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**Generational Differences in
Online Fashion Return Behavior in
China: A Cross-Cohort Analysis**

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Abstract

This thesis investigates generational differences in online fashion return behavior in China, focusing on wardrobing and bracketing. An integrated framework combining the Theory of Planned Behavior (TPB) and Generational Cohort Theory (GCT) is tested using a sequential explanatory mixed-methods design.

The quantitative phase surveyed 225 Chinese fashion e-commerce consumers (Generations X, Y, and Z, 75 each). Data were analyzed using PLS-SEM with multi-group analysis and ANOVA. The qualitative phase included 14 semi-structured interviews analyzed thematically.

Quantitative results show that attitude strongly predicts return intention for both behaviors ($\beta = 0.74$ for wardrobing; $\beta = 0.84$ for bracketing). However, none of the hypothesized generational differences in path coefficients (H1a–H3b) are significant, and the moderating effect of sustainability consciousness on attitude-intention (H4a, H4b) is rejected. The only significant cohort difference is that Generation X scores higher on sustainability consciousness than Generation Z. Qualitatively, cohorts differ not in how strongly attitudes translate into intentions, but in the moral grammar underlying those attitudes: Generation Z emphasizes platform rules and consumer rights, Generation Y real-need adequacy and consequences, and Generation X relational ethics and labor empathy.

The study demonstrates that in the Chinese fashion e-commerce context, generational effects operate primarily on construct meaning and antecedent-belief content, not on belief-intention translation. Practically, platforms should reduce information asymmetry for bracketing and strengthen risk management for wardrobing, rather than relying on blanket return restrictions.

Keywords: generational differences, online fashion returns, wardrobing, bracketing, Theory of Planned Behavior, Generational Cohort Theory, PLS-SEM, mixed methods, sustainability consciousness, China

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Finally, we would like to end with a line from Rabindranath Tagore (1928):

“My last tribute is to those who know I am not perfect but still love me.”

Jiali Qian
Gongxin Wang

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1 Introduction

1.1 Background and Research Context

Product returns have emerged as one of the most consequential and operationally complex challenges in contemporary e-commerce. As online retail has expanded to account for an ever-larger share of global consumer spending, the volume and economic impact of returns have grown correspondingly. The National Retail Federation and Happy Returns (2024) estimated that total returns for the retail industry are projected to reach USD 890 billion in 2024, representing 16.9% of annual sales, more than double the 8.1% return rate recorded in 2019. This near-doubling within five years reflects a structural shift in consumer behavior driven by the rapid expansion of online purchasing and the normalization of liberal return policies, with no signs of reversal. Industry projections suggest this trajectory will continue, with average e-commerce return rates estimated at approximately 19–20.5% by 2026, compared with just 5–9% for brick-and-mortar retail (Putra, 2026). In the European context, the Centre for Market Insights (2025) reported that total B2C e-commerce turnover reached EUR 842 billion in 2024, with fashion and apparel consistently recording the highest per-category return rates across all product segments.

The fashion and apparel sector occupies a particularly significant position within this landscape. Unlike electronics or household goods, fashion products are highly susceptible to uncertainty about fit, color accuracy, and tactile quality, uncertainties that the online channel is structurally unable to resolve prior to purchase. As a consequence, fashion e-commerce return rates consistently exceed those of other categories, with some estimates placing apparel return rates as high as 46% for online purchases compared with 8% to 10% for equivalent in-store transactions (Hjort & Lantz, 2016). Each return initiates a costly and resource-intensive reverse logistics process that erodes retailer profitability, distorts inventory planning, and generates environmental externalities through additional transportation and packaging waste. Understanding why consumers return fashion products, and who is most likely to do so, has therefore become a strategic imperative for the industry.

Within this context, two behavioral patterns have attracted particular academic and managerial attention. The first is wardrobing, defined as the practice of purchasing clothing or accessories with the deliberate intention of wearing them briefly for a specific occasion and subsequently returning them to the retailer (Phau et al., 2022). The second is bracketing, a defensive purchasing strategy in which consumers order multiple sizes or variants of the same item simultaneously, intending to retain only the best-fitting option and return the rest (Nageswaran et al., 2020). While wardrobing is widely classified as a form of Unethical Retail

Disposition and consumer fraud, bracketing occupies a more ethically ambiguous position, driven by rational uncertainty-reduction motives that are enabled and implicitly encouraged by liberal return policies. Both behaviors impose substantial supply chain costs and are increasingly prevalent: the NRF and Happy Returns (2024) report found that 51% of Generation Z consumers engage in bracketing for apparel and footwear purchases, compared with 36% of Generation X consumers, with 93% of retailers identifying fraudulent and abusive return practices as a significant business challenge.

Despite this documented divergence across age groups, academic research has not systematically investigated the psychological and social mechanisms through which generational differences in return behavior arise. Industry data establish the descriptive fact of generational variation; they do not explain it. This gap between observed behavioral patterns and their theoretical understanding motivates the present study.

1.2 Problem Statement and Research Gap

The academic literature on product return behavior has developed along two largely parallel tracks. One body of research, grounded in supply chain management and operations research, focuses on the firm-level consequences of returns, examining return policy design, reverse logistics costs, and the impact of return policy leniency on purchase and return decisions (Hjort & Lantz, 2016; Janakiraman et al., 2016; Nageswaran et al., 2020). A second body of research, rooted in consumer behavior and social psychology, investigates the individual-level psychological antecedents of return intention, including attitudes toward returns, social norms, perceived ease of returning, and ethical orientations (Škapa, 2013; Das & Kunja, 2024; Serravalle et al., 2022).

These two streams have generated important insights but share a common limitation: neither has systematically theorized or empirically tested why consumers of different generational cohorts exhibit divergent return intentions and behaviors. While generational differences have been documented in shopping behavior, digital technology adoption, and sustainability orientation (Parment, 2013; Jeong & Kim, 2025), their expression in the specific domain of online fashion return behavior remains underexplored. In particular, no prior study has applied the Theory of Planned Behavior (TPB; Ajzen, 1991) in a multi-cohort comparative design to examine whether the attitudinal, normative, and control-related antecedents of return intention differ systematically across Generation Z, Millennials, and Generation X consumers.

This gap is consequential for both theory and practice. Theoretically, it leaves unresolved whether generational differences in return behavior reflect differences in attitude, in social

norms, in perceived behavioral control, or in some combination of these psychological mechanisms. Practically, it prevents retailers from designing return policies and communications that are appropriately calibrated to the behavioral drivers and ethical orientations of different consumer segments. The Chinese e-commerce market, with its distinctive generational cohort characteristics shaped by rapid economic transformation, the one-child policy, and the mobile-first digital infrastructure of platforms such as Taobao and JD.com, offers a particularly rich and underexplored context for such an investigation (Wang, 2023; Hung et al., 2007).

1.3 Research Purpose and Questions

The purpose of this study is to investigate generational differences in e-commerce return behavior within the Chinese fashion and apparel market by integrating the Theory of Planned Behavior with Generational Cohort Theory. The study seeks to identify whether, and through which psychological mechanisms, Generation Z, Millennials, and Generation X consumers differ in their return intentions and behaviors, with particular focus on the behaviors of wardrobing and bracketing.

This purpose is operationalized through three research questions:

RQ₁: How do Generation Z, Generation Y (Millennials), and Generation X consumers in China differ in their self-reported frequency of online fashion returns, specifically in wardrobing and bracketing behaviors?

RQ₂: To what extent do the psychological antecedents of return intention specified by the Theory of Planned Behavior (attitude toward the return behavior, subjective norm, and perceived behavioral control) vary across the three generational cohorts in their influence on consumers' intentions to engage in wardrobing and bracketing?

RQ₃: What role do generational values, specifically sustainability consciousness, play in moderating the relationships between TPB constructs and return intention?

1.4 Theoretical Framework

This study is grounded in two complementary theoretical frameworks that together provide both a macro-level comparative structure and a micro-level psychological explanatory mechanism. The Theory of Planned Behavior (Ajzen, 1991) is the primary psychological framework, positing that behavioral intention, the most proximal determinant of behavior,

is jointly predicted by attitude toward the behavior, subjective norm, and perceived behavioral control. TPB has been extensively validated in consumer behavior research and has been applied, though sparsely, to product return contexts (Škapa, 2013; Das & Kunja, 2024). Generational Cohort Theory (Mannheim, 1952; Ryder, 1965) provides the macro-sociological framework, attributing systematic value and behavioral differences across age groups to the formative influence of shared historical, institutional, and technological experiences during late adolescence and early adulthood.

The integrated model proposed in this study treats generational cohort membership as a moderating variable that shapes the TPB belief structures through which return intentions are formed. Concretely, a Generation Z consumer and a Generation X consumer may both follow the same TPB logic, that is, attitude, social norms, and perceived control collectively predicting return intention, yet the content and strength of these antecedents differ systematically, because the two cohorts have been socialized in radically different retail environments: one shaped by mobile-first platforms with frictionless free returns, the other by pre-digital norms where returning was effortful and socially less normalized. This integration is theoretically motivated by the observation that the beliefs underlying attitude, subjective norm, and perceived behavioral control are themselves products of socialization processes, processes that differ systematically across cohorts characterized by distinct digital environments, economic conditions, and consumption cultures (Conner & Armitage, 1998). By combining these frameworks, the study advances beyond purely descriptive accounts of generational variation and offers a theoretically grounded explanation of the psychological pathways through which cohort membership influences return intention.

1.5 Research Methodology Overview

The study employs a sequential explanatory mixed-methods design, in which a dominant quantitative phase is followed by a supplementary qualitative phase that serves to contextualize and interpret the quantitative findings. In the quantitative phase, a survey instrument measures TPB constructs using validated scales adapted from Ajzen (1991) and prior e-commerce studies. The survey is distributed through online channels (the Credamo platform). Quota sampling stratified by generational cohort ensures sufficient representation from each of the three target groups, Generation Z (born 1997–2012), Millennials (born 1981–1996), and Generation X (born 1965–1980), in the Chinese e-commerce market. Data are analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with multi-group analysis to test the hypothesized differences in TPB path coefficients across cohorts.

In the qualitative phase, semi-structured interviews with participants from each generational cohort explore the experiential meanings, social contexts, and values that underlie

quantitatively observed differences in return intention. Thematic analysis informed by TPB constructs and emergent themes provides interpretive depth that the survey data alone cannot yield. The triangulation of quantitative structural estimates with qualitative accounts of consumer experience enhances both the validity and the explanatory richness of the study's findings.

1.6 Scope and Delimitations

The scope of this study is deliberately bounded along three dimensions. First, the product category is restricted to fashion and apparel purchased through online channels, a category selected for its elevated return rates, its susceptibility to the specific behaviors of wardrobing and bracketing, and its centrality to the reverse logistics challenge in Chinese e-commerce. Second, the geographic scope is the Chinese e-commerce market, chosen for the distinctive generational characteristics of Chinese consumer cohorts, shaped by the one-child policy, rapid marketization, and the mobile-first digital infrastructure, and for the underrepresentation of the Chinese context in existing return behavior research. Third, the generational scope encompasses three cohorts: Generation Z, Millennials, and Generation X, as defined by the birth-year boundaries most widely adopted in consumer behavior research for the Chinese context (Hung et al., 2007; Wang, 2023).

Several delimitations apply. The study does not address Baby Boomers or Silent Generation consumers, whose representation in Chinese active e-commerce populations is limited. The study focuses on return intention and self-reported return behavior rather than objective transactional data, reflecting the constraints of survey-based research. Furthermore, while the study investigates sustainability consciousness as a moderating variable, it does not address the full range of value systems that may differentiate generational cohorts; the selection is theory-driven and grounded in the documented sustainability orientations of Generation Z and Millennials in prior literature (Parment, 2013).

1.7 Significance of the Study

This study makes contributions at three levels. Theoretically, it advances the TPB literature by establishing generational cohort as a theoretically principled boundary condition on the attitude–intention, norm–intention, and PBC–intention relationships, responding to calls in the literature for more contextually sensitive applications of the theory (Conner & Armitage, 1998; Armitage & Conner, 2001). It further enriches Generational Cohort Theory's application to consumer behavior by moving beyond descriptive inter-cohort comparisons to

provide a psychological mechanism that explains observed differences (Parry & Urwin, 2011).

Methodologically, the study demonstrates the value of mixed-methods research in unpacking the complex interactions between generational identity, psychological antecedents, and behavioral outcomes in e-commerce contexts. The application of PLS-SEM multi-group analysis to TPB constructs across three generational cohorts provides a replicable methodological template for future cross-cohort consumer behavior research.

Managerially, the findings aim to offer actionable insights for e-commerce retailers and supply chain managers seeking to design return policies, reverse logistics systems, and consumer communications that are appropriately targeted to the behavioral drivers of different generational segments. At a time when return management has become a defining challenge for e-commerce profitability and sustainability, an empirically grounded understanding of why different generations return products, and through which psychological pathways, has significant practical value.

1.8 Thesis Structure

The remainder of this thesis is organized as follows. Chapter 2 presents the literature review, developing the theoretical foundations for the study across five sections: the supply chain management context of e-commerce returns (Section 2.1); a typology of return behaviors including wardrobing and bracketing (Section 2.2); the Theory of Planned Behavior and its applications to consumer and return behavior (Section 2.3); Generational Cohort Theory and the definition of generational cohorts in the Chinese context (Section 2.4); and the integrated conceptual framework with the study's four research hypotheses (Section 2.5). Chapter 3 details the research methodology, covering the research design, sampling strategy, measurement instruments, and analytical approach. Chapter 4 reports the quantitative and qualitative findings. Chapter 5 discusses the findings in relation to the theoretical framework and prior literature. Chapter 6 presents the conclusions, including theoretical and managerial implications, limitations, and directions for future research.

2 Literature Review

2.1 E-commerce Returns as a Supply Chain Management Challenge

The rapid expansion of e-commerce has fundamentally altered the economics of retail logistics, most acutely through the dramatic increase in product return volumes. Unlike conventional brick-and-mortar retail, where return rates typically range between 8% and 10%, fashion e-commerce consistently reports return rates of approximately 50%, imposing substantial and recurring costs on supply chain operations (Hjort & Lantz, 2016). This structural disparity arises from the inherent informational limitations of online shopping: consumers cannot physically inspect, try on, or assess the tactile properties of apparel prior to purchase, thereby generating systematic post-purchase uncertainty that frequently manifests as product returns. The scale of this challenge is considerable: the global reverse logistics market exceeded USD 841 billion in 2024 and is projected to grow at a CAGR of 7.2% through 2034, with e-commerce returns representing the single largest driver of this expansion (Global Market Insights, 2025). In Europe, the Centre for Market Insights (2025) reported that total B2C e-commerce turnover reached EUR 819 billion in 2024, with fashion and apparel accounting for the highest per-category return rates, underscoring the strategic significance of return management in the European and global contexts.

From a supply chain management perspective, product returns do not constitute a simple reversal of the forward logistics flow. Each return initiates a complex and resource-intensive sequence of reverse logistics activities, comprising customer-initiated return authorization, outbound shipment, quality inspection, condition assessment, restocking or disposition decisions, and where applicable, secondary market redistribution, all of which impose significant operational cost and coordination complexity (Janakiraman et al., 2016). A meta-analytic review of 21 studies confirmed that while lenient return policies stimulate purchase demand, the return policy factors driving purchases and those driving actual returns are governed by different dimensions, with the result that retailers seeking to optimize demand through generous policies simultaneously risk amplifying reverse logistics volumes in ways that are difficult to control (Janakiraman et al., 2016). Research using transactional data from a Swedish fashion e-tailer found that customers who benefit from free returns generate a significantly lower contribution per order, and that free returns policies do not necessarily improve long-term retailer profitability, which has direct implications for supply chain cost management in fashion e-commerce (Hjort & Lantz, 2016).

The nature of return behavior itself further complicates supply chain planning. Rintamäki et al. (2021) established an important conceptual distinction between planned and unplanned

product returners in online fashion retail: planned returners, who purchase with a pre-existing intention to return at least some items, exhibit systematically different supply chain implications compared to those returning due to service failures or post-purchase dissatisfaction. This distinction is particularly relevant in the context of bracketing, a behavior in which consumers deliberately order multiple sizes or variants simultaneously with the intention of retaining only one, thereby artificially inflating forward logistics volumes without equivalent revenue and generating supply chain consequences that extend from inventory distortion to increased handling costs and accelerated markdown cycles (Nageswaran et al., 2020). In the omnichannel context, Nageswaran et al. (2020) further demonstrated that firms' return policy decisions, including whether to offer full refunds, charge fees for online returns, or incentivize in-store returns, interact with customer return channel preferences in ways that materially affect overall supply chain profitability.

Understanding the behavioral determinants of product returns is therefore not merely a consumer psychology question but a supply chain management imperative. Identifying which consumer segments are most likely to engage in planned, high-volume, or opportunistic return behaviors enables retailers to design more targeted and cost-effective return policies and reverse logistics systems. This study contributes to that objective by investigating whether and how such behavioral tendencies differ systematically across generational cohorts in the Chinese fashion e-commerce market.

2.2 E-commerce Return Behavior: Typologies and Ethical Dimensions

The Return Policy Leniency Dilemma and Opportunistic Consumer Behavior

In the highly competitive e-commerce environment, retailers often adopt liberal return policies to reduce consumers' perceived risk and enhance their purchase intentions (Chang & Yang, 2022). However, this strategy gives rise to the so-called leniency dilemma of return policies: while generous return guarantees can strengthen consumer confidence, they may also stimulate impulsive purchasing and lead to a substantial increase in return volumes, thereby reducing firms' operational efficiency. Conversely, if retailers tighten return policies in an attempt to curb excessive returns, legitimate customers may be inadvertently penalized, which can ultimately undermine overall customer satisfaction (Duong et al., 2025). Moreover, when e-commerce sellers introduce policies such as Returnable After a Deep Trial (RADT) to satisfy consumers' need for in-depth product experience, these policies may further encourage opportunistic consumer behavior (Chen & Xiao, 2026).

Unethical Retail Disposition and First-Party Fraud

To conceptually define the aforementioned abusive behaviors from an academic perspective, scholars have introduced the concept of Unethical Retail Disposition (URD). URD is explicitly defined as a form of consumer fraud in which consumers intentionally purchase products with the premeditated intention of using them and subsequently returning them to the retailer in order to obtain a refund (Rosenbaum, Kuntze, & Wooldridge, 2011).

Within the e-commerce context, such behavior is often categorized as first-party fraud. Unlike identity theft or other forms of external fraud, first-party fraud refers to fraudulent activities conducted by legitimate account holders who exploit authorized return channels and the faceless nature of online transactions to obtain improper benefits (Amasiatu & Shah, 2014).

