



Master of Business Administration

(MBAMBA-HK)

FINAL Research Proposal

A Study of Hong Kong Consumers' Intentions to Purchase Green Beauty Products

Based on the Theory of Planned Behaviour, Environmental Concern, and Perceived Value

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Abstract

The rise of eco-conscious consumers has driven global interest in green beauty products, yet these products remain under-adopted in Hong Kong. This study aims to explore the factors influencing purchase intentions and actual behaviour toward green beauty products, using the Theory of Planned Behaviour (TPB) as a guiding framework. Key constructs include attitude, subjective norms, perceived behavioural control, environmental concern, and perceived value, along with the mediating role of intention and the moderating effects of demographic variables such as age, gender, income, and profession.

A mixed-methods approach is applied:

1. Focus Groups: Provide qualitative insights into consumer motivations, perceptions, and barriers.
2. Structured Questionnaire Survey: Designed, pilot-tested, and refined (sample size = 385).
3. Data Analysis: Conducted using SPSS for descriptive statistics, reliability, correlation, regression, T-tests, and one-way ANOVA.

The findings will identify drivers and barriers to green beauty adoption, providing actionable recommendations for businesses and policymakers to enhance product offerings and marketing strategies. This research contributes to understanding sustainable consumer behaviour in Hong Kong's beauty market.

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Chapter 1. Introduction

This section provides a comprehensive overview of the study. It begins with the Research Background, highlighting the context and significance of the research topic. Next, it delves into the Research Motivation, explaining the reasons behind choosing this specific area of study and the gaps it aims to fill. The Research Questions section outlines the key questions the study seeks to answer, followed by the Research Aim and Objectives, which detail the primary goals and specific objectives of the research. The Research Limitation section addresses the constraints and potential limitations of the study. Finally, the section concludes with a Summary, encapsulating the key points discussed in the introduction.

1.1 Research Background

In recent years, the global beauty industry has significantly shifted towards sustainability and eco-friendly practices (Suphasomboon & Vassanadumrongdee, 2022). Increasingly, consumers are mindful of the environmental impact of their purchasing decisions, which has led to a heightened demand for green beauty products (Martins, 2024). The market for sustainable beauty products was valued at approximately USD 176.6 million in 2023, with projections suggesting it will grow to USD 326.8 billion by 2031, representing a compound annual growth rate (CAGR) of 8.26% during the forecast period from 2024 to 2031 (InsightAce Analytic, 2024). These products, formulated with natural ingredients and produced through sustainable practices, offer an alternative to conventional cosmetics and skincare that often contain harmful chemicals and contribute to environmental degradation. According to GlobalData (2024), increasing environmental concerns are prompting consumers in the Asia-Pacific region to adopt sustainable and eco-friendly cosmetics, driven by fears that synthetic ingredients may harm their skin and pollute the environment. In Hong Kong, this trend is particularly notable (Statista, 2024), as consumers are becoming more conscious of the ecological footprint of their beauty and personal care routines. Additionally, the Hong Kong beauty market is heavily influenced by international trade, with custom-made products and e-commerce trends emerging as significant opportunities (Arendse, 2024).

The growth of e-commerce and online shopping plays a crucial role in the accessibility and availability of green beauty products in Hong Kong (Statista, 2024). Online platforms offer consumers a vast selection of green beauty products that might not be found in physical stores, making them more accessible and convenient to purchase. This ease of access drives the demand for green beauty products. Moreover, the rise of bespoke products and the convenience

of online shopping further bolster their appeal (Arendse, 2024). E-commerce websites provide detailed product information, customer reviews, and ratings, enabling consumers to make well-informed decisions. Additionally, digital marketing through social media and online advertising allows green beauty brands to effectively communicate their values and the benefits of their products to a broader audience (Pop, Saplacan & Alt, 2020).

1.2 Research Motivations

The motivation behind this research arises from the need to understand the factors influencing consumers' purchase intentions towards green beauty products. Although there is a growing body of literature on sustainable consumer behaviour, there remains a gap in understanding how specific factors such as perceived value, ethical concerns, and social influences drive purchasing decisions within the green beauty sector in Hong Kong. Investigating these factors in the Hong Kong market provides valuable insights into local consumer behaviour, aiding both local businesses and international brands in tailoring their marketing strategies to better serve eco-conscious consumers.

Additionally, the Hong Kong beauty market is experiencing a recovery, marked by a significant shift towards green beauty products as consumers increasingly prioritize sustainability (Amanda, 2024). This research aims to contribute to the broader conversation on sustainability within the beauty industry by filling this gap.

The recovery of the Hong Kong beauty market presents an opportune moment to study the factors influencing green beauty purchases (Amanda, 2024). As the market rebounds, consumers are showing a clear preference for products that align with their values of sustainability and ethical consumption. This trend indicates that consumers are not only concerned about the efficacy of the products they use but also about the environmental and social implications of their choices. Understanding these motivations can provide valuable insights for brands looking to tap into this growing market segment.

Moreover, the increasing demand for green beauty is reflected in the rise of vegan beauty products in Hong Kong. There is a noticeable increase in the availability of vegan beauty products from both international brands and homegrown labels (Suchetana, 2024). This trend highlights the growing consumer demand for products that are not only sustainable but also cruelty-free and ethical. The rise of vegan beauty products underscores the importance of aligning product offerings with these evolving consumer values.

1.3 Research for Existing Gaps

Despite the increasing popularity and consumer awareness of green beauty products, there remains a significant gap in understanding the specific factors that influence purchase intentions and behaviours in the Hong Kong market. Previous studies have primarily focused on Western markets, leaving a void in the context of Hong Kong, where cultural, social, and economic influences may differ significantly. Additionally, the lack of a standardized definition and criteria for what constitutes "green," "sustainable," or "eco-friendly" products compounds this complexity (Cervellon & Carey, 2011), creating challenges for both consumers and businesses in market navigation.

The global emphasis on environmental sustainability has catalyzed interest in eco-friendly products, including green beauty items (Kim & Seock, 2019). However, despite heightened awareness, green beauty products have yet to achieve mainstream adoption in Hong Kong. Understanding consumers' attitudes, subjective norms, perceived behavioural control, environmental concerns and perceived value regarding these products remains limited, presenting a gap in both academic research and industry practices.

Key research questions include:

- a. What factors influence consumers' intention to purchase green beauty products in Hong Kong?
- b. How do consumers' attitudes, social norms, behavioural control, environmental concern, and perceived value contribute to purchase intention?
- c. Does intention act as a mediating factor between predictors and the actual purchase behaviour of green beauty products?
- d. How do demographic variables such as age, gender, income, and profession influence these relationships?

Addressing these problems will provide valuable insights into the dynamics of consumer behaviour in the green beauty market, aiding both academic understanding and practical applications for businesses.

1.4 Research Aim and Objectives

a. Research Aim

The aim of this study is to investigate the factors influencing consumers' intention and behavior toward purchasing green beauty products in Hong Kong. By using the Theory of Planned Behaviour (TPB) as the guiding framework, this research seeks to explore key predictors of purchase intention and understand the mediating and moderating effects within the proposed model.

b. The research objectives of the study are:

- a. To examine the impact of TPB components (attitudes, subjective norms, and perceived behavioural control) on consumers' intention to purchase green beauty products.
- b. To assess the roles of environmental concern and perceived value in influencing purchase intention.
- c. To analyse the mediating effect of intention on the relationship between predictors and actual purchase behaviour.
- d. To explore the moderating role of demographic variables (e.g., age, gender, income, profession) in the relationship between intention and actual purchase behaviour.
- e. To provide recommendations for marketers and policymakers to encourage the adoption of green beauty products in Hong Kong.

