*13.*	*14.*	*15.*	*16.*	*17.*	*18.*	*19.*	*20.*	*21.*	*22.*	*23.*	*24.*	*25.*	*26.*
1.Minimalism	*1*																								
2. Few belonging minimalism	*.89***	*1*																							
3. Mindful minimalism	*.74***	*.50***	*1*																						
4. Aesthetic minimalism	*.83***	*.63***	*.38***	*1*																					
6. Educated self	*.25***	*.25***	*.19***	*.17***	*1*																				
7. Talked about min	*.34***	*,34***	*,25***	*.24***	*.52***	*1*																			
8. Used online tools	*.21***	*.18***	*.12*	*.21***	*.51***	*.39***	*1*																		
9. Used traditional tools	*.11*	*.07*	*.05*	*.15***	*.29***	*.22***	*.52***	*1*																	
10.Contact politic/gov	*.04*	*.01*	*-.01*	*.09*	*.22***	*.21***	*.41***	*.68***	*1*																
11.Participated in min group	*.10*	*.07*	*.06*	*.13*	*.32***	*.28***	*.42***	*.57***	*.63***	*1*															
12. Financial support for a protest	*.02*	*.01*	*-.01*	*.06*	*.24***	*.22***	*.40***	*.63***	*.80***	*.70***	*1*														
13.Took part in a protest	*.03*	*.01*	*.01*	*.05*	*.21***	*.20***	*.36***	*.60***	*.73***	*.69***	*.88***	*1*													
14. Organised a protest	*.04*	*.02*	*.01*	*.07*	*.19***	*.21***	*.35***	*.58***	*.73***	*.70***	*.83***	*.92***	*1*												

15. Organised a boycott	.06	.05	.02	.09	.21**	.22**	.31**	.46**	.63**	.67**	.71**	.78**	.79**	1											
16. Organised a petition	.04	.04	-.02	.07	.20**	.22**	.36**	.57**	.77**	.69**	.81**	.90**	.90**	.78**	1										
17. Minimalism work	.11	.08	.05	.14**	.22**	.20**	.23**	.32**	.41**	.56**	.49**	.50**	.52**	.55**	.55**	1									
18. Community event participate	.03	.03	.01	.04	.31**	.25**	.34**	.44**	.59**	.71**	.70**	.73**	.71**	.62**	.71**	.48**	1								
19. Community event organiser	.04	.05	-.01	.06	.21**88	.16**88	.32**	.50**	.66**	.63**	.74**	.83**	.84**	.71**	.85**	.48**	.71**	1							
20. Made changes at work	.17**	.19**	.12	.10	.35**	.32**	.31**	.24**	,24**	.34**	.30**	.36**	.34**	.34**	.37**	.36**.	42**	.37**	1						
21. Planted trees	.10	.08	.06	.10	.25**	.30**	.34**	.39**	.40**	.43**	.44**	.44**	.42**	.34**	.39**	.30**	.41**	.44**	.33**	1					
21. Repair café participate	.06	.04	.04	.06	.21**	.17**	,27**	.40**	.44**	.50**	.55**	.60**	.61**	.49**	.59**	.43**	.55**	.61**	.32**	.55**	1				
23. Community-garden	.05	.05	.01	.07	.27**	.19**	.32**	.41**	.38**	.51**	.48**	.52**	.50**	.42**	.47**	.39**	.54**	.50**	.27**	.57**	.62**	1			
24. Voted	.18**	.19**	.16**	.09	.31**	.28**	.20**	.16**	.15**	.28**	.22**	.25**	.23**	.27**	.23**	.28**	.33**	.26**	.34**	.27**	.31**	.29**	1		
25. Shareholder activism	.09	.04	.04	.14**	.25**	.22**	.32**	.52**	.58**	.59**	.66**	.74**	.69**	.65**	.67**	.44**	.60**	.71**	.36**	.44**	.58**	.50**	.37**	1	
26. Bank or superannuation	.06	.06	.13	-.03	.20**	.17**	.16**	.25**	.29**	.39**	.42**	.43**	.41**	.41**	.37**	.30**	.45**	.43**	.35**	.33**	.39**	.37**	.48**	.48**	1

N=359

* p < .05

** p < .01

Table D10 Frequency of collective actions: self-described minimalists

How often have you engaged in these activities	Once %	Occasionally %	Often %	Nearly all the time %	Total Active %
Talked about minimalism to friends and family	6.8	49.2	13.6	1.7	71.2
Educated myself about minimalism	6.8	44.1	8.5	1.7	61.1
Planted trees with others	15.3	22.0	6.8	0	44.1
Shown support for minimalism by vote choice	10.2	16.9	11.9	3.4	42.4
Used online tools to raise awareness e.g., Facebook	13.6	18.6	5.1	0	37.3
Worked in a community garden	11.9	13.6	6.8	0	32.3
Made changes at work related to minimalism	0	18.6	11.9	1.7	32.2
Chose a bank or superannuation fund based on environmental policies	6.8	10.2	8.5	0	25.5
Work in a minimalism related profession	6.8	13.6	3.4	1.7	25.5
Participated in a repair café or library	8.5	8.5	5.1	0	22.1
Participated in a minimalist group online or in person	3.4	15.3	1.7	0	27.3
Participated in a community event focused on minimalism	11.9	6.8	0	0	21.7
Used traditional tools e.g., letter writing to raise awareness	0	11.9	5.1	0	21.6
Engaged in shareholder activism	3.4	6.8	3.4	0	17.2
Took part in a protest or rally	1.7	6.8	3.4	0	16
Organised a boycott	1.7	6.8	3.4	0	15.4
Financially supported a protest or rally	1.7	10.2	0	0	14.9
Organised a petition	5.1	5.1	1.7	0	11.9
Organised a protest or rally	0	10.2	0	0	10.2
Personally, contacted a politician	3.4	6.8	0	0	10.2
Organised a community event	1.7	5.1	1.7	0	8.5

N=59