Notably, in order to alleviate the sense of guilt associated with engaging in such misconduct, consumers frequently employ techniques of neutralization to justify and cognitively rationalize their inappropriate behavior within the marketplace (Strutton, Vitell, & Pelton, 1994; Rosenbaum et al., 2011). For example, a consumer engaging in wardrobing may rationalize the behavior by telling themselves that “large retailers can easily absorb the cost,” “everyone does it,” or “I am not harming any specific individual.” Each represents a neutralization strategy that temporarily suspends the moral judgment that would otherwise inhibit the behavior.

Wardrobing as Intentional Fraud

In the apparel retail sector, the most typical and widely discussed manifestation of Unethical Retail Disposition (URD) is wardrobing. Wardrobing refers to the practice whereby consumers purchase clothing, shoes, or similar products solely for the purpose of wearing them briefly for a specific occasion and subsequently returning them to the retailer (Phau et al., 2022).

Academic literature clearly categorizes this behavior as an illegitimate consumer practice or a form of fraudulent return. In such cases, consumers knowingly exploit retailers’ liberal return policies for personal gain, despite being aware that the product has already been used or damaged (Harris, 2010; Škapa, 2013). Consequently, wardrobing fundamentally lacks a genuine intention to purchase and retain the product and is therefore widely regarded as a form of unethical and opportunistic consumer behavior within the retail context. Research on Chinese luxury-fashion consumers has further found that social factors are the primary antecedents of wardrobing attitude and intention in the Chinese e-commerce context, distinguishing Chinese consumers from their Western counterparts whose wardrobing is more strongly driven by personality factors (Phau et al., 2022). These social factors include

consumers' prior experience with return policies (familiarity with the process normalizing repeated use), social media influence (exposure to influencers and peers who model or endorse wardrobing behavior as a lifestyle practice), and peer normative pressure regarding the acceptability of exploiting return channels.

Bracketing and Valuation Uncertainty

In contrast to the purely opportunistic motives underlying wardrobing, recent years have witnessed a rapid increase in bracketing behavior within fashion e-commerce. Recent literature defines bracketing as a defensive purchasing strategy adopted by consumers to cope with valuation and fit uncertainty. Specifically, consumers deliberately purchase multiple versions of the same product, such as different sizes or colors, with the prior intention of keeping only the most suitable item and returning the rest (Chen et al., 2024; Nageswaran et al., 2020).

Unlike wardrobing, which is primarily driven by opportunistic motives after product use, consumers engaging in bracketing typically possess a genuine purchase intention. In essence, they treat e-commerce logistics and return policies as a form of online fitting room to resolve uncertainties regarding product fit and suitability (Xu et al., 2023). Based on this academic conceptualization, the present study argues that, from the perspective of consumer ethics, bracketing does not constitute malicious fraud in the traditional sense. Instead, it occupies a complex ethical gray area. Wang et al. (2026) further demonstrate that information asymmetry between buyers and sellers, including the quality signals conveyed by online reviews, shapes consumers' return decisions, suggesting that the likelihood of bracketing is not only a function of individual attitudes but also of the informational environment in which purchasing decisions are made.

Research Focus of the Present Study

The foregoing review establishes that product return behavior in fashion e-commerce encompasses a spectrum of distinct behavioral types that differ fundamentally in their ethical character, motivational basis, and supply chain implications. Wardrobing represents the opportunistic extreme of this spectrum, driven by an absence of genuine purchase intent and enabled by the exploitation of lenient return policies. Bracketing, by contrast, is motivated by legitimate fit uncertainty and occupies an ethically ambiguous position in which rational consumer decision-making intersects with operational costs borne by the retailer.

The present study focuses specifically on these two behavioral types because both involve intentional planning prior to purchase, both are shaped by consumers' attitudes toward the behavior, by the normative climate within their social networks, and by their perceived control over the logistics of the return process. Moreover, industry data indicate that

generational differences in the prevalence of these behaviors are particularly pronounced. The NRF and Happy Returns (2024) report found that 51% of Generation Z consumers engage in bracketing compared with 36% of Generation X consumers, with Generation Z also exhibiting higher rates of fraudulent and abusive return practices. Examining the attitudinal, normative, and control-related antecedents of return intention across these behaviors, and investigating whether these antecedents differ systematically across generational cohorts, thus constitutes the central empirical contribution of the present research.

2.3 Theory of Planned Behavior

Theoretical Origins and Core Constructs

The Theory of Planned Behavior (TPB) constitutes one of the most extensively validated frameworks in social psychology for predicting and explaining human behavioral intentions. Its origins lie in the Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975), which proposed that behavioral intention, serving as the proximal motivational antecedent of actual behavior, is jointly determined by an individual's attitude toward a behavior and the subjective norms perceived to govern it. While the TRA proved effective for predicting behaviors under full volitional control, its explanatory scope was limited in contexts where individuals faced resource, opportunity, or capability constraints that rendered behavioral performance less than fully voluntary. Ajzen (1988, 1991) extended the TRA by incorporating a third construct, perceived behavioral control (PBC), and thereby created the Theory of Planned Behavior, which retains applicability across both volitional and non-volitional behavioral domains.

In its canonical formulation, TPB posits that behavioral intention is a function of three theoretically distinct constructs (Ajzen, 1991). Attitude toward the behavior reflects the individual's overall favorable or unfavorable evaluation of performing the behavior in question, determined by behavioral beliefs concerning the likely outcomes of the behavior weighted by the subjective valuation of those outcomes. Subjective norm refers to the perceived social pressure to perform or refrain from performing the behavior, derived from normative beliefs about whether significant referents think one should engage in the behavior and weighted by the motivation to comply with those referents. Perceived behavioral control (PBC) captures the individual's perception of the ease or difficulty of performing the behavior, informed by control beliefs regarding the availability of resources, opportunities, and potential obstacles, and is conceptually related to, though distinct from, Bandura's (1977) construct of self-efficacy (Ajzen, 2002). While self-efficacy is a general, cross-contextual belief in one's capacity to execute behaviors and is primarily internal in

nature, PBC is behavior-specific and explicitly incorporates both internal factors (confidence, skill) and external factors (platform interface convenience, retailer policy leniency, logistics accessibility). A consumer may possess high general technology self-efficacy yet report low PBC over a specific return if, for example, the platform's return procedure is complex or the return window is restrictively short. These three constructs collectively determine behavioral intention, which in turn serves as the immediate antecedent of actual behavior. PBC additionally exerts a direct effect on behavior, independent of intention, to the extent that perceptions of control correspond to actual situational constraints (Ajzen, 1991, 2002).

The empirical standing of the TPB has been established through numerous meta-analytic reviews. Armitage and Conner (2001) synthesized 185 independent studies and demonstrated that the TPB accounted for 27% of the variance in behavior and 39% of the variance in intention, representing a substantial improvement over the TRA. PBC contributed significant unique variance in both intention and behavior beyond the theory's original components. Critically, this meta-analysis also revealed that subjective norm is consistently the weakest predictor of intention, a finding that Armitage and Conner (2001) attributed to the relatively crude operationalization of the normative component in many studies and to the potential need for theoretical refinement of this construct. More recently, Hagger and Hamilton (2024) confirmed through meta-analytic structural equation models of longitudinal studies that TPB constructs exhibit temporal stability and that theory-predicted effects hold across measurement occasions, thereby providing robust longitudinal validation of the framework's predictive architecture.

The TPB in Consumer Behavior Research

The TPB has been applied with considerable breadth and cumulative success across consumer behavior research. Rozenkowska (2023) conducted a systematic literature review of 118 peer-reviewed TPB studies in consumer behavior published between 2012 and 2021, identifying two primary research categories and five thematic clusters. The review confirmed that TPB has achieved growing prevalence as a theoretical lens for understanding consumer intentions and behavioral patterns, particularly in the domains of green consumption, food purchasing, and digital commerce. However, Rozenkowska (2023) noted that clothing-related consumer behavior remains among the least-explored applications of TPB, identifying this as a gap warranting further scholarly attention, which the present study directly addresses.

In the e-commerce context specifically, Pavlou and Fygenson (2006) produced a landmark extension of the TPB by applying it to electronic commerce adoption among online consumers. Their longitudinal study validated the predictive power of the TPB for online behavioral intentions and proposed that PBC in the e-commerce context is best conceptualized as a higher-order construct comprising self-efficacy, reflecting the

individual's confidence in executing online transactions, and controllability, reflecting perceptions of external situational factors that facilitate or impede online behavior. This conceptualization is directly relevant to the present study's focus on online fashion return behavior, where PBC encompasses both the consumer's confidence in navigating return procedures and their perception of structural enablers such as the leniency of the platform's return policy and the physical convenience of the return process.

TPB Applied to Product Return Behavior

Despite the breadth of TPB applications in consumer research, its systematic application to product return behavior in the e-commerce fashion context remains underdeveloped. A notable early exception is Škapa (2013), who applied the TPB directly to fraudulent return behavior and proposed and empirically tested a path model in which attitude toward return fraud, subjective norms among peers, and perceived behavioral control collectively predicted fraudulent return intention. Using path analysis with 207 respondents, Škapa (2013) confirmed that all three TPB constructs exerted significant effects on return fraud intention, providing one of the first direct validations of TPB in the product return domain and demonstrating that opportunistic return behaviors such as wardrobing are meaningfully predicted by the theory's core constructs.

More recently, Das and Kunja (2024) employed a qualitative design to investigate the online product return behavior of young consumers, incorporating TPB alongside Expectation Confirmation Theory and the Theory of Cognitive Dissonance. Their findings revealed that planned, intentional return behaviors, including wardrobing and deliberate over-purchasing, are driven by attitudinal permissiveness toward returns as a consumption strategy, normative influences from peer networks endorsing such behaviors, and perceived ease of executing returns facilitated by liberal platform policies. Das and Kunja (2024) explicitly called for future quantitative research applying TPB constructs to return intention across diverse consumer segments, identifying this as a priority gap in the return behavior literature.

The cultural and generational dimension of return behavior through a TPB lens has been explored by Serravalle et al. (2022), who employed semi-structured interviews with Generation Z consumers in China and Italy to examine how cultural context, operationalized through differences in individualism versus collectivism, shapes return intentions and behaviors. Their findings revealed that Chinese Gen Z consumers exhibited a notably different return calculus compared to their Italian counterparts: prior to purchase, Chinese consumers often discount return policy information and prefer to repurchase rather than return, reflecting a cost-benefit orientation shaped by collectivist norms and pragmatic consumption values, while Italian Gen Z consumers prioritize the protective assurance of a lenient return policy against the risk of wrong purchases. These cultural and generational

differences in the normative and attitudinal dimensions of return behavior provide compelling preliminary evidence that TPB constructs operate differently across generational and cultural groups, which constitutes a central premise of the present research.

Limitations of the TPB and Justification for Integration with Generational Cohort Theory

While the TPB provides a robust and extensively validated micro-level framework for predicting behavioral intentions, the theory presents several limitations relevant to the present research context. The most consistently identified empirical weakness is the relatively modest predictive power of the subjective norm construct. Armitage and Conner (2001) attributed this to measurement inadequacy and to the need for a more differentiated normative component that distinguishes between injunctive norms, reflecting what significant others think one should do, and descriptive norms, reflecting what significant others actually do. In the context of online fashion returns, where social media visibility of consumption practices may render descriptive norms particularly salient among younger consumers, this limitation warrants both theoretical attention and careful measurement design.

More fundamentally, the TPB treats attitude, subjective norm, and PBC as individual-level psychological constructs without theorizing how these constructs may be systematically shaped by macro-level sociological forces such as generational cohort membership. Conner and Armitage (1998) identified this as a broader limitation of expectancy-value models, noting that TPB's antecedent beliefs are formed through experiential learning and social context, which are precisely the processes through which generational cohort theory proposes that shared formative experiences produce durable differences in values, norms, and behavioral orientations. The integration of TPB with Generational Cohort Theory therefore represents a theoretically principled extension: GCT provides the macro-level explanatory mechanism through which cohort membership produces systematic differences in the belief structures underpinning TPB constructs, while TPB provides the micro-level psychological pathway through which those differences translate into measurable differences in return intention and behavior.

2.4 Generational Cohort Theory

Theoretical Origins and Core Mechanisms

Generational Cohort Theory (GCT) provides a macro-sociological perspective for

understanding systematic differences in consumer values and behavioral patterns across age groups. The theoretical origins of GCT can be traced back to the seminal work of Mannheim (1952) on the problem of generations. Mannheim argued that generations should not be understood merely as chronological or biologically defined age cohorts. Rather, a generation emerges only when individuals who experience the same major historical or socio-cultural events during their formative years, typically around late adolescence, develop shared patterns of experience and a common worldview, thereby forming what he termed a generation as an actuality.

From a demographic perspective, Ryder (1965) further advanced generational research by introducing the concept of demographic metabolism. He argued that newly emerging birth cohorts function as key carriers of macro-level structural transformation and social change. Because each generation enters the social arena without fixed socio-psychological orientations, the continuous replacement of older participants by younger cohorts helps break the rigidity of existing structures, thereby providing a sustained driving force for societal evolution.

Although Strauss and Howe (1991) proposed a generational succession model based on macro-historical cycles, contemporary research in business and consumer behavior has gradually moved away from rigid classifications based solely on mechanical time intervals such as fixed twenty-year cycles. Instead, scholars increasingly define generational cohorts based on the major socio-historical events and institutional transformations experienced during consumers' formative years. This approach has become a more scientifically grounded and theoretically robust framework for market segmentation (Egri & Ralston, 2004; Hung et al., 2007).

Traditional generational cohort theory assumes that macro-level economic shifts, technological innovations, or political upheavals experienced during late adolescence and early adulthood can shape individuals' core values in a lasting manner, thereby providing an effective mechanism for market segmentation. However, the empirical work of Noble and Schewe (2003) poses a significant challenge to the effectiveness of this cohort-based segmentation approach. Their findings suggest that major external historical events often fail to produce clearly distinguishable and homogeneous value systems across different generations. Consequently, relying solely on abstract macro-level values as the basis for generational market segmentation may face substantial practical limitations.

Defining Generational Cohorts in the Chinese Context

Conventional generational boundaries are largely derived from Western, particularly American, historical contexts, and directly applying such classifications to cross-cultural settings presents significant limitations. Scholars have emphasized that generational cohorts

are fundamentally shaped by transformations in specific national contexts and social institutions (Hung, Gu, & Yim, 2007). For Chinese consumers, the macro-environment has undergone dramatic changes that differ substantially from those experienced in Western societies.

Drawing on this localized framework, the present study adopts the following generational boundaries as operationalized for the Chinese e-commerce context. Generation X, comprising consumers born between 1965 and 1980, reached their formative years during the early stages of China's transition from a centrally planned economy to a market-oriented system. Identified by Hung et al. (2007) as modern pragmatists, this cohort developed a hybrid value orientation that combined traditional pragmatism oriented toward moderate prosperity with newly stimulated desires for material goods and novelty arising from exposure to the emerging advertising industry (Egri & Ralston, 2004; Hung et al., 2007).

Millennials, comprising consumers born between 1981 and 1996, grew up during a period characterized by rapid economic growth and China's increasing integration into the global economy. Referred to by Hung et al. (2007) as global materialists, this cohort not only expanded their global outlook through the early diffusion of the Internet but also constituted the first generation raised under China's one-child policy. As the so-called little emperors, many were supported by a unique family structure in which six adults, parents and grandparents, collectively invested resources in a single child. Combined with an unprecedented wave of marketization and commercialization, these conditions fostered a level of materialism, novelty-seeking, and preference for foreign brands that exceeded that of earlier generations (Hung et al., 2007). Twenge (2023) further characterizes Millennials as a generation shaped by optimism and the rise of participatory digital culture, whose formative technological experiences differed fundamentally from both the pre-digital upbringing of Generation X and the fully mobile-native environment of Generation Z.

Generation Z, comprising consumers born between 1997 and 2012, represents a truly mobile-first generation and a cohort of e-commerce pioneers whose formative years have been fully embedded in a highly digitalized environment characterized by social media ubiquity and a mature online commercial ecosystem (Wang, 2023). Building upon this theoretical premise, the present study argues that such a high degree of familiarity with and reliance on e-commerce may lead this younger cohort to demonstrate a substantially higher level of tolerance for, and strategic utilization of, opportunistic consumer behaviors in online environments, including the bracketing strategy of purchasing multiple items with the intention of returning those that do not meet expectations. In the context of fashion specifically, Jeong and Kim (2025) demonstrated through multi-group structural equation modeling that generational cohort membership produces cohort-sensitive belief formation pathways, with Generation Z responding more strongly to technological fit and perceived

usefulness in digital fashion platforms, while Generation X prioritizes ease of use and experiential satisfaction, suggesting that the psychological mechanisms through which e-commerce attitudes are formed differ systematically across cohorts.

Theoretical Limitations and the Age-Period-Cohort (APC) Effect

Although Generational Cohort Theory (GCT) provides a powerful theoretical lens for understanding macro-level consumer behavior, the framework is not without controversy in the academic literature. Scholars have cautioned that traditional generational research often falls into the trap of overgeneralization, assuming a high degree of internal homogeneity within generational groups (Parry & Urwin, 2011).

A more fundamental methodological concern lies in the potential conflation of the Age-Period-Cohort (APC) effects. As McKercher (2023) warns in his critical examination of consumer behavior theory, many phenomena that are simplistically attributed to generational differences may in fact be misinterpretations of age-related or period-related influences. For instance, the relatively high frequency of product returns among younger consumers may simply reflect their current life-cycle stage, which is typically associated with more impulsive consumption patterns and lower disposable income, representing an age effect. At the same time, this behavior may also be shaped by a broader period effect, namely the widespread adoption of liberal return policies across contemporary e-commerce platforms.

To address the limitations of traditional generational theory, particularly its broad categorizations and lack of explanatory mechanisms at the psychological level, this study proposes an integrative approach that combines the macro-level classification of GCT with the micro-level cognitive framework of the Theory of Planned Behavior (TPB). Rather than relying solely on broad generational labels to explain opportunistic return behaviors, the present research seeks to examine whether systematic differences exist across generational cohorts in terms of attitudes, subjective norms, and perceived behavioral control when facing behaviors such as wardrobing and bracketing. In doing so, the study aims to provide more nuanced psychological evidence to explain intergenerational differences in consumer return intentions.

2.5 Integrated Conceptual Framework and Research Hypotheses

The preceding review has established that two complementary theoretical traditions address different but interconnected aspects of consumer return behavior in fashion e-commerce. The Theory of Planned Behavior provides a well-validated micro-level psychological

framework that identifies attitude, subjective norm, and perceived behavioral control as the proximal determinants of behavioral intention, and has been applied, albeit sparingly, to return-related behaviors in both Western and Chinese consumer contexts (Škapa, 2013; Das & Kunja, 2024; Serravalle et al., 2022). Generational Cohort Theory, by contrast, provides a macro-sociological framework that attributes systematic behavioral differences across age groups to the formative influence of shared historical, institutional, and technological experiences (Mannheim, 1952; Ryder, 1965; Hung et al., 2007). While each framework independently contributes to an understanding of return behavior, neither alone is sufficient to explain why consumers of different generations exhibit divergent return intentions even when controlling for situational and policy-related factors.