By achieving these objectives, the study aims to bridge the gap in understanding green consumer behaviour and offer practical strategies for promoting sustainable consumption in the beauty industry.”

1.5 Research Limitations

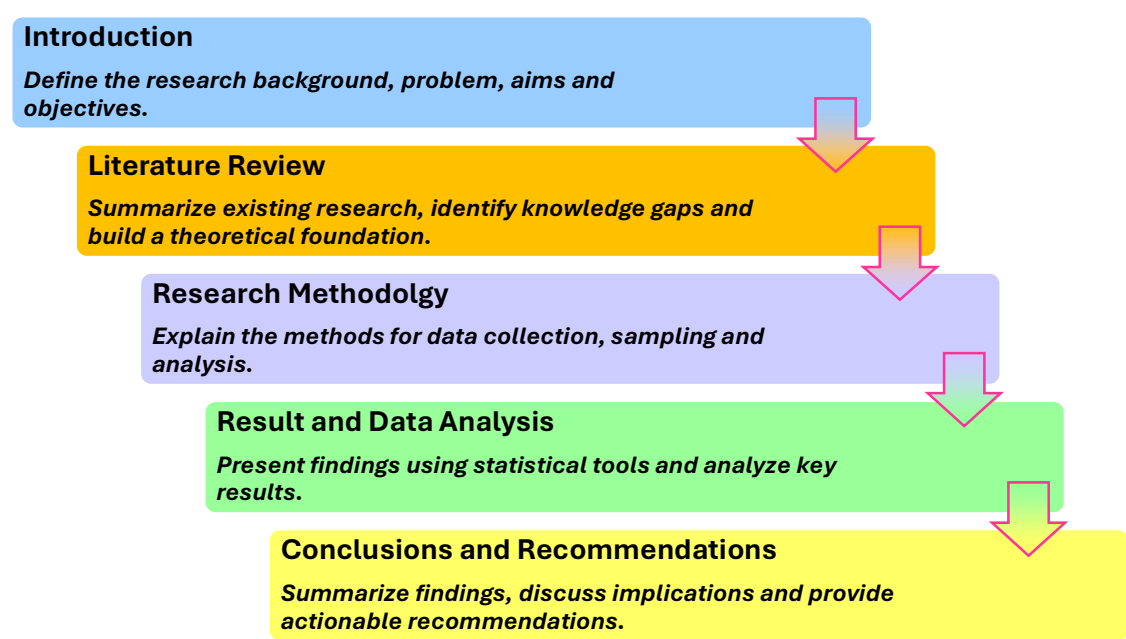
While this research aims to provide comprehensive insights into the factors influencing green beauty purchase intentions, certain limitations must be acknowledged. Firstly, the study focuses primarily on consumers in Hong Kong, which may limit the generalizability of the findings to other regions. Additionally, the reliance on self-reported data introduces potential biases, such as social desirability bias (Podsakoff et al., 2003; Fisher & Katz, 2000). Furthermore, the dynamic nature of consumer behaviour means that factors influencing purchase intentions may evolve over time, necessitating ongoing research in this area (Solomon et al., 2012).

Another limitation is the diversity within the green beauty market itself. With a wide range of products and varying definitions of terms like "green," "sustainable," and "eco-friendly," consumer perceptions and purchasing decisions can vary significantly (Kim & Chung, 2011; Joshi & Rahman, 2019). This variability can complicate the interpretation of findings and the drawing of broad conclusions. Moreover, external factors such as economic conditions (Turcu & Brancu, 2023), regulatory changes (Bozza et al., 2022), and marketing campaigns (Iqbal et al., 2023) can significantly impact consumer behaviour and preferences in the green beauty market.

1.6 Summary

This research aims not only to contribute to academic knowledge but also to offer practical relevance for businesses operating in the green beauty industry in Hong Kong. By understanding the factors driving consumers' purchase intentions, companies can develop products and marketing strategies that align with the values and preferences of eco-conscious consumers. This alignment can enhance brand loyalty, improve customer satisfaction, and ultimately contribute to the growth and sustainability of the beauty market in Hong Kong. To complete the study effectively, the research framework is illustrated in Figure 1, following the schedule outlined in the Gantt Chart (Appendix 1).

Figure 1. Research Framework and Flowchart



Compiled by Author

Chapter 2. Literature Review

This literature review aims to provide a comprehensive overview of the existing research on green beauty purchase intention, encompassing various aspects such as consumer attitudes, market trends, influential factors, and the role of marketing in promoting green beauty products. This literature review will delve into the key findings from studies that have explored the drivers of green beauty purchase intention, the barriers to adoption, and the effectiveness of different marketing strategies in enhancing consumer engagement with green beauty products.

By systematically analysing the existing literature, this review seeks to identify gaps in knowledge, highlight emerging trends, and propose directions for future research. Through this comprehensive analysis, we aim to build a solid foundation that supports the subsequent sections of this dissertation, guiding the following investigation into the specific factors that influence green beauty purchase intention and how these can be leveraged to promote sustainable consumer behaviour.

2.1 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB), introduced by Icek Ajzen in 1985, offers a comprehensive framework for analysing human behaviour across different contexts, including consumer purchase decisions. TPB suggests that an individual's intention to engage in a specific behaviour is influenced by three pivotal factors: attitudes towards the behaviour, subjective norms, and perceived behavioural control. This section will explore the theoretical underpinnings of TPB, illustrating how these elements collectively shape an individual's intentions to buy green beauty products and their subsequent actions.

2.1.1.a Definition of Attitude towards Green Beauty Products

Attitude represents the degree to which a person has a favourable or unfavourable evaluation of the behaviour in question (Lupindo, Madinga & Dlamini, 2024). In the context of green beauty products, it encompasses consumers' beliefs about the benefits and value of using such products (Limbu & Ahamed, 2023). These attitudes are influenced by consumers' perceptions of the environmental, ethical, and health benefits associated with these products. Research has shown that positive attitudes towards green beauty are often driven by increased awareness of sustainability and ethical production practices. Additionally, aesthetic appeal and product efficacy also play significant roles in shaping these attitudes (Lin et al., 2018).

2.1.1.b Construct and Measurement

Attitude towards green beauty products can be measured using scales that assess consumers' perceptions of product attributes such as environmental friendliness, safety, and quality. These items are rated on Likert scales, typically ranging from strongly disagree to strongly agree (Sweeney, Soutar, & Johnson, 1999). This approach helps to gauge the level of agreement with statements about green beauty products (Alwitt & Pitts, 1996; Lin, Yang, Hanifah, & Iqbal, 2018).

2.1.2.a Definition of Subjective Norms

Subjective norms refer to the perceived social pressure to perform or not perform a particular behaviour (Fishbein & Ajzen, 1975). These norms are shaped by the expectations of significant others, such as family, friends, and societal trends (Tarkiainen & Sundqvist, 2005). Subjective norms play a crucial role in shaping purchase intentions for green beauty products, as evidenced by studies exploring the influence of social networks and cultural trends (Lee, 2008; Lupindo, Madinga, & Dlamini, 2024). Research indicates that individuals are more likely to engage in sustainable behaviours, such as purchasing green beauty products, when they believe that significant others value and support these actions (Tarkiainen & Sundqvist, 2005).

2.1.2.b Construct and Measurement

Subjective norms are typically measured through items that ask respondents to rate the extent to which people important to them believe they should or should not engage in the behaviour (Xu et al., 2022). Additionally, these norms can be assessed by measuring the perceived social pressure from their social circle to purchase green beauty products (Gupta, 2021). The survey statements are rated on Likert scales to quantify the influence of social norms (Limbu & Ahamed, 2023).