The integrated model proposed in this study addresses this explanatory gap by treating generational cohort membership as a macro-level moderating variable that shapes the belief structures underlying the three TPB constructs. This is theoretically justified on the grounds that the behavioral beliefs, normative beliefs, and control beliefs from which attitudes, subjective norms, and perceived behavioral control are respectively formed are themselves the product of socialization processes. Because Generational Cohort Theory holds that distinct generational cohorts undergo systematically different socialization experiences during their formative years, it follows that the strength and direction of TPB belief-intention pathways may differ predictably across cohorts in ways that can be theoretically anticipated and empirically tested. This integrative logic is consistent with the argument advanced by Conner and Armitage (1998) that the TPB's expectancy-value architecture is enriched rather than contradicted by the incorporation of stable individual-difference variables that influence belief formation.

Behavior-specific Modeling of Wardrobing and Bracketing

The two focal return behaviors, wardrobing (opportunistic post-use return) and bracketing (defensive multi-item try-and-return), occupy distinct ethical positions and are driven by different motivational logics (Phau et al., 2022; Chen et al., 2024; Xu et al., 2023). Therefore, the study estimates two separate PLS-SEM models. Hypotheses on generational differences in path coefficients are formulated as a-versions for the wardrobing model (with return intention INT_W as the dependent latent variable) and as b-versions for the bracketing model (with return intention INT_B as the dependent latent variable).

Generational Differences in the Attitude-Intention Path

Within the TPB framework, attitude toward a behavior reflects the individual's overall favorable or unfavorable evaluation of performing that behavior. In the context of planned return behaviors, the critical question is not only whether cohorts hold different attitudes (a

mean-level comparison) but whether the strength of the translation from attitude into intention varies across generations. Generational Cohort Theory predicts that the evaluative beliefs underlying attitudes are shaped by cohort-specific socialization. Moreover, the translation mechanism itself may be moderated by cohort membership: consumers who have grown up with frictionless, platform-normalized return policies (Generation Z) may exhibit a tighter coupling between “I think this is acceptable” and “I will do it” than consumers socialized in pre-digital retail environments where returning was more effortful and socially less normalized.

On this basis, the study proposes:

H1a: The positive effect of attitude toward wardrobing on the intention to engage in wardrobing ($ATT_W \rightarrow INT_W$) is significantly stronger for Generation Z than for Millennials and Generation X.

H1b: The positive effect of attitude toward bracketing on the intention to engage in bracketing ($ATT_B \rightarrow INT_B$) is significantly stronger for Generation Z than for Millennials and Generation X.

Generational Differences in Subjective Norm-Intention Path

Subjective norm refers to the perceived social pressure to perform or refrain from a behavior. The relevant normative influences include peer evaluations, social media norms, and the broader social acceptability of treating returns as routine. Generation Z, characterized by intensive social media engagement and high exposure to digital descriptive norms, is theorized to show a stronger influence of subjective norm on return intention than older cohorts, whose normative landscape is dominated by face-to-face interpersonal ties.

Thus:

H2a: The positive effect of subjective norm on the intention to engage in wardrobing ($SN \rightarrow INT_W$) is significantly stronger for Generation Z than for Millennials and Generation X.

H2b: The positive effect of subjective norm on the intention to engage in bracketing ($SN \rightarrow INT_B$) is significantly stronger for Generation Z than for Millennials and Generation X.

Generational Differences in Perceived Behavioral Control-Intention Path

Perceived behavioral control captures the individual’s perception of the ease or difficulty of performing a return. It includes both self-efficacy (digital literacy, platform familiarity) and

controllability (availability of free returns, convenient logistics). Generation Z, as digital natives, is expected to report higher perceived behavioral control. Additionally, because the absence of structural barriers makes the control belief more salient, the translation of perceived behavioral control into intention may also be stronger for Generation Z.

Hence:

H3a: The positive effect of perceived behavioral control on the intention to engage in wardrobing ($PBC \rightarrow INT_W$) is significantly stronger for Generation Z than for Millennials and Generation X.

H3b: The positive effect of perceived behavioral control on the intention to engage in bracketing ($PBC \rightarrow INT_B$) is significantly stronger for Generation Z than for Millennials and Generation X.

The Moderating Role of Sustainability Consciousness

Both Generation Z and Millennials have been identified in the literature as exhibiting higher environmental awareness than Generation X, with sustainability increasingly functioning as a criterion in fashion purchase and disposal decisions (Parment, 2013). To the extent that consumers hold strong sustainability values, the favorable evaluation of return behaviors, particularly high-volume bracketing that generates unnecessary logistical emissions and waste, may be attenuated by guilt or ecological concern. This moderating effect is hypothesized to operate on the attitude-intention link, because sustainability consciousness is conceptually closest to the moral evaluation of the behavior (attitude) rather than to perceived social pressure or perceived control.

Therefore:

H4a: Sustainability consciousness negatively moderates the relationship between attitude toward wardrobing and the intention to engage in wardrobing ($ATT_W \times SUST \rightarrow INT_W$), such that the positive $ATT_W \rightarrow INT_W$ effect is weaker among consumers with higher sustainability consciousness.

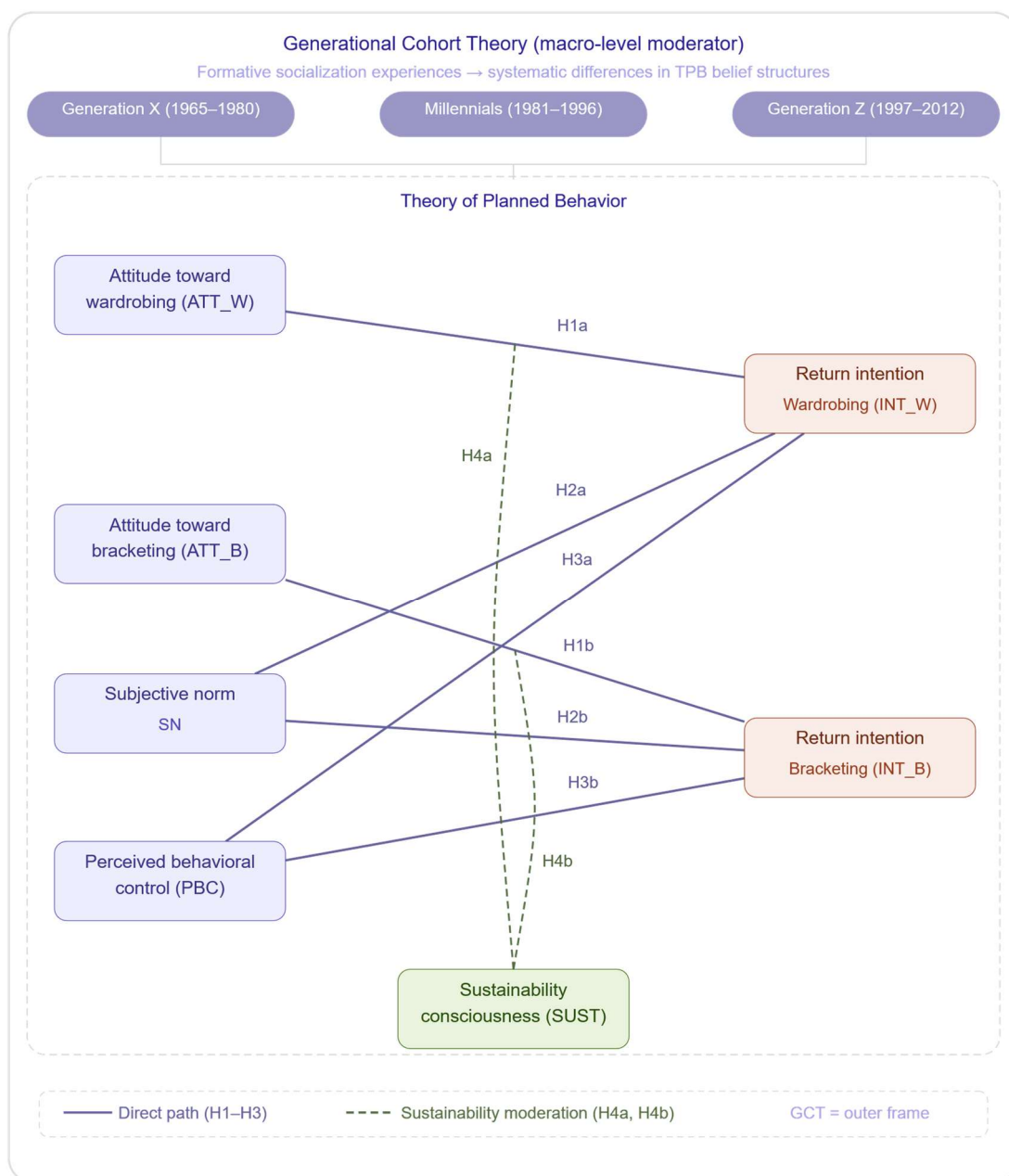
H4b: Sustainability consciousness negatively moderates the relationship between attitude toward bracketing and the intention to engage in bracketing ($ATT_B \times SUST \rightarrow INT_B$), such that the positive $ATT_B \rightarrow INT_B$ effect is weaker among consumers with higher sustainability consciousness.

Supplementary Mean-Level Comparisons (ANOVA)

In addition to the path-coefficient hypotheses, the study also examines whether the three

generations differ in the mean levels of the TPB constructs (attitude, subjective norm, perceived behavioral control) and sustainability consciousness. These construct-score differences are investigated using one-way ANOVA on standardized latent variable scores extracted from the pooled PLS-SEM measurement model. Although not cast as formal hypotheses, these analyses complement the path-coefficient tests by addressing the question: “Do the cohorts hold different attitudes, norms, and control beliefs in the first place?” This is a theoretically distinct question from whether the beliefs translate into intention with different strengths.

Figure 2.1
Integrated conceptual framework



The integrated conceptual framework (Figure 2.1) positions generational cohort membership as a macro-level moderating variable that systematically differentiates the strength of TPB belief-intention pathways. Attitude, subjective norm, and perceived behavioral control jointly predict return intention (Ajzen, 1991). Generational cohort moderates each of these paths separately for wardrobing and bracketing (H1a–H3b). The framework additionally incorporates sustainability consciousness as a construct that negatively moderates the attitude-intention relationship (H4a–H4b). This model responds directly to the research gap identified in the literature: while the existence of generational differences in return behavior frequency has been documented at the descriptive level (NRF & Happy Returns, 2024), the psychological mechanisms through which these differences operate, and whether they reside in path strengths or in construct content, have not been systematically investigated. The mixed-methods sequential explanatory design of the present study, combining PLS-SEM multi-group analysis with semi-structured interviews, is specifically designed to test the hypothesized pathways quantitatively and to illuminate the qualitative meanings consumers attach to their return-related beliefs across generational cohorts.

3 Research Methodology

3.1 Research Design

This study adopts a sequential explanatory mixed-methods design, in which a quantitative phase is executed first and followed by a qualitative phase whose primary purpose is to contextualize, explain, and deepen the interpretation of the quantitative findings. The quantitative phase, which constitutes the dominant strand of the design, employs an online survey to measure Theory of Planned Behavior constructs across three generational cohorts and tests the hypothesized inter-cohort differences through Partial Least Squares Structural Equation Modeling (PLS-SEM) with multi-group analysis. The subsequent qualitative phase employs semi-structured interviews to explore the experiential meanings, social contexts, and generational values that underlie the statistically observed patterns.

The choice of a mixed-methods approach is motivated by the nature of the research questions. RQ1 and RQ2 require the statistical generalizability and precision of quantitative measurement to establish whether TPB path coefficients differ significantly across cohorts. RQ3, which investigates the role of generational values in shaping these relationships, requires the interpretive depth and contextual sensitivity of qualitative inquiry to move beyond the structural model and illuminate the meanings consumers attach to their return-related beliefs and behaviors. The sequential explanatory logic, in which quantitative results guide the focus and sampling of the qualitative phase, ensures that the two strands are methodologically integrated rather than merely coexisting within the same study.

3.2 Research Context

The empirical focus of this study is the Chinese fashion e-commerce market, selected for three reasons. First, China represents the world's largest e-commerce market, with a highly developed mobile-first purchasing infrastructure dominated by platforms such as Taobao, JD.com, and Pinduoduo, which have normalized liberal return policies as standard competitive features. This context generates high natural variation in return behavior and high consumer familiarity with the return process, making it an analytically productive setting. Second, the three generational cohorts defined for this study, Generation Z (born 1997–2012), Millennials (born 1981–1996), and Generation X (born 1965–1980), have undergone distinctly different formative experiences in the Chinese context, shaped by the transition from planned to market economy, the one-child policy, and the successive waves

of digitalization, providing a theoretically rich basis for inter-cohort comparison (Hung et al., 2007; Wang, 2023). Third, existing return behavior research in the Chinese context is sparse relative to the market's scale. The few studies that do address Chinese consumers in this domain, notably Serravalle et al. (2022) and Phau et al. (2022), explicitly acknowledge this gap, with Serravalle et al. (2022) noting that the cultural determinants of return behavior among Chinese Gen Z consumers remain substantially underexplored compared with the extensive Western literature. This asymmetry between China's market significance and its representation in the return behavior literature represents a clear opportunity for scholarly contribution.

The product category is restricted to fashion and apparel, selected for its disproportionately high return rates, its susceptibility to wardrobing and bracketing, and the strong role of fit uncertainty that makes the online channel structurally prone to elevated return volumes. Participants are required to have made at least two online fashion or apparel purchases within the 12 months preceding the survey and to have experienced at least one product return during this period. This dual criterion ensures that participants have sufficient purchasing experience to reflect on their return-related attitudes and behaviors meaningfully, and that all respondents have direct personal experience with the return process, a prerequisite for valid self-reporting of return intention.

3.3 Quantitative Phase

Sampling Strategy

Quota sampling stratified by generational cohort is employed to ensure sufficient and balanced representation across the three target groups. A minimum of 75 valid responses per cohort is targeted, yielding a minimum total sample of 225 participants. This target is grounded in a sample size calculation following Hair et al. (2022), using the formula $n_{\min} > (z/|p_{\min}|)^2$, where the minimum path coefficient (p_{\min}) is set at 0.20, consistent with the average subjective norm-intention correlation of .34 reported in Armitage and Conner's (2001) meta-analysis of TPB studies and with Cohen's (1992) conservative medium-small effect size convention. At a significance level of 5% ($z = 2.486$), this yields a minimum required total sample of approximately 155, which the target of 225 exceeds comfortably. Given the exploratory-predictive orientation of the study, a per-cohort sample of 75 is considered appropriate; where statistical power for detecting smaller effect sizes is a concern, this will be acknowledged as a study limitation in the discussion.

Data collection proceeds through a professional online survey platform (Credamo, a professional research platform widely used in Chinese academic and market research

contexts), where quota controls are applied to ensure the required cohort distribution and to screen for the eligibility criterion of at least one online fashion purchase in the past 12 months. A screening question at the beginning of the survey confirms generational cohort membership through birth year and filters out ineligible respondents.

Survey Instrument and Measurement Scales

The survey instrument comprises six sections: a screening and demographic section, followed by five construct measurement sections corresponding to the study’s key variables. All construct items are measured on a seven-point Likert scale anchored at 1 (Strongly disagree) and 7 (Strongly agree), with the exception of behavioral frequency items which use a five-point frequency scale. The use of a seven-point scale is consistent with the TPB measurement literature and provides sufficient response variance to support PLS-SEM estimation (Ajzen, 1991).

All scales are adapted from validated sources in the prior literature. Given that the survey is administered to Chinese consumers, the instrument is developed directly in Mandarin Chinese. An English translation is subsequently prepared by the research team. A pilot test of 30 respondents is conducted prior to full-scale data collection to assess item clarity.

Table 3.1
Construct operationalization and scale sources

Construct	Abbreviation	Items (n)	Scale	Source
Attitude toward wardrobing	ATT-W	4	7-pt Likert	Škapa (2013); Phau et al. (2022)
Attitude toward bracketing	ATT-B	4	7-pt Likert	Ajzen (1991)
Subjective norm	SN	4	7-pt Likert	Ajzen (1991); Pavlou & Fygenon (2006)
Perceived behavioral control	PBC	4	7-pt Likert	Ajzen (2002); Pavlou & Fygenon (2006)
Return intention – wardrobing	INT-W	3	7-pt Likert	Ajzen (1991)
Return intention – bracketing	INT-B	3	7-pt Likert	Ajzen (1991)
Sustainability consciousness	SUST	4	7-pt Likert	Parment (2013)

Table 3.1 presents the construct operationalization and scale sources. Items are adapted to

the specific behavioral targets of wardrobing and bracketing to ensure compatibility with Ajzen's (1991) principle of correspondence, which requires that attitude, norm, and control measures reference the same behavioral target as the intention measure.

Data Analysis: PLS-SEM and Multi-Group Analysis

Quantitative data are analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), implemented in SmartPLS 4. PLS-SEM is selected over covariance-based SEM (CB-SEM) for three reasons specific to this study's design. First, the study is exploratory-predictive in orientation, rather than confirmatory, which aligns with PLS-SEM's prediction-oriented algorithm. Second, PLS-SEM is more robust to smaller sample sizes per group and is appropriate when constructs include both reflective and potentially formative measurement components. Third, PLS-SEM's Partial Least Squares Multi-Group Analysis (PLS-MGA) procedure directly supports the study's core inferential objective of comparing path coefficients across the three generational cohorts.

Because the two focal behaviors, wardrobing and bracketing, are conceptually distinct, the study estimates two separate PLS-SEM models: one with INT_W as the dependent latent variable (wardrobing model) and one with INT_B as the dependent latent variable (bracketing model). The analytical procedure follows a two-stage approach. In the first stage, the measurement model is assessed for all constructs pooled across cohorts, evaluating indicator reliability (outer loadings > 0.70), internal consistency reliability (Cronbach's alpha and composite reliability > 0.70), convergent validity (Average Variance Extracted, AVE > 0.50), and discriminant validity using the Heterotrait-Monotrait (HTMT) ratio criterion (HTMT < 0.85). Measurement invariance across cohorts is assessed using the Measurement Invariance of Composite Models (MICOM) procedure prior to multi-group comparison, to ensure that constructs are being measured equivalently across groups.

In the second stage, the structural model is estimated within each cohort group, and PLS-MGA is applied to test whether the hypothesized differences in path coefficients (H1a–H3b) reach statistical significance. A Bonferroni correction is applied to account for the three pairwise cohort comparisons ($\alpha = 0.05/3 = 0.0167$). Additionally, the moderating effect of sustainability consciousness on the attitude–intention relationship (H4a, H4b) is examined through the product indicator approach, creating an interaction term (ATT × SUST) in each model. The permutation-based PLS-MGA test is employed, as it does not assume equal group variances and is therefore appropriate for groups of potentially different composition. The minimum detectable path coefficient at the achieved sample of 75 per cohort, calculated using the formula $n > (2.486/|p_{\min}|)^2$ at the 5% significance level (Hair et al., 2022), is approximately 0.29 for individual cohort-level paths; for the overall sample of 225, path coefficients of approximately 0.17 and above are detectable. It is acknowledged that detecting

very small inter-cohort differences in path coefficients (below approximately 0.20) may be subject to reduced statistical power, which is noted as a study limitation.

3.4 Qualitative Phase

The qualitative phase employs semi-structured interviews rather than structured interviews for three reasons grounded in the study's sequential explanatory design. First, the purpose of the qualitative phase is to explain and contextualize the quantitative findings, which by definition means that the interview focus must be responsive to what is found in the survey data, a requirement for flexibility that structured interviews, with their fixed question sequence, cannot accommodate. Second, the constructs under investigation, including generational values, attitudes toward ethically ambiguous consumer practices, and perceived social norms, are complex and socially sensitive, and are better elicited through a conversational format that allows respondents to articulate nuance, qualification, and contradiction. Third, the approach is consistent with precedent in the return behavior literature: Serravalle et al. (2022), in the closest methodological parallel to the present study, employed semi-structured interviews to explore Gen Z return behavior across cultural contexts and found that the format was essential for capturing the contextual reasoning behind return decisions that survey items alone could not reveal.

Sampling and Recruitment for Interviews

A purposive sampling strategy with quota control was used to recruit interview participants from the researchers' personal networks. The final sample included 14 Chinese fashion e-commerce consumers: 4 Generation X, 5 Generation Y (Millennials), and 5 Generation Z. Interviews were conducted online via video call in Mandarin Chinese, audio-recorded with informed consent, and lasted 40 to 60 minutes. Recordings were transcribed verbatim and translated into English.

Thematic Analysis Procedure

Interview data were analyzed using reflexive thematic analysis following the framework of Braun and Clarke (2006), in a deductive-inductive mode. The deductive layer applied TPB construct categories (attitude, subjective norm, perceived behavioral control) and sustainability consciousness as a priori analytical themes, ensuring that the qualitative findings could be directly connected to the quantitative model. The inductive layer remained open to emergent themes that fell outside the TPB framework, particularly those related to generational identity, moral grammars of return practices, and the normative culture of the digital shopping environment. Coding was conducted in two rounds: a first round of initial

coding that applied descriptive labels close to the data, and a second round that grouped initial codes into candidate themes and reviewed them against the full data set for coherence and fit. No qualitative data analysis software was used; all coding was performed manually. Both researchers engaged with the material at every stage: each transcript was read and discussed together, initial codes were generated and agreed upon collaboratively, candidate themes were developed through joint analytical conversation, and all interpretations were cross-checked against the full transcript set before being finalized. Where analytical disagreements arose regarding code boundaries or theme definitions, these were resolved through iterative discussion until a shared interpretation was reached.

3.5 Ethical Considerations

Participation in both the survey and the interviews is entirely voluntary, and participants may withdraw at any time without consequence. Informed consent is obtained from all participants: survey participants provide consent by proceeding past the information screen at the beginning of the questionnaire; interview participants provide written consent prior to the recorded session. All data are anonymized at the point of analysis, with interview participants assigned numerical codes and survey respondents identified only by cohort group. All data are stored on password-protected servers provided by Lund University, in compliance with the General Data Protection Regulation (GDPR). Audio recordings and transcripts are retained only for the duration of the research and will be permanently deleted following the thesis defense and any subsequent publication. The research assistant or reviewer involved in the transcription accuracy check is bound by a confidentiality agreement. As participants are located in China and are therefore not EU data subjects, GDPR does not apply to them directly; however, as the researchers process data within Sweden, all data handling follows GDPR principles of data minimization, purpose limitation, and storage limitation. The study does not involve vulnerable populations, deception, or the collection of sensitive personal data beyond demographic information and consumer behavior self-reports.

3.6 Research Quality

The quality of the quantitative strand is evaluated through the standard psychometric criteria of the PLS-SEM framework: reliability, convergent validity, and discriminant validity of the measurement model, and the predictive relevance and effect sizes of the structural model. For the qualitative strand, quality is assessed through the criteria of credibility (achieved through member checking and thick description), transferability (supported by detailed reporting of

the research context and participant characteristics), dependability (ensured by a transparent and documented analytical procedure), and confirmability (supported by the maintenance of an audit trail linking analytical decisions to raw data). The integration of the two strands is evaluated by assessing the degree to which the qualitative themes corroborate, extend, or challenge the quantitative findings, with any discrepancies treated as analytically productive rather than as threats to validity.

4 Findings

4.1 Quantitative Results

Sample characteristics

Table 4.1

Sample demographic and shopping-channel characteristics (N = 225)

Characteristics	Frequency (n)	Percentage (%)
Generational Cohort		
Gen X	75	33.33%
Gen Y	75	33.33%
Gen Z	75	33.33%
Gender		
Male	87	38.70%
Female	138	61.30%
Education Level		
High school or below	8	3.60%
Associate's / Bachelor's degree	184	81.80%
Master's degree or above	33	14.70%
Income level (Monthly, CNY)		
<3,000	24	10.70%
3,001–8,000	86	38.20%
8,001–15,000	82	36.40%
15,001–25,000	30	13.30%
>25,000	3	1.30%
City Tier		
Tier-1 city	67	29.80%
Tier-2 city	85	37.80%
Tier-3 or below city	73	32.40%
Primary Shopping Platform		
Taobao	134	59.60%
Tmall	17	7.60%
JD.com	20	8.90%
Pinduoduo	34	15.10%
Douyin (TikTok)	18	8.00%
Other (VIPSHOP.COM)	2	0.90%

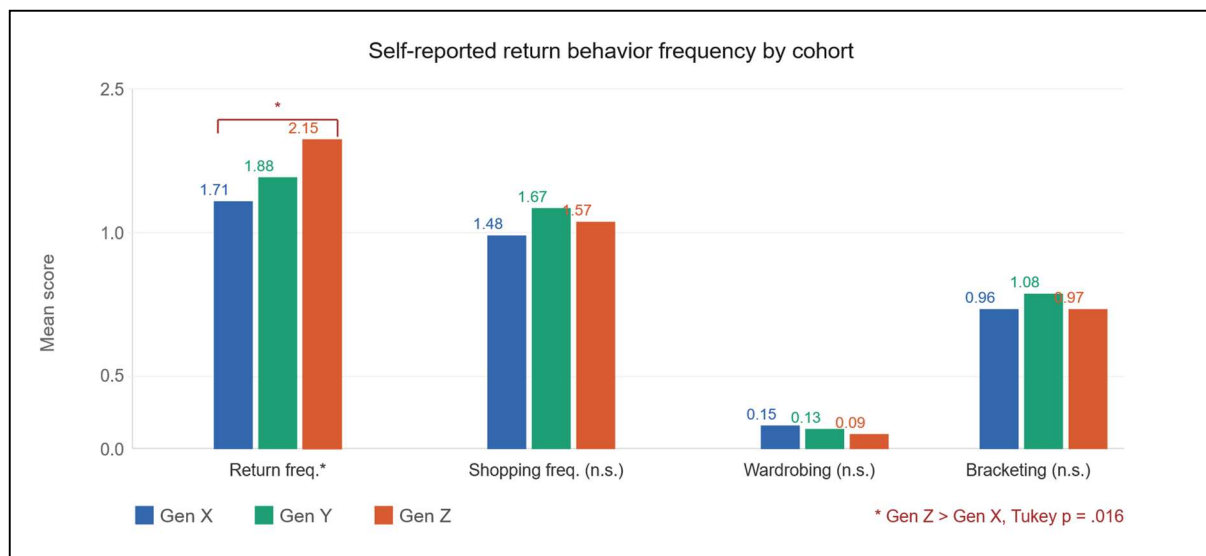
The final analytical sample comprised 225 valid Chinese fashion e-commerce consumers,

distributed equally across three generational cohorts (75 per cohort) in line with the quota-sampling design. Generation X (born 1965–1980) represented 33.3% of the sample, Generation Y / Millennials (born 1981–1996) 33.3%, and Generation Z (born 1997–2012) 33.3%. The gender distribution was 61.3% female (n = 138) and 38.7% male (n = 87), consistent with the female-skewed nature of the fashion e-commerce market in China. Educational attainment was concentrated at the associate’s / bachelor’s level (81.8%; n = 184), with a smaller subset at master’s level or above (14.7%; n = 33) and a minority reporting high-school education or below (3.6%; n = 8). Monthly personal income was most commonly in the CNY 3,001–8,000 (38.2%) and CNY 8,001–15,000 (36.4%) bands, with smaller proportions below CNY 3,000 (10.7%), in the CNY 15,001–25,000 band (13.3%), and above CNY 25,000 (1.3%). The sample was distributed across city tiers, with 29.8% from Tier-1 cities, 37.8% from Tier-2 cities, and 32.4% from Tier-3 or below. Reflecting the dominance of Alibaba-group platforms in Chinese fashion e-commerce, Taobao was reported as the primary shopping platform by 59.6% of respondents, followed by Pinduoduo (15.1%), JD.com (8.9%), Douyin (8.0%), Tmall (7.6%), and Vipshop (0.9%); Xiaohongshu (RED) was not selected as a primary platform by any respondent, though several mentioned it during interviews as a referral channel. Table 4.1 summarizes these characteristics.

Cohort differences in self-reported return behavior (RQ1)

Figure 4.1

Self-reported return behavior frequency by cohort



Note. Bars represent cohort means (Gen X, Gen Y, Gen Z; n = 75 per cohort). Scale ranges: return frequency (0–4), online shopping frequency (0–3), wardrobing frequency (0–4), bracketing frequency (0–3). * indicates significant cohort difference: $F(2, 222) = 3.92, p = .020$; post-hoc Tukey HSD: Gen Z > Gen X, $p = .016$. All other comparisons non-significant.

Table 4.2*Self-reported online shopping and return behavior by cohort (M ± SD)*

Behavior (scale range)	Gen X (n=75)	Gen Y (n=75)	Gen Z (n=75)	F (2, 222)	p	Post-hoc (Tukey HSD)
Online shopping frequency (0–3)	1.48 (0.92)	1.67 (0.88)	1.57 (0.89)	0.82	0.44	–
Return frequency (past 12 months) (0–4)	1.71 (0.88)	1.88 (0.93)	2.15 (1.09)	3.92	0.02	Z > X*, p=0.016<0.05
Wardrobing frequency (0–2)	0.15 (0.43)	0.13 (0.38)	0.09 (0.37)	0.37	0.69	–
Bracketing frequency (0–3)	0.96 (0.91)	1.08 (0.83)	0.97 (0.80)	0.45	0.64	–

Note. Data are presented as mean (standard deviation). Scale ranges: online shopping frequency (0=less than once a month, 1=1–2 times, 2=3–4 times, 3=more than 4 times per month); return frequency (0=0 times, 1=1–2 times, 2=3–5 times, 3=6–10 times, 4=more than 10 times); wardrobing and bracketing frequencies (0=never, 1=rarely, 2=sometimes, 3=often, 4=always – but observed max was 2 for wardrobing and 3 for bracketing). Post-hoc comparisons were performed using Tukey’s HSD test ($\alpha=0.05$).

A one-way ANOVA with generational cohort as the independent variable was conducted on the four self-reported behavioral indicators: online shopping frequency, return frequency in the past 12 months, wardrobing frequency, and bracketing frequency.

Figure 4.1 visualizes the cohort-level means across all four behavioral indicators. Results are reported in Table 4.2. Two patterns emerge from Table 4.2.

First, online shopping frequency did not differ significantly across cohorts ($F(2, 222) = 0.82$, $p = .443$), suggesting that the three generations are broadly comparable in their level of engagement with online fashion retail, an important precondition for the validity of any subsequent cohort comparison.

Second, the total return frequency over the prior 12 months did differ significantly, with Generation Z reporting more returns than Generation X ($M_Z = 2.15$ vs. $M_X = 1.71$; Tukey $p = .016$) and Generation Y occupying an intermediate position not significantly different from either neighbor ($M_Y = 1.88$). The cohort comparison directly addresses RQ1 at the behavior-frequency level: Generation Z does return more, but the difference is on the order of moving from an average of “1–2 to 3–5 returns per year” rather than the dramatic two-fold gap suggested by some industry reports.

Third, the self-reported frequency of the two focal behaviors, wardrobing and bracketing, did

not differ significantly across cohorts. Mean wardrobing scores were uniformly low (0.09–0.15 on a 0–4 scale) and clustered at the “never / rarely” end of the response distribution, while bracketing scores were moderate (0.96–1.08) and similar across cohorts. Two observations on these null results are warranted. The low wardrobing means and the failure of any cohort to exceed a sample maximum of 2 are consistent with social-desirability bias: wardrobing, as an ethically marked behavior, is plausibly underreported regardless of generation, and also with the conceptual point that wardrobing is by design an occasional rather than habitual practice. The bracketing means, by contrast, indicate that this defensive try-and-return strategy is a familiar practice across all three cohorts in Chinese fashion e-commerce, with no cohort holding a meaningful frequency advantage despite Generation Z’s higher total return rate. This pattern hints that Generation Z’s elevated return frequency is being driven by a broader repertoire of return triggers (including unplanned, situational, and emotional returns) rather than by a higher rate of the two planned behaviors examined in the structural model, a hypothesis that will be revisited in the qualitative section.

Measurement model assessment

All outer loadings of the reflective indicators exceeded the recommended threshold of 0.70 in both models, with the exception of PBC_3 (0.659 in the wardrobing model; 0.696 in the bracketing model). Because Cronbach’s α , composite reliability, and AVE for the PBC construct nonetheless exceeded their respective thresholds, and because PBC_3 captures conceptually important content related to the perceived effort cost of returns, this indicator was retained. All other indicator loadings ranged from 0.718 to 0.955, indicating strong indicator reliability across the seven reflective constructs. Cronbach’s α ranged from 0.736 (PBC) to 0.946 (INT_B), composite reliability (ρ_c) from 0.823 to 0.965, and average variance extracted (AVE) from 0.541 (PBC) to 0.902 (INT_B), all comfortably above the conventional thresholds of 0.70, 0.70, and 0.50 respectively.

Variance inflation factors (VIF) for all indicators were below the recommended ceiling of 5.0, with the highest at 5.186 (INT_B_3) approaching but not violating the threshold, a pattern that is acceptable given the high content overlap of the three INT_B items, all of which measure stated future intention to bracket. The full measurement-model statistics are reported in Table 4.3.

Table 4.3*Measurement-model assessment for the wardrobing and bracketing PLS-SEM models*

Model	Construct	Cronbach's α	Composite reliability (rho_c) (CR)	Average variance extracted (AVE)	Item	Outer loadings	VIF
Wardrobing	Attitude - Wardrobing (ATT_W)	0.848	0.898	0.687	ATT_W_1	0.877	2.339
					ATT_W_2	0.792	1.731
					ATT_W_3	0.813	1.800
					ATT_W_4	0.831	1.922
	Subjective Norm (SN)	0.920	0.944	0.808	SN_1	0.915	3.924
					SN_2	0.897	3.454
					SN_3	0.875	2.599
					SN_4	0.907	3.253
	Perceived Behavioral Control (PBC)	0.736	0.825	0.542	PBC_1	0.831	1.349
					PBC_2	0.726	1.472
					PBC_3	0.659	1.450
					PBC_4	0.718	1.317
	Return Intention - Wardrobing (INT_W)	0.854	0.911	0.774	INT_W_1	0.890	2.300
					INT_W_2	0.879	2.140
					INT_W_3	0.871	1.975
	Sustainability Consciousness (SUST)	0.921	0.940	0.796	SUST_1	0.889	3.276
SUST_2					0.896	3.134	
SUST_3					0.924	2.577	
SUST_4					0.860	3.318	
Bracketing	Attitude - Bracketing (ATT_B)	0.944	0.959	0.855	ATT_B_1	0.938	4.726
					ATT_B_2	0.922	3.846
					ATT_B_3	0.925	4.132
					ATT_B_4	0.915	3.609
	Subjective Norm (SN)	0.920	0.944	0.807	SN_1	0.913	3.924
					SN_2	0.897	3.454
					SN_3	0.873	2.599
					SN_4	0.911	3.253
	Perceived Behavioral Control (PBC)	0.736	0.823	0.541	PBC_1	0.856	1.349
					PBC_2	0.719	1.472
					PBC_3	0.696	1.450
					PBC_4	0.655	1.317
	Return Intention - Bracketing (INT_B)	0.946	0.965	0.902	INT_B_1	0.947	4.530
					INT_B_2	0.948	4.459
					INT_B_3	0.955	5.186
	Sustainability Consciousness (SUST)	0.921	0.944	0.809	SUST_1	0.909	3.276
SUST_2					0.906	3.134	
SUST_3					0.874	2.577	
SUST_4					0.908	3.318	

Discriminant validity was assessed using the Heterotrait–Monotrait (HTMT) ratio (Henseler, Ringle, & Sarstedt, 2015), with values reported in Table 4.4.

Table 4.4
Discriminant validity (HTMT) for the wardrobing and bracketing models

Wardrobing model	ATT_W	SN	PBC	INT_W	SUST
ATT_W					
SN	0.285				
PBC	0.099	0.496			
INT_W	0.915	0.268	0.137		
SUST	0.222	0.434	0.136	0.210	
Bracketing model	ATT_B	SN	PBC	INT_B	SUST
ATT_B					
SN	0.719				
PBC	0.391	0.496			
INT_B	0.966	0.728	0.390		
SUST	0.413	0.434	0.136	0.416	

Note. Red values exceed the conservative 0.85 threshold. See discussion of attitude–intention collinearity in Chapter 5.

In the wardrobing model, all HTMT values were below the conservative threshold of 0.85 with one exception: $HTMT(ATT_W, INT_W) = 0.915$, which exceeds 0.85 but falls below the more liberal 0.90 threshold by only a narrow margin. The high HTMT between attitude and intention to engage in wardrobing is theoretically expected. ATT and INT are by Ajzen’s (1991) construction conceptually adjacent, and in behavioral domains where the behavior is highly attitudinally driven (such as opportunistic returning), discriminant validity tends to be tighter. The bracketing model showed a more pronounced version of the same pattern: $HTMT(ATT_B, INT_B) = 0.966$ exceeded even the most liberal threshold, and $HTMT(SN, INT_B) = 0.728$ was elevated, though still within accepted bounds. The very high HTMT between attitude toward bracketing and intention to bracket is interpreted primarily as substantive evidence that in the Chinese fashion e-commerce context, attitude is so close to a self-reported intention to bracket as to render the two constructs near-collinear, though a measurement explanation cannot be fully excluded on survey data alone. Theoretical implications of this collinearity are discussed in Chapter 5.