2.1.3.a Definition of Perceived Behavioural Control

Perceived behavioural control refers to an individual's assessment of their ability to execute a specific behaviour. This includes factors such as the availability of resources, self-efficacy, and situational constraints. Higher levels of perceived control typically correspond with stronger purchase intentions. In the context of green beauty products, this construct encompasses the consumer's confidence in their ability to access and afford these products. Factors facilitating purchase include positive attitudes towards green products, strong subjective norms, and high self-efficacy (Limbu & Ahamed, 2023). Conversely, factors impeding purchase include

perceived high costs, limited availability, and lack of knowledge about the benefits of green beauty products (Anchliya et al., 2023).

2.1.3.b Construct and Measurement

Perceived behavioural control can be evaluated through items that gauge the perceived difficulty or ease of purchasing green beauty products. This includes assessing both internal factors, such as self-efficacy and confidence, and external factors, such as resource availability and situational constraints. Scales for this construct typically incorporate items related to affordability, accessibility, product awareness, and knowledge about the products (Al Mamun et al., 2020; Sharma & Foroapon, 2019).

2.2.a Definition of Environmental Concern

Environmental concern represents the extent to which individuals are aware of environmental issues and support initiatives to address them (Kaiser & Byrka, 2020). It significantly influences attitudes and behaviours towards sustainable products (Nguyen, Lobo, & Greenland, 2021). Consumers who exhibit high levels of environmental concern are more inclined to engage in eco-friendly practices, such as purchasing green beauty products (Moisander & Pesonen, 2002). This relationship between environmental concern and the intention to buy green beauty products is supported by studies emphasizing the growing awareness and activism among consumers (Kaiser & Byrka, 2020; Nguyen, Lobo, & Greenland, 2021; Moisander & Pesonen, 2002).

2.2.b Construct and Measurement

Environmental concern is often assessed using scales that measure the level of concern about environmental issues and the perceived importance of taking action to address them (Dunlap & Jones, 2002). Responses are typically gathered using Likert scales, which provide insights into the strength of an individual's environmental values (Bamberg & Möser, 2007).

2.3.a Definition of Perceived Value

Perceived value refers to a consumer's overall evaluation of a product's utility, based on their perception of the benefits received relative to the costs incurred (Hanss & Böhm, 2012). In the context of green beauty, perceived value encompasses dimensions such as functional benefits, emotional satisfaction, and social recognition derived from using eco-friendly products (Zhuang, Luo, & Riaz, 2021; Limbu & Ahamed, 2023).

2.3.b Construct and Measurement

Perceived value can be measured through items that assess the perceived benefits of green beauty products relative to their cost, including factors such as quality, efficacy, and ethical considerations. This value is often measured using multidimensional scales that capture various aspects of value perception. Responses to these survey statements are typically gathered using Likert scales, which help quantify these perceptions.

2.4.a Definition of Intention to Purchase Green Beauty Products

Purchase intention refers to the likelihood of a consumer engaging in a specific purchase behaviour. In this study, it signifies the probability of consumers choosing green beauty products over conventional alternatives. Intention is a critical predictor of actual behaviour, as established in the Theory of Planned Behaviour (TPB) framework. Factors such as perceived value, quality, efficacy, ethical considerations, and environmental concern can significantly influence purchase intention (Newton et al., 2015; De Canio et al., 2021), as they shape consumers' attitudes and perceptions toward green beauty products.

2.4.b Construct and Measurement

Purchase intention can be measured through items that assess the likelihood of purchasing green beauty products within a specific timeframe. These items typically evaluate factors such as interest, preference, and the probability of future purchase. Responses are collected using Likert scales, which help quantify the strength of consumers' intentions to buy green beauty products (Wijekoon & Sabri, 2021).

2.5.a Definition of Purchase of Green Beauty Products

Green beauty product purchasing behaviour encompasses the conscious decisions consumers make to select and acquire cosmetic and personal care items that prioritize environmental sustainability. Various psychological and social factors shape this consumer behaviour, including individual attitudes toward sustainability, social influences, self-efficacy in making green choices, and personal environmental values. Studies in consumer behaviour have revealed that health consciousness and environmental awareness play crucial roles in shaping green beauty consumption patterns (Ghazali et al., 2017). Moreover, consumers' purchasing decisions are significantly influenced by specific product characteristics, including natural ingredient composition, sustainable packaging solutions, and ethical production certifications (Kim & Chung, 2011). A deeper understanding of these purchase behaviour determinants and

potential obstacles is crucial for developing market strategies that effectively promote sustainable beauty products.

2.5.b Construct and Measurement

The measurement of green beauty product purchases typically employs multi-method approaches to capture consumer buying patterns. Researchers primarily utilize self-reported surveys to assess purchase frequency, volume, and other behavioural aspects (Joshi & Rahman, 2015). These measurements commonly incorporate Likert-type scales to evaluate purchase consistency and behavioural patterns. For enhanced validity, some studies complement survey data with objective purchase records from retail databases or market research firms (Lin et al., 2018). The measurement instruments typically assess multiple dimensions, including purchase frequency, product categories, and monetary expenditure.

The analytical framework for such data encompasses both descriptive and advanced statistical methods. While descriptive statistics provide baseline understanding of purchase patterns, sophisticated techniques such as structural equation modelling (SEM) help uncover complex relationships between various predictors and actual purchase behaviour (Liobikienė & Bernatoniene, 2017). These analytical approaches enable researchers to examine how factors such as environmental attitudes, social influences, perceived control, and value perceptions interact to shape green beauty consumption patterns, ultimately contributing to theory development and practical insights.

2.6.a Definition of Demographic Factors

Demographic characteristics serve as crucial determinants in understanding green beauty product consumption patterns. Variables such as age, gender, income level, and profession have been found to create distinct consumer segments with varying propensities toward sustainable beauty products (Sharma & Foropon, 2019). Research indicates that these demographic factors not only shape initial purchase intentions but also influence long-term consumption patterns of eco-friendly cosmetics (Yadav & Pathak, 2016). By examining these demographic variables as moderators, researchers can better understand how different consumer segments respond to and engage with sustainable beauty offerings, thereby enabling more targeted marketing approaches and product development strategies (Nguyen et al., 2019). This study incorporates demographic factors as moderating variables to develop a more nuanced understanding of consumer behaviour in the green beauty market (San et al., 2021).

2.6.b Construct and Measurement

Demographic factors are typically measured using categorical or ordinal survey items. Age is often captured as a continuous variable or categorized into age groups (e.g., 18-24, 25-34). Gender is usually measured as a binary or multiple-choice item. Income levels can be recorded in ranges (e.g., below \$20,000, \$20,000-\$50,000) to analyse the purchasing power of different consumer groups. Profession is measured using into sectors (e.g., education, healthcare, business) (Diamantopoulos et al., 2003).

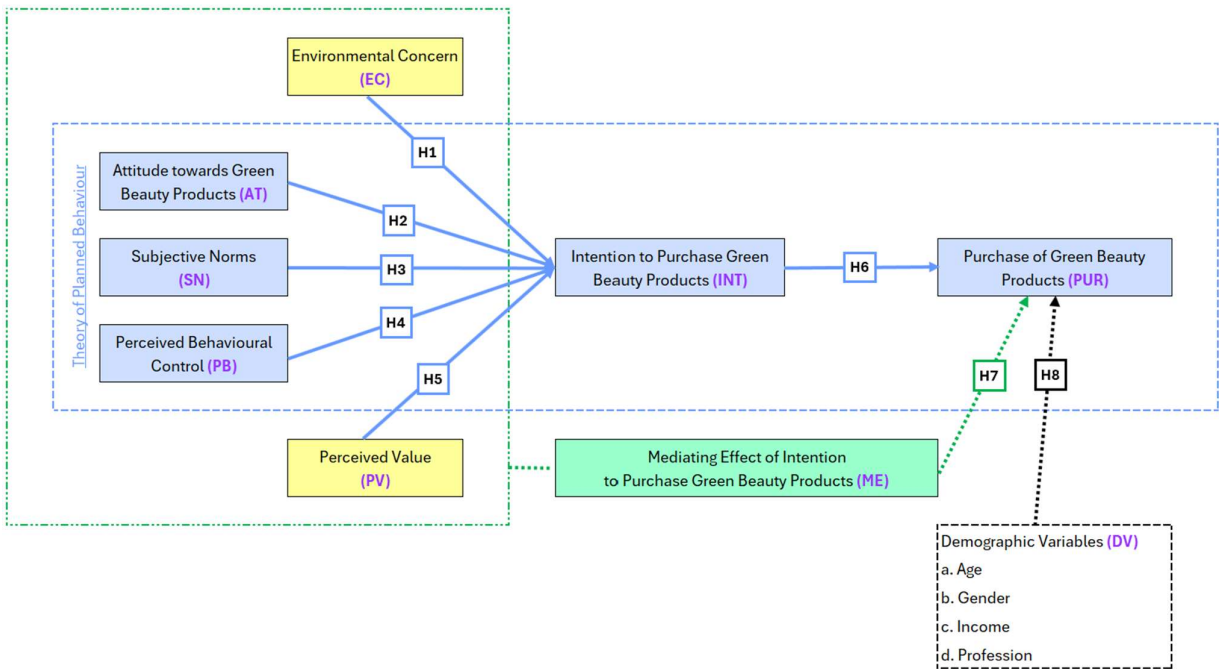
Chapter 3. Research Methodology

This chapter describes the research methods and procedures used in this study to investigate green beauty purchase intentions and behaviours. It explains the research model and hypotheses, the combination of quantitative and qualitative methods, and the data collection techniques. Additionally, the chapter covers data analysis methods, sampling strategies, research limitations, and ethical considerations, ensuring the study's methodological rigor and adherence to ethical standards.

3.1 Research Model with Hypotheses

This study employs the Theory of Planned Behaviour (TPB) (Ajzen, 1991) as the foundational framework for developing the research model. The hypotheses outlined earlier will be tested empirically through a structured research design, focusing on variables such as attitude, subjective norms, perceived behavioural control, environmental concern, and perceived value as predictors of green beauty product purchase intention and behaviour (Chen & Tung, 2014). The conceptual model is illustrated in Figure 2 and the corresponding descriptions of each component are elaborated in Table 1.

Figure 2. Conceptual Model and Hypotheses



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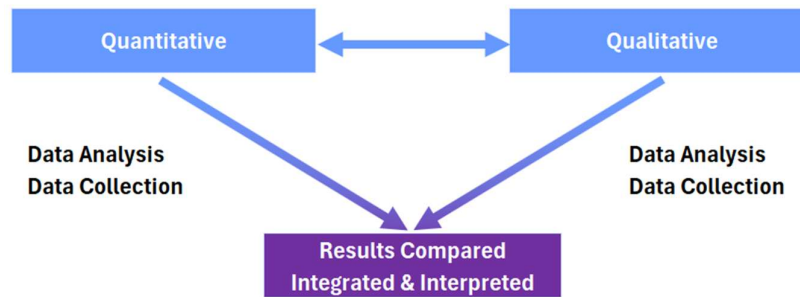
Table 1. Descriptions of Hypotheses and Demographic Variables

Hypothesis/ Demographic Variable		Description	Literature Reference
H1	EC → INT	Environmental Concern is positively correlated with the intention to purchase green beauty products. Individuals with greater concern for the environment are more likely to intend to buy these products.	Yada & Kumar (2023)
H2	AT → INT	Attitude positively influences the Intention to Purchase Green Beauty Products. A favourable attitude toward green beauty products enhances purchase intention.	Meliniasarin & Mas'od (2024)
H3	SN → INT	Subjective Norms positively influence the Intention to Purchase Green Beauty Products. Social influences, such as pressure from peers or family, increase the intention to purchase green beauty products.	Ngo-Thi-Ngoc, Nguyen-Viet & Hong-Thach (2024)
H4	PB → INT	Perceived Behavioural Control positively influences the Intention to Purchase Green Beauty Products. Greater perceived ability or ease leads to higher purchase intention	Wang et al. (2019)
H5	PV → INT	Perceived Value positively influences the Intention to Purchase Green Beauty Products. A higher perceived value in terms of quality or sustainability drives purchase intention.	Doszhanov & Ahmad (2015)
H6	INT → PUR	Intention positively influences the actual Purchase of Green Beauty Products. A strong intention directly translates into actual purchasing behaviour.	Vania & Ruslim (2023)
H7	ME → PUR	Intention mediates the relationship between key antecedents and the actual Purchase of Green Beauty Products. It serves as a critical mechanism driving behaviour.	Al Mamun et al., 2020
H8a	DV - Age	Younger consumers demonstrate stronger intentions and positive attitudes toward purchasing green beauty products due to their heightened environmental awareness and sustainability concerns.	Kim & Seock (2022)
H8b	DV - Gender	Female consumers exhibit greater involvement and stronger purchase intentions toward green beauty products, attributed to their higher consciousness of health, beauty, and environmental issues.	Dlamini & Mahowa (2024).
H8c	DV - Income	Higher income levels are positively associated with green beauty product consumption, as consumers with greater financial resources are more willing to pay premium prices for environmentally friendly cosmetics.	Lavuri et al. (2021)
H8d	DV - Profession	Individuals in professional occupations, particularly those with higher educational attainment, show increased awareness and stronger purchase intentions toward green beauty products, possibly due to greater exposure to environmental information and sustainable practices in their work environments.	Sharma & Foropon (2019)

3.2 Triangulation

Triangulation involves using multiple methods or data sources in a study to achieve a comprehensive understanding of a phenomenon (Denzin, 2009). In this research, methodological triangulation is implemented by integrating both quantitative and qualitative approaches. This combination mitigates the risk of bias from relying on a single method, thereby enhancing the credibility and reliability of the findings (Jick, 1979). Moreover, this dual approach enhances the validity of the results, as it allows for cross-verification of data from different methods. By combining these approaches, the study ensures a robust examination of the factors influencing green beauty product purchase intentions and behaviours.

Figure 3. A Mixed-Methods Concurrent Triangulation Strategy



Source: Atif, Richards & Bilgin (2013)

3.3 Quantitative and Qualitative Research

This study employs a mixed-methods approach to comprehensively examine the factors and demographic variables influencing green beauty product purchase intentions and behaviours (Ghazali et al., 2017). The research begins with qualitative focus group discussions to gain deep insights into consumer motivations, perceptions and barriers related to green beauty products. Insights from these discussions inform the design of a structured questionnaire for the quantitative phase. A pilot test is then conducted to evaluate the questionnaire's reliability and validity (Creswell & Plano Clark, 2017). Based on the pilot test results, the questionnaire is refined and finalized before being administered in the final survey. This survey, structured to test hypotheses and measure key demographic variables, is then conducted with a representative sample. By integrating these methods, the study achieves both statistical generalizability and contextual richness, ensuring robust and multidimensional findings (Kim & Seock, 2019).