Model fit statistics indicated acceptable fit for both models: SRMR was 0.062 for the wardrobing model and 0.058 for the bracketing model, both below the 0.08 threshold for acceptable fit in PLS-SEM (Henseler et al., 2014). NFI values were 0.840 (wardrobing) and 0.886 (bracketing), broadly consistent with model adequacy.

Structural model results

Path coefficients for the pooled-sample structural model, with their bootstrapped t-statistics and 95% percentile confidence intervals, are reported in Table 4.5.

Table 4.5
Structural model results (pooled sample, N = 225)

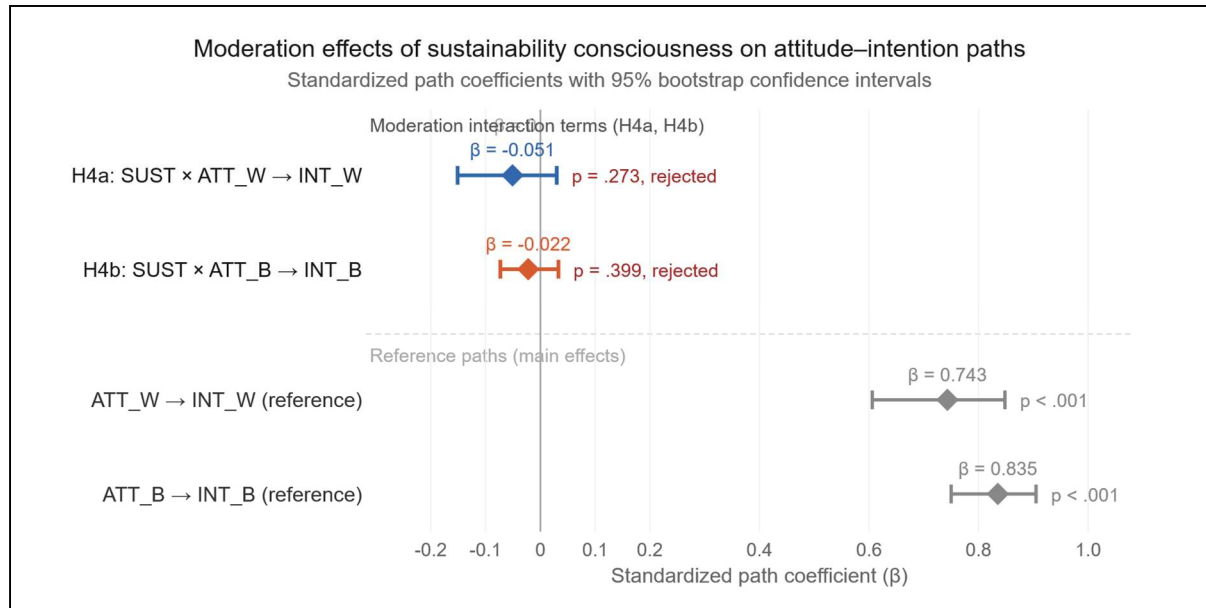
Hypothesis	Structural path	β	t	p	95% CI LL	95% CI UL	Result
H4a	SUST × ATT_W → INT_W	-0.051	1.097	0.273	-0.151	0.030	Rejected
	ATT_W → INT_W	0.743	12.312	0.000	0.606	0.848	Supported
	SN → INT_W	0.019	0.432	0.666	-0.074	0.101	Not supported
	PBC → INT_W	0.043	0.932	0.352	-0.041	0.141	Not supported
	SUST → INT_W	-0.028	0.612	0.541	-0.126	0.052	Not supported
H4b	SUST × ATT_B → INT_B	-0.022	0.844	0.399	-0.073	0.033	Rejected
	ATT_B → INT_B	0.835	21.228	0.000	0.750	0.905	Supported
	SN → INT_B	0.115	2.199	0.028	0.019	0.221	Supported
	PBC → INT_B	0.007	0.260	0.795	-0.043	0.064	Not supported
	SUST → INT_B	-0.015	0.546	0.585	-0.070	0.035	Not supported

Note. β = standardized path coefficient; CI = bootstrap 95% percentile confidence interval (5,000 resamples).

Attitude exerted a strong, positive, and statistically significant effect on intention in both models: $\beta(\text{ATT_W} \rightarrow \text{INT_W}) = 0.743$ ($t = 12.31$, $p < .001$) and $\beta(\text{ATT_B} \rightarrow \text{INT_B}) = 0.835$ ($t = 21.23$, $p < .001$). The magnitude of these effects, when read alongside the f^2 statistics ($f^2 = 1.205$ for ATT_W and $f^2 = 1.990$ for ATT_B), indicates that attitude is by far the dominant predictor of intention in both behaviors, with very large effect sizes that exceed Cohen's (1988) conventions by an order of magnitude. Subjective norm exerted a small but statistically significant effect on the intention to bracket ($\beta = 0.115$, $t = 2.20$, $p = .028$) but not on the intention to wardrobe ($\beta = 0.019$, $p = .666$). PBC was not significant in either model ($p = .352$ and $p = .795$). Sustainability consciousness exerted no main effect on intention in either model ($p = .541$ and $p = .585$), and its hypothesized moderating effect on the attitude → intention path was non-significant for both wardrobing ($\beta = -0.051$, $t = 1.10$, $p = .273$) and bracketing ($\beta = -0.022$, $t = 0.84$, $p = .399$). H4a and H4b were therefore rejected on the basis of the pooled PLS-SEM. Figure 4.2 illustrates the 95% confidence intervals for both interaction terms alongside the main attitude–intention paths; in both cases the intervals span zero, confirming the absence of a reliable moderating effect. The pooled model explained 61.7% of the variance in wardrobing intention and 84.3% of the variance in bracketing intention, with Stone-Geisser Q^2 statistics of 0.594 and 0.837 respectively, indicating strong predictive relevance.

Figure 4.2

Moderation effects of sustainability consciousness on attitude–intention paths (H4a, H4b)



Note. Points represent standardized path coefficients (β); horizontal lines represent 95% bootstrap percentile confidence intervals (5,000 resamples). The vertical reference line marks $\beta = 0$. Lower panel shows main attitude–intention paths for reference. H4a: $\beta = -0.051$, 95% CI $[-0.151, 0.030]$, $p = .273$; H4b: $\beta = -0.022$, 95% CI $[-0.073, 0.033]$, $p = .399$. Both hypotheses rejected.

Measurement invariance assessment (MICOM)

Prior to multi-group analysis, the Measurement Invariance of Composite Models (MICOM) procedure with 5,000 permutations was conducted for each pairwise cohort comparison (X vs. Y, X vs. Z, Y vs. Z) within each structural model. Step 1 (configural invariance) holds by design because the same indicators and algorithmic settings are applied to all groups. Step 2 (compositional invariance) was assessed by examining whether the original correlation between the composite scores of each group exceeded the 5% quantile of the permutation distribution and whether the permutation p-value exceeded 0.05. Results for all 30 construct-by-comparison combinations are reported in Table 4.6.

Compositional invariance was established in 29 out of 30 construct-by-comparison tests. The single exception was SN in the wardrobing model for the X vs. Z comparison (permutation $p = 0.019$, original correlation 0.984 below the 5% quantile of 0.990). Item-level inspection of outer loadings identified SN_1 (“Most people important to me consider returning online fashion purchases to be acceptable”) as the source: its loading on the SN composite was 0.946 for Generation X but 0.814 for Generation Z, a difference of 0.132 (permutation $p = 0.006$). The remaining three SN items (SN_2 through SN_4) showed loading differences within ± 0.077 and non-significant permutation p-values. Substantively, this pattern indicates that the item referring to “people important to me”, a phrasing oriented toward injunctive

normative referents, anchors more centrally on the SN construct for Generation X than for Generation Z, whose normative landscape is shaped more strongly by digital descriptive norms (what peers actually do online, observed via social media) than by injunctive judgments of close referents. The qualitative findings reported in Section 4.2 directly substantiate this interpretation.

Table 4.6

MICOM step 2 (compositional invariance) – permutation test

Comparison	Model	Construct	Original correlation	5.0%	Permutation p value	Result
X vs Y	Wardrobing	ATT_W	0.999	0.996	0.679	Accepted
		INT_W	0.999	0.997	0.188	Accepted
		PBC	0.865	0.160	0.725	Accepted
		SN	0.998	0.995	0.429	Accepted
		SUST	0.906	0.438	0.208	Accepted
	Bracketing	ATT_B	1.000	1.000	0.190	Accepted
		INT_B	1.000	1.000	0.997	Accepted
		PBC	0.970	0.790	0.678	Accepted
		SN	1.000	0.999	0.697	Accepted
		SUST	0.997	0.991	0.426	Accepted
X vs Z	Wardrobing	ATT_W	1.000	0.997	0.987	Accepted
		INT_W	1.000	0.999	0.988	Accepted
		PBC	0.696	0.284	0.287	Accepted
		SN	0.984	0.990	0.019	Rejected
		SUST	0.997	0.803	0.727	Accepted
	Bracketing	ATT_B	1.000	1.000	0.773	Accepted
		INT_B	1.000	1.000	0.874	Accepted
		PBC	0.966	0.843	0.442	Accepted
		SN	1.000	0.999	0.684	Accepted
		SUST	0.999	0.997	0.659	Accepted
Y vs Z	Wardrobing	ATT_W	1.000	0.996	0.824	Accepted
		INT_W	0.999	0.997	0.249	Accepted
		PBC	0.895	0.010	0.893	Accepted
		SN	0.985	0.607	0.644	Accepted
		SUST	0.915	0.503	0.266	Accepted
	Bracketing	ATT_B	1.000	1.000	0.236	Accepted
		INT_B	1.000	1.000	0.927	Accepted
		PBC	0.982	0.932	0.430	Accepted
		SN	1.000	0.999	0.756	Accepted
		SUST	0.999	0.995	0.683	Accepted

In line with the reporting requirement that compositional invariance must hold before path coefficients can be meaningfully compared (Henseler et al., 2016), the SN → INT_W path coefficient is not compared between Generation X and Generation Z in the multi-group analysis. The test of H2a in the SmartPLS MGA is therefore based only on the X vs. Y and Y

vs. Z comparisons; this constraint is reflected in Table 4.7 and revisited substantively in Chapter 5.

Multi-group analysis (RQ2, H1a–H3b)

The PLS-MGA permutation procedure with 5,000 resamples was conducted to test the six path-coefficient hypotheses. To control the family-wise Type I error rate across the three pairwise comparisons (X vs. Y, X vs. Z, Y vs. Z) for each hypothesis, a Bonferroni correction was applied: a difference was considered statistically significant only if its two-tailed permutation p-value fell below $\alpha = 0.05 / 3 = 0.0167$. Results are reported in Table 4.7.

Table 4.7

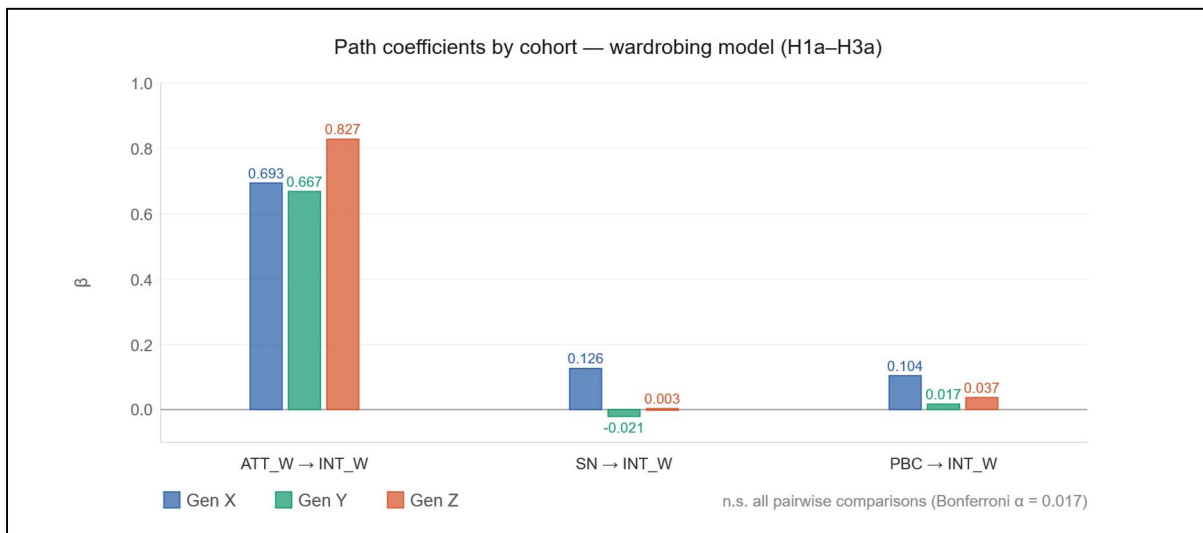
PLS-MGA results — pairwise comparison of path coefficients across cohorts

Path	Comparison	β (Gen X)	β (Gen Y)	β (Gen Z)	β diff	2-tailed p value	Bonferroni-corrected $\alpha = 0.0167$	Result
ATT_W → INT_W (H1a)	X vs Y	0.693	0.667	–	0.026	0.912	n.s.	Rejected
	X vs Z	0.693	–	0.827	-0.134	0.351	n.s.	
	Y vs Z	–	0.667	0.827	-0.160	0.350	n.s.	
SN → INT_W (H2a)	X vs Y	0.126	-0.021	–	0.147	0.271	n.s.	Rejected
	X vs Z	–	–	–	–	–	–	
	Y vs Z	–	-0.021	0.003	-0.024	0.840	n.s.	
PBC → INT_W (H3a)	X vs Y	0.104	0.017	–	0.087	0.652	n.s.	Rejected
	X vs Z	0.104	–	0.037	0.067	0.473	n.s.	
	Y vs Z	–	0.017	0.037	-0.020	0.991	n.s.	
ATT_B → INT_B (H1b)	X vs Y	0.877	0.790	–	0.087	0.340	n.s.	Rejected
	X vs Z	0.877	–	0.836	0.041	0.726	n.s.	
	Y vs Z	–	0.790	0.836	-0.046	0.647	n.s.	
SN → INT_B (H2b)	X vs Y	0.085	0.216	–	-0.131	0.268	n.s.	Rejected
	X vs Z	0.085	–	0.032	0.053	0.655	n.s.	
	Y vs Z	–	0.216	0.032	0.184	0.182	n.s.	
PBC → INT_B (H3b)	X vs Y	-0.027	0.015	–	-0.042	0.607	n.s.	Rejected
	X vs Z	-0.027	–	0.025	-0.053	0.465	n.s.	
	Y vs Z	–	0.015	0.025	-0.010	0.893	n.s.	

None of the six hypothesized cohort differences in path coefficients reached statistical significance at the Bonferroni-corrected threshold; nor did any reach significance even at the uncorrected $\alpha = 0.05$ level. H1a, H1b, H2a, H2b, H3a, and H3b were therefore rejected. Despite this uniform null finding at the level of statistical significance, two descriptive observations from the path coefficients themselves warrant comment in the discussion: first, the directional pattern for ATT → INT ($\beta(X) < \beta(Z)$ in the wardrobing model: $0.693 < 0.827$, $\Delta\beta = -0.134$; and $\beta(X) > \beta(Z)$ in the bracketing model: $0.877 > 0.836$, $\Delta\beta = 0.041$) is opposite for the two behaviors, contrary to the directionally uniform expectation that Generation Z would

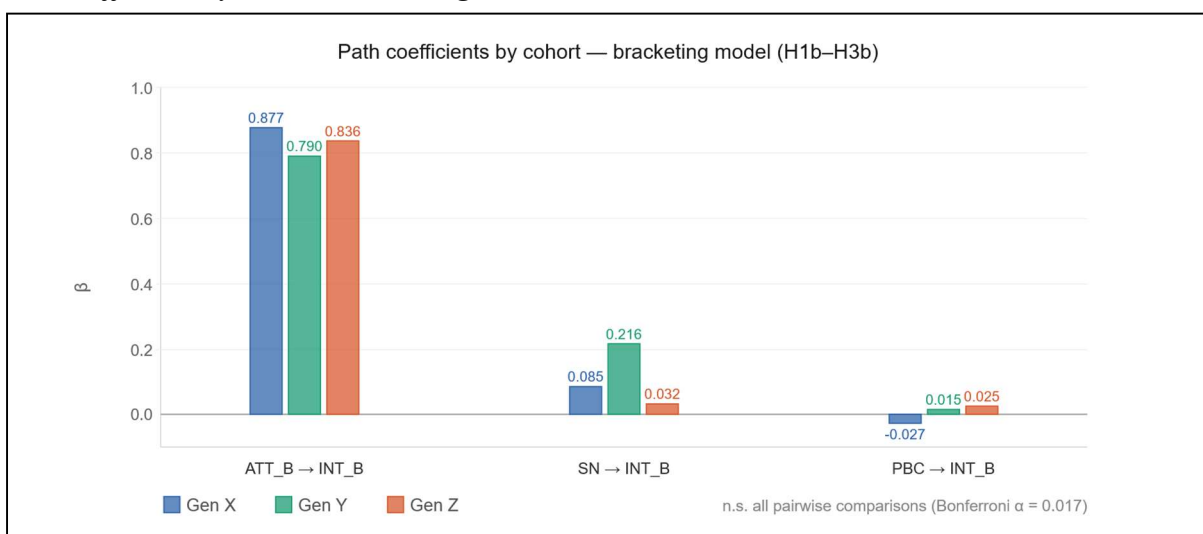
show stronger attitude–intention links for both; and second, the SN → INT_W coefficient was numerically positive for Generation X ($\beta = 0.126$) and near zero or slightly negative for Generation Y ($\beta = -0.021$) and Generation Z ($\beta = 0.003$), again contrary to the hypothesized monotonic generational gradient. These directional patterns, although not statistically significant, will be interpreted alongside the qualitative findings in Chapter 5.

Figure 4.3
Path coefficients by cohort — wardrobing model (H1a–H3a)



Note. Bars represent standardized path coefficients (β) estimated within each cohort subsample ($n = 75$ per cohort) using PLS-SEM. The horizontal line marks $\beta = 0$. None of the pairwise cohort differences reached significance at the Bonferroni-corrected threshold ($\alpha = 0.017$). H1a, H2a, and H3a all rejected.

Figure 4.4
Path coefficients by cohort — bracketing model (H1b–H3b)



Note. Bars represent standardized path coefficients (β) estimated within each cohort subsample ($n = 75$ per cohort) using PLS-SEM. The horizontal line marks $\beta = 0$. None of the pairwise cohort

differences reached significance at the Bonferroni-corrected threshold ($\alpha = 0.017$). H1b, H2b, and H3b all rejected.