3.4 Focus Group

Focus groups are conducted to obtain comprehensive insights into consumers' attitudes, perceptions, motivations, and behaviours concerning green beauty products (Morgan, Krueger, & King, 1998). These discussions involve participants selected based on their demographics and previous purchasing behaviours to ensure a diverse range of perspectives (Stewart & Shamdasani, 2014). The qualitative data gathered from these focus groups is invaluable for refining the design and content of the subsequent survey questionnaire (Hennink, 2013). By incorporating this feedback, the final survey instrument becomes more robust and tailored to capturing nuanced consumer behaviours (Liamputtong, 2011). Additionally, the qualitative insights enrich the overall analysis by providing deeper contextual understanding that complements the quantitative findings, thereby enhancing the reliability and validity of the study (Creswell & Creswell, 2017)

3.5 Questionnaire Survey Method

A structured questionnaire was developed using insights from the literature review and focus group discussions (Hair, Page & Brunsveld, 2019). This questionnaire is designed to measure key variables such as attitude, subjective norms, perceived behavioural control, environmental concern, perceived value, purchase intention, and purchase behaviour. The items are adapted from validated scales in existing literature to fit the context of green beauty products. Additionally, demographic information is collected to provide a comprehensive understanding of the respondents (Malhotra, Nunan & Birks, 2020).

The questionnaire is divided into several sections, each addressing specific constructs relevant to the research model. These sections typically include:

- **Demographics:** Collecting information such as age, gender, income, and profession.
- **Attitudes:** Measuring consumers' beliefs and evaluations regarding green beauty products.
- **Subjective Norms:** Assessing the influence of social pressure and opinions of others.
- **Perceived Behavioural Control:** Evaluating the ease or difficulty perceived by respondents in purchasing green beauty products.
- **Environmental Concern:** Capturing the level of respondents' awareness and care for environmental issues.
- **Perceived Value:** Assessing the value respondents attribute to green beauty products.

- **Purchase Intention and Behavior:** Measuring the likelihood of purchasing and actual purchase patterns of green beauty products.

Each section uses Likert-scale items, typically ranging from 1 (Strongly Disagree) to 7 (Strongly Agree), allowing for standardized responses and facilitating quantitative analysis. By following this structured and iterative approach, the questionnaire survey provides reliable and valid data to test the research hypotheses and achieve the study objectives.

3.6 Pilot Test and Final Survey

The pilot test, comprising 10% of the sample size (Cocks & Torgerson, 2012) as calculated in Section 3.6.3, is administered with the questions presented in Table 2. Based on the pilot test results, the questions may be modified for the final survey.

Table 2. Survey Questions for Pilot Test

Factor	Survey Questions	References
Environmental Concern (EC)	I have a strong interest in environmental protection, green consumption, and related topics.	Wang et al. (2020)
	I am knowledgeable and aware of environmental issues related to green beauty products.	Al Mamun et al. (2020)
	I choose green beauty products because they are made with natural ingredients.	Singh, Kapoor & Misra (2019)
	I prefer green beauty products because they help address environmental problems.	Singh, Kapoor & Misra (2019)
	I use green beauty products to support environmental health.	Mamun et al. (2020)
	Green beauty products are seen as a healthier option for the environment and purchasing them fulfils my environmental responsibilities.	Suphasomboon & Vassanadumrongdee (2022)
Attitude towards Green Beauty Products (AT)	I think green beauty products are healthier for me.	Shimul, Cheah & Khan (2021)
	I have a favourable view of green beauty products.	Al Mamun et al. (2020)
	Despite their higher cost, I prefer green beauty products over conventional ones.	Al Mamun et al. (2020)
	I believe that buying green beauty products is a positive action.	Al Mamun et al. (2020)
	I believe that purchasing green beauty products is the right choice.	Linh & Chou (2022)
	Green beauty products contain fewer or no chemical residues compared to conventional beauty products.	Ngo-Thi-Ngoc, Nguyen-Viet & Hong-Thach (2024).

Continue...

Factor	Survey Questions	References
Subjective Norms (SN)	Expectations from friends, family, other consumers, and influencers affect my intention to buy green beauty products.	Teixeira et al. (2023)
	I tend to buy green beauty products based on recommendations from my family members.	Al Mamun et al. (2020)
	I tend to buy green beauty products based on recommendations from my friends.	Al Mamun et al. (2020)
	The majority of people who matter to me believe I should buy green beauty products.	Ghazali et al. (2017)
	Individuals whose opinions I respect would prefer me to buy green beauty products.	Adels (2018)
	My decision to purchase green beauty products can be influenced by social media.	Al Mamun et al. (2020)
Perceived Behavioural Control (PB)	Green beauty products. are typically available at the stores where I usually shop.	Paul, Modi & Patel (2016).
	I am sure that I can buy green beauty products if I choose to.	Adels (2018)
	I am open to purchasing green beauty products.	Al Mamun et al. (2020)
	I possess the means and capability to purchase green beauty products.	Ghazali et al. (2017)
	The decision to buy green beauty products rests solely with me.	Ghazali et al. (2017)
	I believe I can overcome any obstacles to using green beauty products.	Xu et al. (2022)
Perceived Value (PV)	I choose to buy green beauty product because it demonstrates greater environmental responsibility compared to other products.	Nhu, Van & Thu (2019)
	The environmental benefits of green beauty product offer excellent value and meet my expectations.	Nhu, Van & Thu (2019)
	The designs and narratives of green beauty products align with my personality and uplift my mood.	Suphasomboon& Vassanadumrongdee (2022)
	The aesthetics of green beauty products (such as design, appearance, smell, texture, brand image, or packaging) encourage me to use it.	Suphasomboon& Vassanadumrongdee (2022)
	Green beauty products enhance overall health and wellbeing more effectively than standard products.	Suphasomboon& Vassanadumrongdee (2022)
	Green beauty products positively influence others' impressions of me, enhancing how I am perceived.	Suphasomboon& Vassanadumrongdee (2022)
Intention to Purchase Green Beauty Products (INT)	I am prepared to pay more for green beauty products than for conventional ones.	Linh & Chou (2022)
	I plan to buy green beauty products in the future.	Al Mamun et al. (2020)
	I favour purchasing green beauty products over conventional beauty products.	Al Mamun et al. (2020)
	I will prioritize buying a beauty product if it is green.	Wang et al. (2020)
	I aim to engage in environmentally-friendly consumption.	Al Mamun et al. (2020)
	If I were to purchase a similar product, I would choose this green beauty product.	Shimul, Cheah & Khan (2021)
Purchase of Green Beauty Products (PUR)	I have already transitioned to using green beauty products.	Shimul, Cheah & Khan (2021)
	I regularly engage in environmentally-friendly consumption practices.	Al Mamun et al. (2020)
	I frequently choose green beauty products over conventional ones.	Al Mamun et al. (2020)
	I opt for products made from healthy and eco-friendly materials whenever I can.	Xu et al. (2022)
	Of all the skincare products I currently use, what percentage are green beauty products?	Al Mamun et al. (2020)
	The exceptional green beauty product boosts consumer satisfaction and purchase intentions.	Linh & Chou (2022)

3.6.1 Target Population

The target population for this study includes individuals in Hong Kong who have experience or interest in purchasing beauty products, with a specific focus on green beauty products. According to recent demographic data released by the Census and Statistics Department, HKSAR (2024) on 4 September 2024, Hong Kong has an estimated population of approximately 7.2 million people. Of this, it is anticipated that around 56% fall within the age range of 18 to 60, the primary consumer demographic for beauty products. Based on these figures, the estimated group size of potential green beauty consumers is approximately 4.02 million. This includes individuals with varying levels of environmental awareness and purchasing power, providing a diverse and representative sample for the study. The inclusion criteria ensure that respondents have sufficient familiarity with beauty products and are able to provide meaningful insights into their attitudes, perceptions, and behaviors regarding green beauty products.