Figures 4.3 and 4.4 display the within-cohort path coefficients for the wardrobing and bracketing models respectively.

Cohort differences in latent construct scores (ANOVA)

To complement the path-coefficient analysis, one-way ANOVAs with cohort as the factor were conducted on the standardized latent variable scores ($M \approx 0$, $SD \approx 1$) extracted from the pooled PLS-SEM measurement model. This analysis tests whether the cohorts hold the constructs at different mean levels, rather than whether the constructs operate differently within the cohorts. Results are reported in Table 4.8.

Of the seven constructs, only sustainability consciousness showed a statistically significant cohort effect ($F(2, 222) = 3.34$, $p = .037$), with Generation X scoring significantly higher than Generation Z on the Tukey HSD post-hoc ($M_X = 0.21$ vs. $M_Z = -0.21$; $p = .028$) and Generation Y occupying a near-zero intermediate position. Subjective norm reached marginal significance ($p = .056$), driven by Generation Z's elevated mean ($M_Z = 0.23$) relative to the older cohorts ($M_X = -0.11$, $M_Y = -0.12$). All other constructs, including attitude toward wardrobing, attitude toward bracketing, perceived behavioral control, intention to wardrobe, and intention to bracket, showed no significant cohort differences in mean level.

Table 4.8

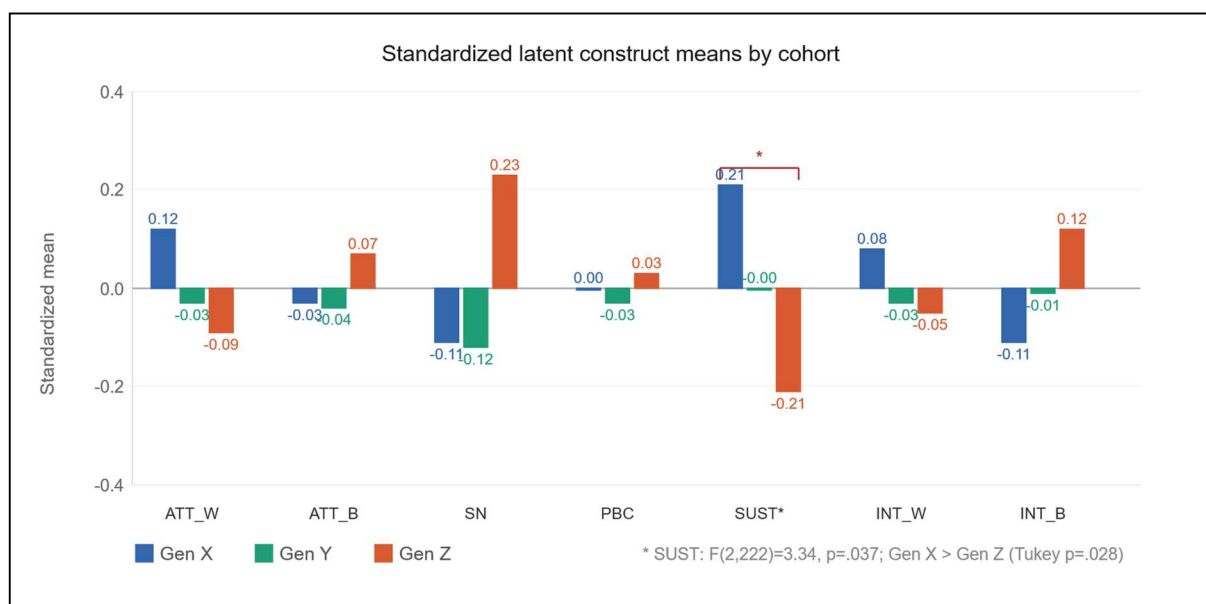
One-way ANOVA on standardized latent variable scores by cohort ($M \pm SD$)

Construct	Gen X (n=75)	Gen Y (n=75)	Gen Z (n=75)	F (2, 222)	p	Post-hoc (Tukey)
ATT_W	0.12 (1.10)	-0.03 (0.89)	-0.09 (1.01)	0.87	.422	–
ATT_B	-0.03 (1.04)	-0.04 (0.96)	0.07 (1.02)	0.26	.770	–
SN	-0.11 (1.04)	-0.12 (0.97)	0.23 (0.96)	2.92	.056	–
PBC	0.00 (0.84)	-0.03 (0.95)	0.03 (1.19)	0.08	.919	–
SUST	0.21 (0.97)	-0.00 (0.85)	-0.21 (1.13)	3.34	.037	X > Z*, p=0.028<0.05
INT_W	0.08 (1.02)	-0.03 (0.90)	-0.05 (1.09)	0.40	.668	–
INT_B	-0.11 (1.08)	-0.01 (0.92)	0.12 (1.00)	1.04	.354	–

The sustainability finding is theoretically consequential and runs counter to the dominant Western literature expectation that Generation Z is the most environmentally conscious cohort (Parment, 2013). In the Chinese fashion e-commerce context studied here, Generation X reports higher sustainability consciousness than Generation Z, by approximately 0.42 standardized units. Three interpretations are possible: (i) the result reflects a thrift-based, anti-waste orientation in Generation X that is captured by the SUST items but is conceptually

distinct from a contemporary Western “climate-conscious consumer” identity; (ii) the result reflects Generation Z’s deeper integration into the affordance structure of e-commerce, which routinizes returning as normal and decouples environmental considerations from individual decisions; or (iii) both mechanisms operate simultaneously. The qualitative findings reported in Section 4.2 favor interpretation (i) and (iii) jointly, with Generation X’s responses showing a pronounced frugality and item-cherishing register (rooted in traditional values of not wasting) that is theoretically distinct from younger cohort environmental discourse. Figure 4.5 visualizes these construct-level means, with the SUST gradient standing out as the only clearly differentiated pattern across cohorts.

Figure 4.5
Standardized latent construct means by cohort



Note. Bars represent standardized latent variable scores ($M \approx 0$, $SD \approx 1$) extracted from the pooled PLS-SEM measurement model ($n = 75$ per cohort). The horizontal line marks the grand mean of zero. * indicates a significant cohort effect: $F(2, 222) = 3.34$, $p = .037$; post-hoc Tukey HSD: Gen X > Gen Z, $p = .028$. All other constructs non-significant ($p > .05$).

4.2 Qualitative Findings

The qualitative phase complemented the structural model results by exploring how members of each cohort reason about the ethical, normative, and operational dimensions of online fashion returns, with the aim of explaining the largely null path-coefficient differences observed in the MGA while contextualizing the two findings that did reach statistical significance: Generation Z’s higher overall return frequency and Generation X’s higher sustainability consciousness score.

Qualitative sample and analytical procedure

Table 4.9 reports the interview sample profile.

Table 4.9

Interview participant profile and cohort distribution

Participant	Cohort	Age	Frequently used platforms	Online shopping frequency / shopping context
X1	Gen X	48	Pinduoduo	Mainly buys clothes and fruit online; described Pinduoduo as the main platform used.
X2	Gen X	53	Pinduoduo, Douyin, Taobao, JD.com	Uses multiple mainstream Chinese platforms; online purchases mainly depend on need.
X3	Gen X	56	Douyin, Taobao, JD.com, Pinduoduo	Uses several major platforms; no fixed shopping frequency was specified.
X4	Gen X	49	Vipshop, JD.com, Pinduoduo	Uses Vipshop for clothes and cosmetics, JD.com for fresh products, and Pinduoduo for small items.
Y1	Gen Y	38	Douyin, JD.com	Shops approximately every week.
Y2	Gen Y	35	JD.com	Shops relatively frequently, approximately two to three times per week.
Y3	Gen Y	36	Vipshop	Mainly buys clothes seasonally, such as spring, summer, and winter clothing.
Y4	Gen Y	30	Vipshop, Taobao	Buys clothing approximately one to two times per month.
Y5	Gen Y	33	JD.com, Taobao, Vipshop	Shopping frequency depends on actual need.
Z1	Gen Z	24	Taobao	Buys fashion products approximately three to four times per month.
Z2	Gen Z	24	Pinduoduo, Taobao, JD.com	Has online shopping experience across major platforms; often conducts pre-purchase research.
Z3	Gen Z	23	Douyin, Taobao, JD.com	Shops irregularly, usually when there is a specific need or when products are encountered through platform browsing or livestreaming.
Z4	Gen Z	24	Taobao, Xianyu	Mainly uses Taobao; occasionally uses Xianyu for discontinued or unavailable items. Domestic fashion purchases were more frequent during undergraduate study.
Z5	Gen Z	24	Taobao, Pinduoduo	Shops approximately six to seven times per month when in China.

The qualitative phase comprised 14 in-depth interviews with Chinese fashion e-commerce consumers, sampled purposively from 3 different generations. The sample included four Generation X participants (X1–X4, aged 48–56), five Generation Y / Millennial participants (Y1–Y5, aged 30–38), and five Generation Z participants (Z1–Z5, aged 23–24). All interviews were conducted in Mandarin Chinese, audio-recorded with informed consent, transcribed verbatim, and analyzed thematically. The interview protocol covered eight thematic blocks: preferred shopping platforms and frequency, general return experience, attitudes toward

wardrobing, attitudes toward bracketing, subjective norms (digital and interpersonal), perceived behavioral control (platform support and friction), sustainability consciousness, and generational comparisons. Pseudonymous identifiers preserved cohort affiliation while protecting confidentiality.

A deductive–inductive coding strategy was applied. In the deductive layer, the three TPB constructs, namely attitude (ATT), subjective norm (SN), and perceived behavioral control (PBC), together with sustainability consciousness (SUST), served as a priori parent nodes.

Table 4.10 summarizes the resulting code structure.

Table 4.10

Code structure: parent nodes, sub-nodes, and analytical focus

Parent node	Sub-node	Analytical focus
ATT: moral evaluation of return behaviors	Wardrobing	How interviewees evaluate post-use returns; responsibility shifting, rule-exploitation vs. defensive justice, restraint motivated by empathy for labour or aversion to waste.
	Bracketing	How interviewees understand try-and-return shopping; trial-cost transfer, compensating for online information gaps, “precision consumption”.
	Emotion / other-driven returns	Returns triggered by personal mood, taste change, or buyer’s remorse outside the wardrobing/bracketing categories.
SN: subjective norm	Macro-digital norms	How platform algorithms, social media, and online consumption culture shape the social acceptability of returns; digital norm internalization, de-moralization, visibility concerns.
	Micro-interpersonal ties	How parents, children, friends, couriers, neighbors influence return judgement; shame, family ethics, avoidance of household moral commentary.
PBC: perceived behavioral control	Platform policy support	How 7-day no-reason returns, return-shipping insurance, instant refunds, and door-to-door pickup raise the felt controllability of returning.
	Real-world friction	How customer-service communication, refund timing, no-elevator situations, courier handoff, and seller trust constitute returning barriers.
	Internal control / prevention	How consumers reduce return uncertainty by knowing their own size, pre-consulting customer service, and pre-purchase research.
SUST: sustainability consciousness	Failure of environmental concern	Why environmental beliefs are overridden in concrete return decisions by personal interest, convenience, and individual need.
	Responsibility shifting / neutralization	How consumers reattribute the environmental cost of returning to retailers, platforms, or supply-chain design.
	Thrift-based “don’t-waste”	How frugality, item-cherishing, and waste-avoidance traditions restrain returns in some respondents.

Within each parent node, inductive open coding identified sub-themes that emerged from the data: under ATT, three sub-nodes (wardrobing, bracketing, and emotional or other-driven return evaluation) captured the differentiated moral logic consumers applied to different return types; under SN, two sub-nodes distinguished macro-digital norms (platform algorithms, social media, return-record visibility) from micro-interpersonal ties (parents, children, friends, delivery couriers); under PBC, three sub-nodes captured platform-policy support, real-world logistics friction, and consumers' own pre-purchase and internal control strategies; and under sustainability consciousness, three sub-nodes captured failure of environmental concern, responsibility shifting or neutralization, and a thrift-based "don't-waste" value. The overall coding path can be summarized as: TPB-based a priori nodes, followed by open coding, then theme refinement, and finally cross-cohort comparison.

Coding framework and theme development

Building on the deductive–inductive coding process described in last section, the analysis converged on four core analytical themes corresponding to the four parent nodes, namely attitude (ATT), subjective norm (SN), perceived behavioral control (PBC), and sustainability consciousness (SUST), with each theme being further refined into the cohort-comparable analytical content reported in the next several sections.

The ATT theme focuses on how consumers judge the legitimacy of return behaviors. Within this theme, wardrobing-related reasoning predominantly invoked codes related to "taking advantage", responsibility shifting, rule exploitation, and moral self-restraint, whereas bracketing-related reasoning was dominated by codes about online information asymmetry, the attribution of trial cost, consumer entitlement, and consumption efficiency. Attitude in this study therefore does not present as a single pro- or anti-return disposition; it presents as a differentiated moral framing applied to different return types, varying in moral grammar across cohorts.

The SN theme focuses on the normative environment within which return behavior is performed. Coding revealed that normative pressure originates from two distinct sources: a macro-digital environment composed of platform algorithms, social media discourse, the visibility of return records, and platform credit-scoring mechanisms; and a micro-interpersonal environment composed of parents, children, friends, couriers, and other concrete others. The analysis accordingly distinguishes macro-digital norms from micro-interpersonal ties.

The PBC theme focuses on the executability of returning, decomposing into platform policy support, real-world logistical and interactional friction, and consumer-side internal control and pre-purchase prevention. The first layer is operationalized through codes such as "7-day no-reason returns", shipping insurance, instant refunds, and door-to-door pickup; the second

and third layers involve codes such as customer-service communication friction, courier time-mismatch, distrust of the merchant, knowing one’s own size, and pre-purchase customer-service consultation.

Table 4.11

Theme development from initial codes to analytical themes

Theoretical node	Initial codes	Developed theme	Link to RQ
ATT	“Returning after wearing is immoral”; “merchants also have it hard”; “affects re-sale”; “taking advantage”	Moral framing of wardrobing	RQ1, RQ2
ATT	“Online fitting room”; “consumers have rights”; “sizing is inaccurate”; “can’t touch the actual item”; “side-by-side comparison”	Legitimacy account of bracketing	RQ1, RQ2
ATT	“Just return if I don’t like it”; “doesn’t look good on me”; “emotional regret”; “impulse purchase”	Emotional or other-driven return evaluation	RQ1
SN	“Everyone is doing it”; “discount-hunting tips”; “platform credit score”; “public return rates”; “I don’t care what others think”	Macro-digital norms	RQ2, RQ3
SN	“My parents think it’s wasteful”; “my friends think it’s normal”; “if my child likes it I won’t return it”; “afraid of being called a careless buyer”	Micro-interpersonal ties	RQ2, RQ3
PBC	“7-day no-reason returns”; “shipping insurance”; “instant refund”; “door-to-door pickup”; “the platform process is convenient”	Platform policy support	RQ2
PBC	“Communicating with customer service is troublesome”; “courier times don’t match”; “no elevator”; “afraid the merchant won’t accept it”; “refund is slow”	Real-world logistical and interactional friction	RQ2
PBC	“I know my own size”; “consult customer service first”; “do research before buying”; “don’t order on impulse”	Internal control and pre-purchase prevention	RQ2
SUST	“Environmentalism is useless”; “I’ll return it anyway”; “I don’t want to lose out personally”; “convenience comes first”	Failure of environmental concern	RQ3
SUST	“It’s a merchant quality issue”; “the platform should change the packaging”; “it’s a supply-chain problem”; “it’s not my fault”	Responsibility shifting and neutralization	RQ3
SUST	“If it’s wearable I keep it”; “don’t waste”; “I won’t return for a minor flaw”; “use everything to the full”	Thrift-based item-cherishing	RQ3

Note. Initial codes are translated from the original Mandarin Chinese. Each developed theme synthesizes a cluster of codes that recurred across multiple interviews and was retained on the basis of cohort-comparative analytical value.

Finally, the sustainability consciousness theme comprise three sub-themes: the failure of environmental concern in concrete return decisions, responsibility shifting and

neutralization, and a thrift-based item-cherishing value. This theme explains the conditions under which environmental belief is attenuated by personal interest, convenience, and responsibility attribution, and the conditions under which traditional frugality and waste-avoidance values may instead constrain return behavior. The subsequent analysis applies this four-theme framework to compare Generation X, Generation Y, and Generation Z. The full theme-development pathway, including the initial codes from which each developed theme emerged and its link to the research questions, is summarized in Table 4.11.

Attitude: generational differences in the moral evaluation of returns

Interview data revealed that consumers do not hold a single, undifferentiated attitude toward “returning”; rather, attitude is structured by how the return type is morally framed. Wardrobing and bracketing elicited markedly different evaluative logics across cohorts, and the within-cohort variation in why each behavior was endorsed or rejected proved as important as the overall acceptance level.

Wardrobing: shared moral rejection but different justification logics. Across all three cohorts, wardrobing was largely rejected, but the reasons differed in revealing ways. Generation Z did not de-moralize wardrobing wholesale. Although several Z participants emphasized consumer rights, when they encountered an explicit scenario of returning a worn item they retained clear moral lines. Z1 described a friend who had worn a stage costume “without removing the tag” and then returned it, characterizing this as “a bit too much (excessive)” because “the next consumer who receives the clothes won’t know it has been used by someone else,” making it “unfair” and “somewhat unethical.” Notably, Z1’s objection was not grounded in sympathy for the merchant’s bottom line but in fairness between consumers, a peer-oriented moral register. A second Z-cohort logic appeared in Z4’s discussion of similar “zero-cost rental” behaviors: if the merchant has set up a return mechanism, then consumers operating within those rules have a degree of legitimacy, and any damage or wear can be addressed through the merchant’s risk-control procedures. This is not an endorsement of fraud but a re-framing in which moral responsibility resides primarily in platform design and merchant risk-management, not in the individual consumer’s moral self-discipline.

Generation Y rejected wardrobing on more pragmatic-ethical grounds. Y2 stated that purchasing should reflect real need, not “buying just to take advantage of the 7-day no-reason return and then returning it.” Y4 added that wearing items before returning may cause merchants to lose value through soiling, damage, or impaired resale. Y-cohort evaluations centered on tangible-consequence reasoning: real need, evident use, downstream cost to others.

Generation X grounded its rejection in relational ethics and labor-empathy. X1 directly characterized post-use returns as “too unethical” and insisted that “unreasonable returns”

should be borne by the consumer themselves: “we can’t be unreasonable.” X4 evaluated the same practice with: “it’s not easy for merchants to do business,” and judged the behavior “a bit too much (excessive).” For X participants, wardrobing was understood as harm to merchants, couriers, and the trade relationship itself, not as a strategy that could be normalized via platform rules. The cohort gradient is therefore not in whether wardrobing is rejected but in what kind of moral object it is treated as: a consumer-fairness violation for Generation Z, a tangible-consequence problem for Generation Y, and a relational-ethics breach for Generation X.