3.6.2 Sampling Method

This study employs a snowball sampling method (Parker, Scott & Geddes, 2019). to identify and recruit participants for the final survey. Snowball sampling is particularly useful in research contexts where the target population may be difficult to access or identify, such as consumers of green beauty products who might not be concentrated in easily identifiable locations.

3.6.3 Sampling Size

To determine the appropriate sample size for this study, the following formula (Cochran, 1977) was used:

Sample Size Formula

$$n = \frac{Z^2 \cdot p \cdot (1 - p)}{e^2}$$

Where:

- **n** = Required sample size
- **Z** = Z-score corresponding to the desired confidence level (e.g., 1.96 for 95% confidence)
- **p** = Estimated proportion of the population with the attribute of interest (use 0.5 as it is unknown and 0.5 provides maximum variability)
- **e** = Margin of error (e.g., 0.05 for ±5%)

Finite Population Correction

For a finite population size, the following adjustment is applied:

$$n_{\text{adjusted}} = \frac{n}{1 + \frac{n-1}{N}}$$

Where:

- N = Total population size

Application to the Study

The estimated population size (N) for green beauty consumers in Hong Kong is approximately **4.02 million**, based on demographic data. Assuming a confidence level of **95% (Z=1.96)**, a margin of error of **±5% (e=0.05)**, and an estimated proportion (p) of **0.5** for maximum variability:

1. Initial Sample Size (n):

$$n = \frac{1.96^2 \cdot 0.5 \cdot (1 - 0.5)}{0.05^2} = \frac{3.8416 \cdot 0.25}{0.0025} = 384.16$$

Approximately 385 participants are required.

2. Adjusted Sample Size (n_{adjusted})

$$n_{\text{adjusted}} = \frac{385}{1 + \frac{385-1}{4,020,000}} \approx 385$$

Given the large population size, the adjusted sample size remains close to the initial calculation.

Conclusion

A target sample size of **385 participants** is deemed sufficient to ensure a representative and reliable dataset for this study, adhering to the desired confidence level and margin of error. This ensures the generalizability of findings to the broader green beauty consumer population in Hong Kong.

3.7 Data Analysis Techniques

The data collected in this study is analysed using SPSS version 29 (Statistical Package for the Social Sciences), a robust software widely used for statistical analysis in social science research. For the quantitative data, SPSS is employed to perform descriptive statistics, reliability analysis, and inferential statistical tests. Key techniques include:

- Descriptive Analysis: Summarizing the demographic characteristics of the respondents and the distribution of key variables.

- Reliability Analysis: Evaluating the internal consistency of the questionnaire items using Cronbach's alpha.
- Correlation Analysis: Examining relationships between variables such as attitude, subjective norms, and perceived behavioural control.
- Independent T-Test: Comparing means between two groups (e.g., demographic subgroups) to identify significant differences in variables such as purchase intention or behaviour.
- One-way ANOVA (Analysis of Variance): Testing differences among three or more groups (e.g., income levels or age groups) to explore variations in key constructs like purchase intention.
- Regression Analysis: Testing the hypotheses by exploring the impact of independent variables (e.g., environmental concern, perceived value) on the dependent variables (e.g., purchase intention and behaviour).

3.8 Research Method Limitations

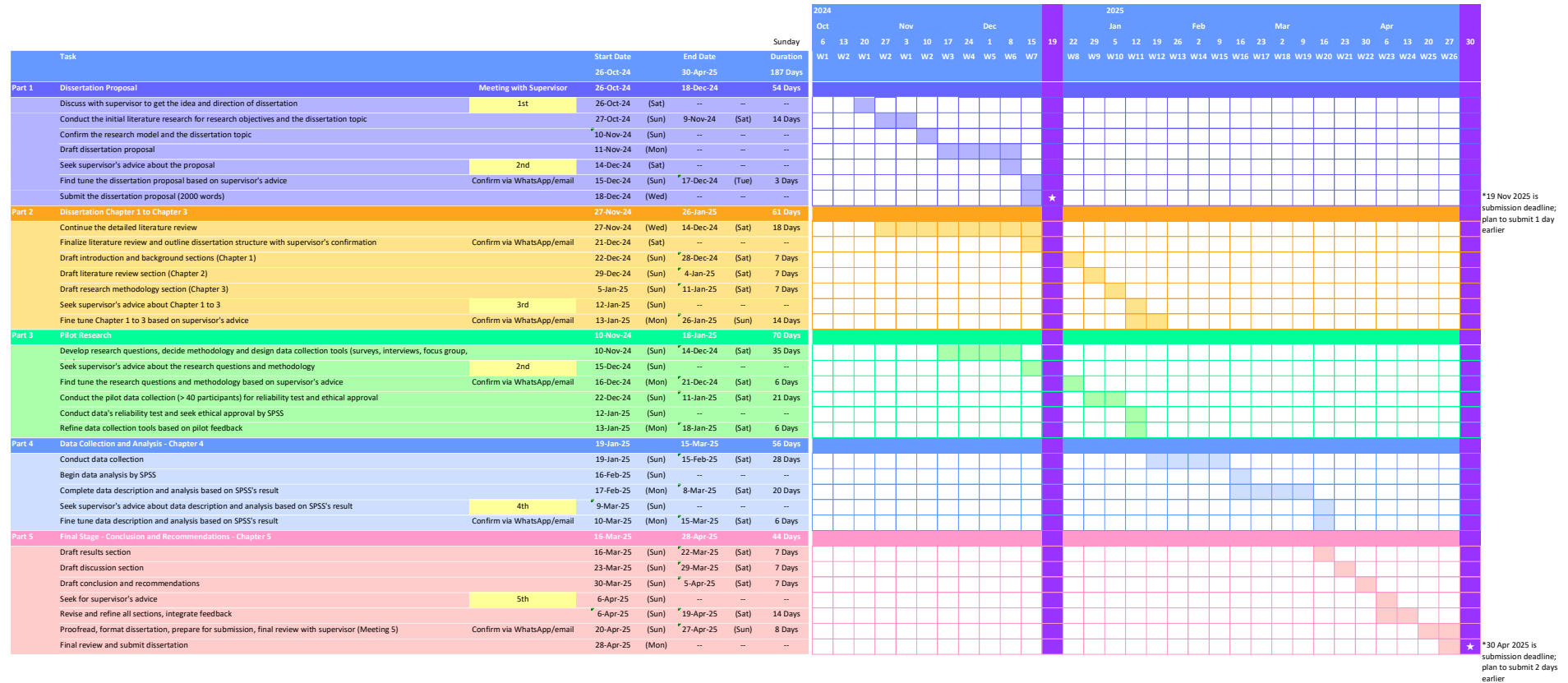
While this research employs a robust methodology, several limitations warrant acknowledgment. First, the reliance on self-reported data through questionnaires may introduce social desirability bias, potentially leading respondents to overstate their environmental concerns and green purchasing behaviours (Milfont, 2009). Second, the use of non-probability sampling through convenience and snowball methods may limit the generalizability of findings to the broader Hong Kong population (Ahmed, 2024). Third, the cross-sectional nature of the study captures attitudes and behaviours at a single point in time, potentially missing temporal variations in consumer behaviour (Maguire & Geiger, 2015). To mitigate these limitations, the study implements careful questionnaire design with validated scales and employs methodological triangulation through pilot testing and comparisons with existing literature findings.