Bracketing: from consumer entitlement to conditional acceptance. Bracketing elicited a more permissive and ethically ambiguous evaluation, and showed the clearest generational gradient. Generation Z framed bracketing as a consumer entitlement embedded in the platform’s offer structure. Z5 explicitly stated that consumers are not engaged in “freeloading” but are “really trying to get items that fit them”; if “the platform happens to give you these rights,” then consumers can use them. Z4 added that he frequently orders multiple sizes and keeps the best-fitting one, because clothing is not cheap and “consumers need to actually get the right item after spending money,” with shoulder width, length, color, and the on-body look “hard to judge from product-page data alone.” In this Z-cohort discourse, bracketing is constructed as precision consumption, not opportunism: trial cost is structurally embedded in the e-commerce contract because the platform cannot offer an embodied fitting room.

Generation Y endorsed bracketing more conditionally. Y4 said the size and fit uncertainty inherent in online shopping makes bracketing “understandable” so long as the items are tried within the time window and not soiled or damaged, but added “you can reduce the quantity or avoid buying more than you’ll keep.” This adequacy principle, bracketing as a justified response to real information asymmetry but not as a blanket entitlement, characterized most Y responses.

Generation X showed the most explicit responsibility-bordered acceptance. X3 acknowledged buying multiple items to compare colors or prices because, with online shopping, “you can’t see the things” the way a brick-and-mortar store allows: “sometimes you can only buy several and try them on yourself.” However, X3 simultaneously insisted that “the responsibility I should bear, I should bear, and the responsibility the merchant should bear, the merchant should bear,” and called for platform-level intervention to curb excessive return behavior rather than endorsing it as a consumer right. X-cohort acceptance of bracketing is therefore not grounded in expanded consumer rights but in a particular circumstance of information asymmetry, paired with clearly demarcated responsibility.

The qualitative material refines the TPB attitude construct by showing that “attitude toward returning” is not a single dimension but a moral-evaluation framework that varies by return type (wardrobing vs. bracketing) and is structured by cohort-specific socialization registers.

The cohort difference is not best summarized as “Gen Z is more permissive about returning”; it is more accurately described as “different cohorts answer the question ‘what kind of return is legitimate?’ through different moral grammars.” Generation Z draws on platform rules, consumer rights, and trial-cost efficiency; Generation Y on real need, moderation, and consequence; Generation X on responsibility boundaries, empathy for the merchant and courier, and transaction ethics. This finding has direct bearing on why the path coefficient $ATT \rightarrow INT$ did not differ significantly across cohorts in the PLS-SEM MGA: cohorts are not differentiated by how strongly a favorable attitude translates into intention, but by what favorable attitudes they hold and on what moral grounds.

Subjective norm: from interpersonal morality to digital visibility

The qualitative findings on subjective norm directly substantiated the MICOM result that the SN construct is interpreted in structurally different ways by Generation X and Generation Z, particularly the SN_1 item, which references injunctive normative judgments by “important others.”

Macro-digital norms: platform visibility, social media, and rule-based pressure. Generation Z participants tended to construe returning as a personalized, rule-mediated consumption choice, and were correspondingly less sensitive to general social judgment of return records. Z5, asked how she would feel if her WeChat contacts could see her return history, replied that this would not noticeably change her habits because “what to buy and what to return” is her own decision. Z1 similarly argued that returns happen because items are unsuitable or substandard, not because the return rate reflects on one’s character. Yet Z-cohort responses also showed selective digital-norm engagement: several rejected the “everyone is doing it, so I’d be losing out if I don’t” framing of return-exploitation tip content on Xiaohongshu and Douyin. Z3 explicitly stated he was unmoved by high-like return-tip posts, saying he would “find it laughable.” Z-cohort digital-norm responses are best characterized as compartmentalized: low sensitivity to general visibility, but maintained moral discrimination between legitimate returns and exploitative ones.

Generation Y participants showed elevated sensitivity to digital visibility framed as privacy and impression-management risk. Y4 reported that if return history were made publicly visible, she “wouldn’t be comfortable” and might even “abandon the platform,” because privacy exposure produces a feeling of “being under a spotlight.” Y3 echoed this, viewing return history as private information whose visibility to others would feel “dangerous” and would lead to more cautious purchasing. The Y-cohort SN profile is therefore not best explained by traditional moralization but by privacy-anxiety: the platformization of consumption makes private purchase behavior potentially observable, and this potentiality functions as a normative pressure of its own.

Generation X participants showed bifurcated reactions to digital visibility. Some, like X3, said exposure of return rates would not change their behavior. But this insensitivity does not signal absence of norm pressure; rather, it indicates that X-cohort normative pressure operates through real-world interpersonal channels rather than through platform data.

Micro-interpersonal norms: family, relational morality, and everyday judgement. Generation X consistently placed return behavior within an interpersonal-responsibility frame. X1, asked about young consumers' aggressive use of "refund-only" policies, characterized this as "not good behavior," arguing that young people "don't understand how hard doing business is" and treat themselves as "a god." X4 characterized excessive exploitation of return rules as "quite abnormal" and "selfish," and reiterated the responsibility-boundary principle. For Generation X, the merchant, the courier, and the transaction partner are not abstract platform nodes but real workers deserving consideration; the normative referent is the concrete other.

Generation Y showed a coordination between family-evaluation and self-boundary. Y participants could understand parental criticism of return wastefulness but treated returning as private. Y1 stated that public visibility of return history would change her habits because "shopping is very private; there's no need for everyone to know." Y-cohort SN pressure is therefore a hybrid: private domain protected from interpersonal evaluation, with platform visibility experienced as intrusion.

Generation Z showed weaker family-norm pressure. Z3 reported parents view return-when-unsuitable as normal. Z5 acknowledged that her parents might think bulk-buying-and-returning is "wasteful" but typically only "say a couple of words" without real opposition. Z-cohort family norms persist as background reminders rather than enforceable constraints.

The SN construct in the Chinese fashion e-commerce context is not a unitary "other-pressure" variable but a composite normative system structured by cohort. Generation Z's normative landscape is dominated by selective digital-norm engagement coupled with weakened family-norm enforcement; Generation Y's by privacy concerns about the platformization of private consumption; Generation X's by real-world interpersonal ethics and concrete labor empathy. This pattern explains the MICOM finding that the SN_1 item ("most people important to me") anchors more centrally on the SN composite for Generation X than for Generation Z: the phrase "people important to me" carries a substantively different normative weight when "important others" are the local interpersonal network (Generation X) versus when they include the diffuse digital audience and may even exclude family judgment (Generation Z).

Perceived behavioral control: platform affordance, friction, and pre-purchase prevention

The PBC construct, in interview material, decomposed into three layers: platform-policy support, real-world friction, and consumer pre-purchase prevention. Each layer operated differently across cohorts.

Platform support. Platform policies clearly raised the perceived controllability of returning for all cohorts. The 7-day no-reason return, return-shipping insurance, instant refund, and door-to-door pickup reduce both the financial and operational cost of returning. The cohort difference lies in how these affordances are leveraged. Z5 noted that no-reason returns and free shipping enable a “buy first, decide later” stance: “If I’m not satisfied I can directly return; I don’t bear the shipping cost, so whatever else there is doesn’t matter.” Z4 stated that without the 7-day return and shipping insurance, “I probably wouldn’t have bought,” illustrating that platform affordances shape Z-cohort purchase intention upstream of return intention. Generation Y also relies on platform convenience but emphasizes process efficiency. Y2 commented that JD.com returns are smooth, with pickup arranged at an agreed time. Y3 cited shipping insurance as the basis for “free return.” Y-cohort discourse centers on time-saving and minimization of additional communication or coordination cost. Generation X also recognizes the convenience. X3 noted that door-to-door pickup is “fine” because parcels can be left at the door and the courier handles the rest, and separately observed that refunds are generally processed within a day or two. X-cohort acknowledgment of platform convenience is sincere but does not translate directly into higher return intention; it is filtered through additional considerations of responsibility, perceived hassle, and whether the item is “worth returning.”

Real-world friction. Friction tends to attenuate PBC unevenly across cohorts. Generation Y repeatedly cited communication cost and time mismatch as PBC-reducing factors. Y1 described JD.com returns as “troublesome” because of the requirement to go through customer service first, which she described as an unwanted extra layer before the return could even be submitted. Y4 recounted an incident in which back-and-forth communication with a merchant over sizing took nearly a week, and the most frustrating aspect was “the communication with the merchant” rather than the return process itself. Generation X’s friction was more strongly embodied: physical-logistical and bodily-cost considerations. X4 mentioned that for large-item returns, the absence of an elevator in her residential building led to repeated negotiations with the courier, who was reluctant to carry heavy items up the stairs. X1 described having a slightly oversized garment that she had intended to return, but ultimately wore as home clothing because she was “too lazy to return it.” For Generation X, PBC is not whether one can tap the return button but whether one is willing to undertake the physical labor, waiting, and negotiation involved. Generation Z, generally most fluent

with platform procedures, was nonetheless not immune to friction. Z5 described a frustrating wait when a courier was unavailable for pickup. PBC is therefore not reducible to “knowing how to use the platform”; it is a joint product of online process and offline logistics.

Internal control and pre-purchase prevention. A subset of participants from all cohorts reported using pre-purchase strategies to reduce return likelihood, treating informed buying as a form of control. Y4 said she and her friends typically know their own size and consult customer service when uncertain. Z2 reported that her low return rate stems from extensive pre-purchase research, including occasionally visiting offline stores for important items before purchasing online. X-cohort participants similarly used height, weight, and merchant recommendation to reduce the likelihood of misfit purchases. The implication is that high PBC does not always translate into frequent returns; for time-cost-sensitive consumers, the controllability “I can return easily” coexists with the preference “I’d rather not need to.”

PBC in this context has three layers, namely platform-policy support, real-world friction, and internal control or pre-purchase prevention, and the cohort difference lies in which layer is most diagnostic. Generation Z leverages platform support as a trial-cost-reducing affordance; Generation Y is most sensitive to process-efficiency and communication friction; Generation X is most sensitive to embodied logistics and trust in the merchant. This three-layer structure helps explain why the PBC → INT path coefficient did not differ significantly across cohorts in the MGA: a survey instrument capturing the platform-support layer alone (which the four PBC items predominantly do) will not register the cohort-distinguishing friction and prevention layers.

Sustainability consciousness: failed concern, neutralization, and thrift-based restraint

The qualitative analysis on sustainability consciousness was designed to interrogate the H4 hypothesis, that environmental beliefs should attenuate the attitude → intention pathway. In the survey data, this moderation was rejected at the pooled-model level (H4a: $\beta = -0.051$, $p = .273$; H4b: $\beta = -0.022$, $p = .399$). The qualitative material suggests that this is not because sustainability awareness is absent but because three distinct mechanisms blunt its translation into return restraint.

Failure of environmental concern. Environmental awareness is routinely overridden by personal cost-benefit. Y1, presented with the scenario of an item that is “perfectly wearable but, once returned, may become industrial waste,” replied directly that “I would return it”; pressed on the contradiction with stated environmental concern, she added that “real interests are more important.” Z3, given the same scenario, separated returning from environmental responsibility, arguing that cardboard and plastic packaging are normal

household products and not necessarily severe high-energy-cost materials. In both cases, sustainability is acknowledged at the level of belief but fails to constrain the concrete decision.

Responsibility shifting and neutralization. Several participants reframed the environmental cost as a system-level problem rather than an individual one. Z1's mother had criticized returning as wasteful of courier resources, but Z1 maintained that the merchant's loss is "not very large" and that single orders are often split into multiple parcels by the platform anyway, locating the resource consumption in supply-chain design rather than in consumer choice. Y2 described returns as contributing to "the operation of industry," reframing them as a "benign cycle" enabled by recycling and degradable materials. These responses exemplify the techniques of neutralization documented by Strutton, Vitell, and Pelton (1994): not denial of the problem, but reattribution of moral agency. Sustainability consciousness, when it survives this re-framing, does not function as an inhibitor of returns.

Thrift-based sustainability. A distinct register appeared in Generation X, what our coding labelled "plain item-cherishing" (rooted in traditional frugality), that operates not through contemporary environmental discourse but through frugality and use-value. X3 said that for low-priced items with minor flaws (such as a stray thread), "I just don't mind." X2, in the industrial-waste scenario, said "if I bought this item and I can still wear it, maybe I wouldn't return it." This restraint draws on lived experience and a thrift ethic rather than on climate-related environmental beliefs. X4, however, said she would still return in the industrial-waste scenario, showing that even within Generation X the thrift register is not uniform. These patterns are suggestive and internally consistent, but rest on only four Generation X participants; the interpretation is offered as an analytically plausible account rather than a settled finding, and should be treated as a hypothesis for testing in larger samples. The X-cohort thrift register substantively reshapes the H4 question. The survey SUST items, with their explicit references to environmental impact, transportation emissions, and packaging waste, capture only the contemporary environmentalist layer of sustainability; the thrift-based layer, equally consequential for actual return restraint, is not measured. This methodological observation directly explains the apparently contradictory pattern in the quantitative results: Generation X scored higher on the standardized SUST measure ($M_X = 0.21$ vs. $M_Z = -0.21$), and yet the moderating effect of SUST on the attitude \rightarrow intention path was non-significant in the pooled PLS-SEM. The SUST score elevation reflects the Generation X thrift sensibility, but the moderation analysis tests an effect that the construct is conceptually too narrow to capture.

The qualitative material therefore suggests that sustainability consciousness in the Chinese fashion-return context may operate not as a monolithic environmental concern varying uniformly in strength across cohorts, but as a layered construct: (i) climate-related environmental belief, which is acknowledged across cohorts but routinely overridden by

personal cost-benefit; (ii) responsibility shifting or neutralization, more prominent in Generation Y and Generation Z, which reframes the environmental cost as a system-level rather than individual problem; and (iii) thrift-based item-cherishing, which appeared more prominently in Generation X responses and is rooted in lived experience, and which appeared to restrain some returns through a frugality ethic that operates outside the modern sustainability vocabulary. It is important to note that this pattern should be regarded as a provisional observation rather than a confirmed finding as it rests only on four interviews. Interpreted in light of this layered structure, H4 is better framed as a conditional moderation: sustainability consciousness may restrain return intention when the item remains acceptable, the personal return benefit is low, and responsibility is not credibly attributable to the merchant or the platform – but when the item is unsuitable, the consumer feels economically disadvantaged, or the platform offers low-cost return conditions, the environmental belief rarely converts into behavioral restraint.

5 Discussion

The discussion synthesizes the quantitative and qualitative findings against the integrated TPB–Generational Cohort Theory framework, the prior return-behavior literature, and the Chinese fashion e-commerce context. Section 5.1 interprets the quantitative path-coefficient and ANOVA results at the level of the structural model; Section 5.2 develops the qualitative explanations of the underlying mechanisms; Section 5.3, the central integrative section, performs the triangulation between the two strands, identifies points of convergence and divergence, and resolves the apparent contradiction between the strong overall ATT → INT pathways, the null cohort differences in path coefficients, and the meaningful cohort differences observed qualitatively. Sections 5.4 through 5.7 then situate the contributions, implications, limitations, and future directions of the study.

5.1 Interpreting the quantitative findings

The dominance of attitude and the near-collinearity with intention

The most striking quantitative finding is the dominance of attitude in predicting intention for both behaviors, accompanied by a high discriminant-validity ratio between ATT and INT, in particular $HTMT(ATT_B, INT_B) = 0.966$, well above the conservative 0.85 threshold. This pattern is consistent with what Škapa (2013) reported in his TPB application to fraudulent return behavior, where attitude was the dominant predictor of return-fraud intention and subjective norm and PBC contributed comparatively little. It is also consistent with Das and Kunja (2024), who found that planned, intentional return behavior among young Indian consumers is overwhelmingly driven by attitudinal permissiveness rather than by normative or control factors.

What is theoretically interesting in the present results is not that attitude predicts intention strongly, that is expected, but that attitude and intention are so close in measurement that the discriminant validity ratio approaches unity, especially for bracketing. Two interpretations are possible. The first is methodological: items measuring attitude toward bracketing (e.g., “I think it is reasonable to order multiple sizes...”, “Bracketing is a practical strategy...”) may overlap semantically with items measuring intention to bracket (e.g., “I plan to order multiple sizes...”, “I am likely to use bracketing...”), conflating evaluation with anticipated action. The second is substantive: in a highly normalized e-commerce environment with frictionless return affordances, the distance between “I think this is acceptable” and “I will do this” collapses, because there is no structural obstacle between evaluation and action. The methodological explanation cannot be conclusively excluded on

survey data alone, and is worth monitoring in future instrument development. However, the qualitative evidence tips the balance clearly toward the substantive account, and that is the position taken both in Chapter 4 and throughout this discussion. Multiple Generation Z interviewees described attitude and intention as effectively coterminous in their own reasoning: “If I think it’s fine and the platform allows it, I just do it.” This near-collinearity has implications for the literature: in mature mobile-first e-commerce ecosystems, the TPB’s classic decomposition of intention into three independent antecedents may compress, with attitude absorbing much of the variance previously attributed to norm and control because the platform has functionally eliminated normative ambiguity and control friction.

The weakness of subjective norm and the partial role for bracketing

Subjective norm exerted a small but significant effect on bracketing intention ($\beta = 0.115$, $p = .028$) and a non-significant effect on wardrobing intention ($\beta = 0.019$, $p = .666$). This asymmetry is theoretically interpretable. Bracketing, as a practice that is socially visible (consumers discuss tips, share product-fit information, and validate try-and-return strategies on Xiaohongshu and Douyin), is plausibly more responsive to norm than wardrobing, which is by its ethical character a private and concealed behavior. The Phau et al. (2022) study of Chinese consumer wardrobing also found that social factors are the primary antecedents of wardrobing attitude in the Chinese context; the present results refine that finding by suggesting that social factors operate more strongly on attitude formation than directly on intention, and more strongly on the publicly normalized practice (bracketing) than on the privately stigmatized one (wardrobing). The general weakness of the SN coefficient is consistent with the meta-analytic finding by Armitage and Conner (2001) that subjective norm is the weakest predictor of intention across TPB studies, and with their suggestion that this weakness reflects measurement under-specification of the normative construct.

The non-significant PBC pathway

Perceived Behavior Control did not significantly predict intention in either model ($\beta = 0.043$ and $\beta = 0.007$, both $p > .35$). This is consistent with the highly developed return infrastructure in Chinese fashion e-commerce: when 7-day no-reason returns, return-shipping insurance, and door-to-door pickup are the platform-standard, the variation in perceived control across consumers is structurally compressed. In behavioral domains where actual situational control is uniformly high, PBC contributes little additional predictive variance, a pattern noted by Ajzen (2002) and consistent with the broader observation that PBC’s predictive power varies substantially across behavioral domains and depends on the actual presence of obstacles to action.