3.9 Research Ethics

The study adheres to ethical guidelines, ensuring that participants provide informed consent and that their privacy and confidentiality are maintained. Ethical approval is obtained from the relevant institutional review board, and participants are informed about their right to withdraw from the study at any point without penalty.

Appendix 1

Gantt Chart of Dissertation



Academic References

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APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

This document is also available in Welsh.

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:	Chau Shuk Man, Kathy			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student
3	Institute/Academic Discipline/Centre:	The Hong Kong Management Association (HKMA)			
4	Campus:	The Hong Kong Management Association (HKMA)			
5	E-mail address:	2322640@student.uwtsd.ac.uk			
6	Contact Telephone Number:	852-97310763			

For students:		
7	Student Number:	2322640
8	Programme of Study:	Master of Business Administration
9	Director of Studies/Supervisor:	Dr. Katherine Mo

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☐	NO	☒
					Date
2	If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
Institute Research Committee		☐			
Other (write in)		☐			

SECTION C: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	UWTSD Research Ethics & Integrity Code of Practice	☒
2	UWTSD Research Data Management Policy	☒
3	[List any other relevant documents here]	☒

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution					
2	Contact person name					
3	Contact person e-mail address					
4	Is your research externally funded?	YES	☐	NO	☒	
5	Are you in receipt of a KESS scholarship?	YES	☐	NO	☒	
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	YES	☐	NO	☒
7		Employed	YES	☐	NO	☒
8	Is the research being undertaken within an existing UWTSD Athrofa	If YES then the permission question	YES	☐	NO	☒

	Professional Learning Partnership (APLP)?	below does not need to be answered.				
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☒

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	YES	☐	NO	☒
	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).				

SECTION E: Details of Research Activity

1	Indicative title:	A Study of Hong Kong Consumers' Intentions to Purchase Green Beauty Products Based on the Theory of Planned Behaviour, Environmental Concern, and Perceived Value		
2	Proposed start date:	3 November 2024	Proposed end date:	19 December 2024
	Introduction to the Research (maximum 300 words per section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below: <i>Purpose of Research Activity</i> <i>Proposed Research Question</i> <i>Aims of Research Activity</i> <i>Objectives of Research Activity</i> Demonstrate, briefly, how <u>Existing Research</u> has informed the proposed activity and explain <i>What the research activity will add to the body of knowledge</i> <i>How it addresses an area of importance.</i>			
3	Purpose of Research Activity This study examines how Hong Kong consumers make decisions about purchasing green beauty products, focusing on understanding sustainable consumption patterns in the local market. Recent market analysis indicates substantial growth potential in the sustainable beauty sector, with industry projections suggesting significant expansion through 2031 (InsightAce Analytic, 2024). While global markets show increasing interest in sustainable beauty products, Hong Kong presents unique characteristics that warrant specific investigation. Despite increasing environmental awareness and the rise of eco-conscious consumers globally, green beauty products remain under-adopted in Hong Kong. The research addresses a significant knowledge gap, as previous studies have primarily focused on Western markets, leaving a void in understanding the unique cultural, social, and economic influences in Hong Kong. This understanding is particularly crucial as the Hong Kong beauty market experiences a recovery marked by a shift towards sustainable products and growing consumer consciousness about environmental impact. The research is further motivated by the increasing availability of vegan beauty products and the rise of e-commerce platforms, which have transformed how consumers access and purchase green beauty products. This study aims to contribute to both academic knowledge and practical business applications by providing insights that can help companies develop products and marketing strategies aligned with eco-conscious consumers' values and preferences. (this box should expand as you type)			

4	Research Question The study addresses several critical research problems aimed at understanding the complex dynamics of green beauty product consumption in Hong Kong. The primary research question examines the factors influencing consumers' intention to purchase green beauty products in Hong Kong, considering both direct and indirect influences. This is supplemented by investigating how consumers' attitudes, social norms, behavioural control, environmental concern, and perceived value collectively contribute to purchase intention, providing a comprehensive understanding of the decision-making process. The research also explores the mediating role of intention between predictors and actual purchase behaviour, helping to bridge the gap between consumer intentions and actions. Additionally, the study examines how demographic variables such as age, gender, income, and profession influence these relationships, providing valuable insights for market segmentation and targeted marketing strategies. These questions are designed to provide a holistic understanding of consumer behaviour in the green beauty market, addressing both theoretical and practical aspects of sustainable consumption. The findings will help identify barriers to adoption and opportunities for market growth, while also contributing to the broader literature on sustainable consumer behaviour. (this box should expand as you type)
5	Aims of Research Activity The primary aim of this research is to conduct a comprehensive investigation into the factors influencing consumers' intention and behavior toward purchasing green beauty products in Hong Kong, utilizing the Theory of Planned Behaviour (TPB) as the guiding framework. The study seeks to explore key predictors of purchase intention and understand the mediating and moderating effects within the proposed model, encompassing both psychological and demographic factors. This research aims to bridge the gap between theoretical understanding and practical application in the green beauty industry by examining how various factors interplay to influence consumer decisions. The study also aims to contribute to the growing body of literature on sustainable consumption by providing insights specific to the Hong Kong market, where cultural and social factors may differ significantly from Western contexts. Additionally, it aims to provide valuable insights for businesses seeking to expand their presence in the green beauty market by understanding consumer motivations and barriers to adoption. The research aims to generate actionable recommendations for both marketers and policymakers to effectively promote and encourage the adoption of green beauty products in Hong Kong. (this box should expand as you type)
6	Objectives of Research Activity The research encompasses five key objectives designed to provide a comprehensive understanding of green beauty product consumption in Hong Kong. First, it seeks to examine the impact of TPB components (attitudes, subjective norms, and perceived behavioral control) on consumers' intention to purchase green beauty products, providing insights into the psychological factors driving consumer decisions. Second, the research aims to assess the roles of environmental concern and perceived value in influencing purchase intention, acknowledging the growing importance of sustainability in consumer decision-making. Third, it analyzes the mediating effect of intention on the relationship between predictors and actual purchase behavior, helping to understand the gap between intentions and actions. Fourth, the study explores the moderating role of demographic variables in the relationship between intention and actual purchase behavior, providing valuable insights for market segmentation. Finally, it aims to provide practical recommendations for marketers and policymakers to encourage the adoption of green beauty products in Hong Kong, ensuring the research has practical applications. These objectives collectively contribute to both theoretical understanding and practical implementation in the green beauty industry. (this box should expand as you type)
	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	The research employs a comprehensive mixed-methods approach combining qualitative and quantitative research methodologies to ensure robust and reliable findings. The qualitative component

	involves focus groups designed to gather deep insights into consumer motivations, perceptions, and barriers to adoption of green beauty products. These sessions will provide rich, contextual data about consumer decision-making processes and help inform the development of the quantitative survey instrument. The quantitative component centers on a structured questionnaire survey with a sample size of 385 participants, carefully determined to ensure statistical significance. The survey will undergo rigorous pilot testing and refinement before full deployment. It will measure various constructs including attitudes toward green beauty products, subjective norms, perceived behavioral control, environmental concern, perceived value, purchase intention, actual purchase behavior, and demographic factors. Data analysis will be conducted using SPSS software (version 29), employing a range of statistical techniques including descriptive statistics, reliability testing, correlation analysis, regression analysis, T-tests, and one-way ANOVA. The research methodology incorporates triangulation to ensure validity and reliability of findings, combining different data sources and analytical methods. The study will adhere to strict research ethics guidelines while acknowledging limitations such as regional specificity to Hong Kong and potential self-reporting biases. This comprehensive methodological approach ensures that the research findings will be both academically rigorous and practically applicable to the green beauty industry. (this box should expand as you type)
	Location of research activity Identify all locations where research activity will take place.
8	Hong Kong (this box should expand as you type)
	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.
9	Yes, I am loving Hong Kong where is the location of research activity (this box should expand as you type)

10	Use of documentation not in the public domain: Are any documents NOT publicly available?	NO	☒
		YES	☐
11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. (this box should expand as you type)		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	YES	NO
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒

16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		
	(this box should expand as you type)		

SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☒	☐
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☒	☐
7	Participant observation with their knowledge?	☐	☒
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.		
	Details of any other primary data collection method: (this box should expand as you type)	☐	☒

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

Who are the intended participants:		YES	NO
1	Students or staff at the University?	☒	☐
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.	☐	☒
	Details of any other participant groups: (this box should expand as you type)		

Participant numbers and source	
Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
10	How many participants are expected? Not less than 385 (this box should expand as you type)
11	Who will the participants be? Friends and fellows, research participants on social media (e.g. facebook) (this box should expand as you type)
12	How will you identify the participants? By snowball sampling only (this box should expand as you type)

Information for participants:		YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	☒
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐

19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	(this box should expand as you type)			

Information for participants:		YES	NO	N/A
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	(this box should expand as you type)			

SECTION H: Anticipated Risks

Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.							
1	<table border="1"> <tr> <td>Full risk assessment completed and appended?</td> <td>Yes</td> <td>☐</td> </tr> <tr> <td></td> <td>No</td> <td>☒</td> </tr> </table>	Full risk assessment completed and appended?	Yes	☐		No	☒
Full risk assessment completed and appended?	Yes	☐					
	No	☒					
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information <table border="1"> <tr> <td> Risk to participants: N/A <i>(this box should expand as you type)</i> </td> <td> How you will mitigate the risk to participants: N/A <i>(this box should expand as you type)</i> </td> </tr> </table>	Risk to participants: N/A <i>(this box should expand as you type)</i>	How you will mitigate the risk to participants: N/A <i>(this box should expand as you type)</i>				
Risk to participants: N/A <i>(this box should expand as you type)</i>	How you will mitigate the risk to participants: N/A <i>(this box should expand as you type)</i>						
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities						
	N/A <i>(this box should expand as you type)</i>						

4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator: N/A <i>(this box should expand as you type)</i>	How you will mitigate the risk to the investigator: N/A <i>(this box should expand as you type)</i>
5	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to the University: N/A <i>(this box should expand as you type)</i>	How you will mitigate the risk to the University: N/A <i>(this box should expand as you type)</i>
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment: N/A <i>(this box should expand as you type)</i>	How you will mitigate the risk to environment: N/A <i>(this box should expand as you type)</i>

Disclosure and Barring Service				
	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7	Does your research require you to hold a current DBS Certificate?	☐	☒	☐
8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.	N/A		

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	After data collection, participants will receive a debriefing. Survey participants will be emailed a brief summary of the study's goals and how their input contributes to understanding green beauty purchase intentions. Interview participants will receive similar feedback immediately after the interview. The feedback will also reassure participants that their data will be kept confidential and explain how the research findings may benefit both the academic community and businesses in the green beauty industry <i>(this box should expand as you type)</i>
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	Before participation, participants will be informed of the study's purpose, voluntary nature, and confidentiality. For surveys, consent will be obtained through an online consent form that participants agree to before proceeding. All consent records will be securely stored in accordance with Hong Kong's Personal Data Protection Ordinance. <i>(this box should expand as you type)</i>
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.

	Survey responses will be anonymous, with no personal identifying information collected. Any personal data will be removed during transcription, and only aggregated results will be presented. Participants will be informed that their responses will remain confidential and used solely for research purposes, in compliance with Hong Kong's Personal Data Protection Ordinance. <i>(this box should expand as you type)</i>
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SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	YES	NO
1	"Personal data" means any information relating to an identified or identifiable natural person ('data subject'). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.	☐	☒
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	<i>(this box should expand as you type)</i>		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	"Special category data" means sensitive personal data consisting of information as to the data subjects' – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☒
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	<i>(this box should expand as you type)</i>		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☒	☐
6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☒	☐
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	"Cloud" storage or websites?	☒	☐
11	Other – specify:	☐	☒

12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:
	To ensure data security and confidentiality, all collected data will be stored in password-protected files and encrypted for protection. Only authorized personnel will have access to the data. Backup procedures will be in place to ensure data integrity, with encrypted backups stored in secure locations. Personal identifiers will be removed through anonymization and pseudonymization techniques, ensuring that participants cannot be identified from the data. All data storage and handling procedures will comply with Hong Kong's Personal Data Protection Ordinance to maintain privacy and security throughout the research process. <i>(this box should expand as you type)</i>

Data Protection			
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☒	☐
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system? (SPSS)	☒	☐
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	(Q13) Electronic Transfer of Data: The electronic transfer of data will be conducted using secure, encrypted methods to ensure the protection of sensitive information. All data transfers will comply with the Hong Kong's Personal Data Protection Ordinance, the General Data Protection Regulation (GDPR) and the Data Protection Act (2018). Only authorized personnel will have access to the data, and strict protocols will be followed to prevent unauthorized access or data breaches. (Q17) Use of Personal Addresses, Postcodes, Faxes, Emails, or Telephone Numbers: Personal contact information will be collected and stored securely. Access to this data will be restricted to my supervisor and me only. All personal data will be anonymized before analysis to protect the privacy of participants. The collection and use of personal data will adhere to the principles of the Hong Kong's Personal Data Protection Ordinance, the GDPR and the Data Protection Act (2018), ensuring that data is used lawfully, fairly, and transparently. (Q19) Use of a Data Management System (SPSS): Data will be managed and analysed using SPSS, a secure and reputable statistical software. Access to SPSS will be limited to my supervisor and me only. The software will be used in accordance with data protection regulations, ensuring that all data is stored and processed securely. Regular audits will be conducted to ensure compliance with the Hong Kong's Personal Data Protection Ordinance, the GDPR and the Data Protection Act (2018). <i>(this box should expand as you type)</i>		
22	List all who will have access to the data generated by the research activity:		
	My supervisor and myself. <i>(this box should expand as you type)</i>		

23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	My supervisor and myself. <i>(this box should expand as you type)</i>		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	Security Measures: Electronic data will be encrypted and access restricted to authorized personnel using multi-factor authentication. Regular security audits will be conducted. Data Storage Location: Data will be stored on my laptop, secured with high-level password protection. Data Storage Duration: Data will be retained as per institutional guidelines. Data Format: Data will be stored electronically in encrypted databases. Data Archiving: Yes, data will be archived in a long-term digital archive after the project. Physical data will be securely destroyed as per institutional guidelines. <i>(this box should expand as you type)</i>		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. <i>(Most relevant to academic staff)</i>		
	N/A <i>(this box should expand as you type)</i>		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒

SECTION K: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant:	<i>Kathy.C</i>	Date: 18 December 2024

For STUDENT Submissions:

2	Director of Studies/Supervisor:	Dr. Kathrine Mo	Date: 18 December 2024
3	Signature:	<i>KMo</i>	

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		Date:
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed ALL RELEVANT sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☒	I have attached a copy of final/interim approval from external organisation (where appropriate)
☒	I have attached a full risk assessment (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