The rejection of H4 and the inverse generational pattern of sustainability consciousness

H4a and H4b, sustainability consciousness as a negative moderator of attitude → intention, were rejected at the pooled level. Moreover, the construct-score ANOVA produced a result directly contrary to the dominant Western expectation: Generation X ($M = 0.21$) scored higher on sustainability consciousness than Generation Z ($M = -0.21$), and this difference reached statistical significance (Tukey $p = .028$). This inverse generational gradient is noteworthy. Parment (2013) and others in the Western literature have linked higher sustainability consciousness to younger cohorts; the present finding in the Chinese context suggests either that the cross-cultural mapping of generational environmentalism does not hold uniformly, or that the construct as measured by the standard SUST items captures something distinct from contemporary environmental discourse in this sample. The qualitative findings are consistent with the latter interpretation, identifying a thrift-based item-cherishing register among Generation X participants that may load onto the SUST items (which include “I try to minimize unnecessary returns”, readily endorsed on frugality grounds even without environmental belief). This qualitative observation should, however, be read cautiously given that it rests on only four Generation X interview participants.

The uniform null in cohort-difference path coefficients

Hypotheses H1a through H3b, six predictions of generational differences in path coefficients, were uniformly rejected. None reached significance even at the uncorrected $\alpha = 0.05$, let alone at the Bonferroni-corrected $\alpha = 0.0167$. This is a strong null result. Three explanations should be considered: (i) the per-cohort sample size of 75 yields a minimum detectable effect size of approximately 0.29 for individual cohort paths, which means smaller-but-real differences could be present and undetected; (ii) the SmartPLS path coefficients capture only the strength of one-to-one effects within cohorts and do not directly reflect substantive cohort differences in the content of beliefs, only in the translation of beliefs into intention; (iii) the path-translation logic may genuinely operate similarly across cohorts in a setting where the structural environment (platform policies, return infrastructure) is shared. The qualitative findings favor (ii) and (iii) jointly, with the most consequential cohort differences appearing not in path strengths but in the substantive content of beliefs.

5.2 Interpreting the qualitative mechanisms

Differentiated moral grammars of returning

The interview material revealed that attitude is not a unidimensional permissiveness scale but a moral-evaluation framework that varies in its grammar, specifically its preferred terms of legitimation and rejection, across cohorts. Generation Z reasoned through rules, consumer rights, and platform-design fairness; Generation Y through real-need adequacy and tangible consequence; Generation X through relational ethics, labor empathy, and responsibility boundaries. This finding directly extends the Phau et al. (2022) observation that Chinese consumer wardrobing attitudes are socially formed, by showing that the content of social formation differs across cohorts in theoretically interpretable ways consistent with the generational-cohort socialization mechanism (Hung et al., 2007; Egri & Ralston, 2004).

Decomposed subjective norm: digital, privacy, and relational layers

The qualitative SN findings illuminate the MICOM non-invariance result for the wardrobing model's SN_1 item. The phrase "people important to me" carries different normative content across cohorts: for Generation X, it indexes close family and concrete interlocutors with whom one is in active moral exchange; for Generation Z, it indexes a more diffuse normative landscape in which family judgment is attenuated and digital descriptive norms (what peers do on visible platforms) hold a more central position. The construct is the same; the referent is not. This finding directly substantiates the argument by Conner and Armitage (1998) for refining the normative component of TPB by distinguishing injunctive from descriptive norms, and it adds an empirical dimension: cohort socialization in mature platform ecosystems shifts the weighting of injunctive versus descriptive norms toward the descriptive pole.

Three-layer PBC and the measurement gap

The interview material decomposed PBC into platform-policy support, real-world friction, and internal control or pre-purchase prevention. The survey PBC items predominantly capture the first layer; the second and third layers, which carry most of the qualitative cohort distinction, are not well captured. This identifies a measurement gap: a PBC instrument adequate for cross-cohort comparison in the Chinese e-commerce context should incorporate items addressing real-world logistical friction (e.g., elevator or lift access, courier reliability, communication cost) and pre-purchase prevention behaviors (e.g., consulting customer service, offline pre-check). Generation X's PBC profile is most visible in the friction layer; Generation Z's in the platform-support layer; Generation Y's in the process-efficiency layer. The single survey-measured PBC construct compresses these into a single dimension that the

survey PBC → INT coefficient cannot disaggregate.

Three sustainability mechanisms and the conditional moderation

The qualitative SUST analysis identified three distinct mechanisms by which sustainability consciousness fails to translate into return restraint: cost-benefit override (the environmental belief is overridden by personal interest), responsibility shifting and neutralization (the environmental cost is reattributed to merchants, platforms, or supply chains), and thrift-based restraint (frugality and item-cherishing constrain some returns, in some Generation X participants). The first two mechanisms, both well-documented in the consumer ethics literature, particularly the techniques-of-neutralization tradition initiated by Strutton et al. (1994), explain the null H4 result. The third mechanism reframes the construct itself: a SUST score that loads partly on thrift will show a Generation X advantage even when contemporary environmental belief is no stronger in this cohort.

5.3 Triangulation and convergence

Triangulation, the central methodological contribution of this study's sequential explanatory mixed-methods design, proceeds by identifying points where the two strands converge, points where they appear to diverge, and points where one strand resolves a puzzle generated by the other.

Convergence: attitude-driven intention with cohort-differentiated content

The quantitative finding that attitude strongly predicts intention, paired with the qualitative finding that cohorts hold differently grounded attitudes, jointly support a coherent integrated picture. The path coefficient $\beta(\text{ATT} \rightarrow \text{INT})$ does not differ across cohorts because the translation of an evaluative position into a behavioral intention is structurally similar; the platform environment offers comparable affordances to all cohorts. What differs is the moral grammar producing the evaluative position in the first place: Generation Z's permissive bracketing attitudes are grounded in rights and platform-rule logics; Generation X's more cautious bracketing attitudes are grounded in responsibility boundaries; Generation Y's are grounded in tangible consequence. The quantitative model captures the translation step; the qualitative material captures the upstream grammar. The two are complementary descriptions of different stages in the same psychological process.

This complementarity offers a productive reframing of the cohort-comparison enterprise in TPB research more broadly. Cohort-comparative studies that test only path-coefficient differences will systematically under-detect cohort effects when the substantive cohort

variation operates upstream of the belief-intention translation. The methodological implication is that integration with qualitative inquiry is not merely supplementary but essential where cohort socialization is theorized to shape belief content. In the present study, had the qualitative phase not been conducted, the uniform null path-coefficient result would have been the headline finding and the conclusion would have been that TPB constructs operate equivalently across Chinese cohorts in fashion e-commerce returning. The qualitative phase reveals that this null is a methodological artifact of where the cohort effect is located in the causal chain, not an empirical absence of cohort differentiation. This is precisely the kind of integration the sequential explanatory design (Creswell & Plano Clark, 2017) is structured to deliver, and it provides direct empirical support for the argument by Conner and Armitage (1998) that the TPB's expectancy-value architecture is enriched, rather than contradicted, by incorporating stable upstream variables that shape belief formation.

Resolution: the MICOM non-invariance as a substantive finding, not a measurement artifact

The MICOM finding that SN is not compositionally invariant for the X-vs-Z comparison in the wardrobing model is, in conventional methodological terms, a problem: it precludes path comparison. But interpreted alongside the qualitative material on SN, it becomes a substantive finding in its own right. The cohorts are not interpreting SN_1 in the same way because they do not have the same normative landscape. Generation X's SN is anchored in concrete interpersonal others; Generation Z's is anchored in a hybrid of digital descriptive norms and weakened family norms. The non-invariance is not measurement noise; it is the empirical fingerprint of a real cohort difference in how social pressure is constructed. This is a methodological-substantive convergence that would not be visible from either strand alone.

Resolution: the inverse SUST gradient and the thrift register

The quantitatively observed Generation X advantage in SUST ($X > Z$, $p = .028$) appears, at first reading, to contradict the Western literature linking environmentalism to younger cohorts. The qualitative material offers a resolution that is internally consistent: the SUST construct, as measured, appears to capture both contemporary environmental belief and thrift-based item-cherishing; Generation X may score higher because the items load on the thrift register that is salient in this cohort, rather than because Generation X holds stronger climate-related beliefs. This interpretation is plausible and fits the data, but the qualitative evidence for it comes from four participants; the account should therefore be treated as a hypothesis in need of larger-sample confirmation rather than an established finding. Subject to that caveat, the finding does not falsify the Western Generation-Z-environmentalism thesis. It suggests a construct-validity boundary that a revised SUST instrument which discriminates the two registers explicitly could help to clarify in future research.

Divergence: H4 rejected quantitatively, found conditionally in qualitative material

The H4 moderation was rejected in both pooled models. The qualitative material, however, found that sustainability consciousness does restrain return intention under specific conditions, namely when the item remains acceptable, the personal return benefit is low, and responsibility is not credibly attributable to the platform or merchant. The two findings are reconciled by understanding the H4 moderation hypothesis as too strong: the pooled-sample interaction term tests an average moderating effect across all participants and all return situations, when the qualitative material shows the effect is conditional on a specific configuration of item value, return benefit, and responsibility attribution. The discrepancy is therefore a contribution: it identifies the conditions under which sustainability awareness functions as a behavioral constraint and the conditions under which it does not.

Convergence on the Generation Z return-frequency elevation

The single statistically significant cohort difference in behavior, Generation Z's higher overall return frequency ($M_Z = 2.15$ vs. $M_X = 1.71$; $p = .016$), converges with the qualitative finding that Generation Z exhibits the most permissive moral grammar for bracketing and the lowest sensitivity to digital-visibility norms. But the absence of significant cohort difference in wardrobing or bracketing specifically, combined with Generation Z's higher overall return rate, indicates that the elevated frequency is being driven by a broader repertoire of return triggers, including emotional, situational, and quality-related returns, rather than by the two planned behaviors examined in the structural model. The qualitative interviews substantiate this: Generation Z participants described returning for taste change, mood, and momentary preference shifts, behaviors not captured by the wardrobing or bracketing construct.

This convergence carries an important implication for the supply chain management literature on returns. The dominant theoretical traction in the e-commerce return field has been on identifying and modeling planned, intentional return behaviors, such as wardrobing as fraud (Harris, 2010; Phau et al., 2022) and bracketing as a defensive strategy (Chen et al., 2024; Xu et al., 2023), under the implicit assumption that planned behaviors capture the majority of cohort-distinguishing return volume. The present results challenge this assumption: while wardrobing and bracketing frequencies are flat across cohorts and the planned-behavior path coefficients are uniform, the aggregate return frequency does diverge, with Generation Z generating approximately 26% more annual returns than Generation X. This residual variance must be located in the unplanned return categories, including emotional, mood-driven, and taste-change returns, which fall outside the TPB framework's planned-behavior scope (Ajzen, 1991). For reverse-logistics planning, this means that even a perfect implementation of policies targeting bracketing and wardrobing would address only

a portion of the cohort-differentiated return load.

Synthesis: the location of cohort effects in the integrated framework

Stepping back from individual triangulation points, an overall pattern emerges. Cohort effects in this Chinese fashion e-commerce context are not located in the strength of TPB pathways (path coefficients are uniform), nor in the mean level of most TPB constructs (ANOVA results are predominantly null), but in three specific locations: (i) the substantive content of behavioral, normative, and control beliefs, which varies in moral grammar and referent across cohorts; (ii) the compositional structure of the subjective norm construct itself, which is not invariant between Generation X and Generation Z for the wardrobing behavior; and (iii) the construct content of sustainability consciousness, which may conflate contemporary environmental belief with thrift-based item-cherishing in cohort-differentiated ways. This pattern is internally consistent in the present data but rests on a small qualitative subsample and warrants confirmation. This three-fold location of cohort effects, none of which is detectable by path-coefficient comparison alone, illustrates the broader epistemological point that cohort effects in mixed-methods consumer research are often best understood as effects on what the TPB constructs mean to different consumers, not on how the constructs combine into intention. The integrated TPB–GCT framework should therefore be re-specified accordingly: cohort moderates construct content and referent, while the belief-intention translation operates similarly across cohorts in highly normalized e-commerce environments.

5.4 Theoretical contributions

The study makes five theoretical contributions to the supply chain management and consumer behavior literature on e-commerce returns.

First, it extends the application of the integrated TPB–Generational Cohort Theory framework to the Chinese fashion e-commerce return context, a market that has been identified by Serravalle et al. (2022) and Phau et al. (2022) as underexplored relative to its scale, and shows that cohort differences in return behavior are best modeled not as differences in the strength of TPB pathways but as differences in the content and grammar of the beliefs that anchor those pathways. The integration of GCT with TPB therefore operates not as a moderation of path coefficients but as a moderation of construct meaning and antecedent-belief content.

Second, it demonstrates empirically that the subjective norm construct does not maintain compositional invariance across the Chinese Generation X and Generation Z, identifying

SN_1 as the source of non-invariance. This refines the broader theoretical observation that subjective norm is the weakest TPB predictor (Armitage & Conner, 2001; Conner & Armitage, 1998) by showing that part of this weakness reflects construct under-specification in cohort-comparative work: a single SN construct conflates injunctive and descriptive normative referents that are weighted differently by cohorts shaped by different normative landscapes.

Third, it identifies sustainability consciousness as a potentially multi-register construct in the Chinese fashion-return context, in which contemporary environmental belief, system-responsibility shifting, and thrift-based item-cherishing may combine in cohort-distinctive ways. This observation – offered as a plausible interpretation given the available evidence rather than an established finding – refines the H4-style hypothesis and provides a methodological caution to the cross-cultural application of Western generational environmentalism findings: in cultural contexts where a strong frugality tradition coexists with weaker contemporary environmental discourse in older cohorts, generic SUST instruments may risk conflating two conceptually distinct registers, and the implications of that conflation for cross-cohort comparisons deserve explicit attention in future instrument development.

Fourth, it contributes a methodological-substantive integration argument: in a sequential explanatory mixed-methods design, MICOM non-invariance findings should not be treated solely as analytical obstacles but should be interpreted substantively in light of the qualitative material. The SN non-invariance for the X-vs-Z comparison in the present study is itself an empirical finding about cohort-differentiated normative landscapes, not merely a measurement issue. This perspective suggests a proposition worth testing in future cohort-comparative TPB research: where qualitative analysis identifies a construct as carrying cohort-distinct referents, the corresponding MICOM violation may constitute evidence for upstream cohort moderation of construct meaning rather than a measurement failure to be remediated by item modification. Whether this holds across different constructs, cohort contrasts, and cultural contexts remains to be established; the present study provides one instance consistent with this interpretation, not a general principle. If confirmed in subsequent work, it would argue for a re-orientation of the PLS-SEM cohort-comparison literature, which conventionally treats non-invariance as disqualifying the path comparison without considering its substantive content.

Fifth, the findings extend the existing literature on returns as a supply chain challenge by clarifying the boundary of TPB applicability in mature platform-mediated commerce. Janakiraman, Syrdal, and Freling (2016) noted in their meta-analysis that lenient return policies stimulate both purchase and return, with effects mediated by perceived risk and perceived value. The present results refine this by showing that in a setting where return-policy leniency is industry-uniform (the contemporary Chinese fashion e-commerce

environment), the variation in consumer-side TPB constructs is correspondingly compressed: attitude dominates because norm and control have been functionally homogenized by platform standardization. Future research that compares pre- and post-leniency-shock cohorts, or compares high- vs. low-leniency platform environments within the same cohort, could test this compression hypothesis directly.

5.5 Practical and managerial implications

For Chinese fashion e-commerce platforms and apparel retailers, the findings have several actionable implications.

Platform return-policy design. The dominance of attitude as the predictor of return intention, paired with the platform-affordance dependence of Generation Z's bracketing logic, suggests that platforms attempting to moderate excessive return volumes should not pursue the blunt instrument of stricter or fee-based return policies as a primary lever. Such measures would likely affect legitimate fit-uncertainty returns (bracketing) and emotional returns disproportionately, while doing little to deter the small minority engaged in wardrobing. A more effective lever is reducing the upstream information asymmetry that drives bracketing, through more accurate sizing information, augmented-reality try-on, improved product photography, and verified-fit reviews, addressing the trial-cost problem that Generation Z explicitly identifies as the rationale for bracketing.

Cohort-segmented communication. Communication about return-related sustainability differs in effectiveness by cohort. Generation Z's environmental discourse is regularly neutralized by responsibility-shifting; environmental messaging targeted at Generation Z is therefore most likely to be effective when it directly addresses the system-responsibility attribution by demonstrating retailer or platform investment in reverse-logistics sustainability, rather than appealing to individual environmental responsibility. For Generation X, the qualitative material — acknowledging the small sample of four — suggests that restraint may operate more through thrift and item-cherishing than through climate-related belief; if so, messaging that emphasizes “use what you have” or pre-purchase certainty may be better aligned with that cohort's existing moral grammar than standard environmental appeals. Generation Y's privacy-anxiety profile suggests that visibility-based interventions (e.g., publicly visible return rates) would generate disproportionate backlash relative to their behavioral effect, and should be avoided as a strategy.

Wardrobing risk management. The interview material clearly shows that wardrobing is morally rejected across cohorts but legitimized through different defensive logics. Generation Z's “platform should risk-manage” framing is particularly informative: it indicates that

effective wardrobing prevention should sit primarily in platform-level risk-management systems (return-fraud detection, account-level return-rate monitoring, and the recently emerging tagged-garment technologies) rather than in consumer-facing moral appeals.

Bracketing infrastructure design. Because bracketing in Chinese fashion e-commerce is normalized and largely uniform across cohorts, retailers should treat it as an operational rather than ethical issue. Infrastructure investments that reduce the reverse-logistics cost of bracketed multi-size orders (consolidated shipping, simplified return packaging, store-pickup options that allow on-site fit verification) will achieve better risk-adjusted cost reduction than consumer-side moralization.

Implications for the supply chain. From a supply chain management perspective, the finding that bracketing is a normalized cross-cohort practice should inform demand forecasting and reverse logistics planning. Treating bracketing as deviance to be suppressed underestimates the true demand signal; treating it as a legitimate trial-cost embedded in fashion e-commerce gives a more accurate picture of net retained orders and reverse-flow volume. This reframes returns from a cost-control problem to a structural feature of the digital fashion category.

5.6 Limitations

Several limitations of the study should be acknowledged.

Sampling and statistical power. The per-cohort sample size of 75 (total N = 225) supports detection of path coefficients of approximately 0.29 or larger at the cohort level. Smaller-but-real cohort differences in path coefficients (below approximately 0.20) may exist and remain undetected. Replication with larger per-cohort samples would clarify whether the uniform null pattern reflects truly absent differences or under-powered detection. A related sampling note concerns the Credamo platform used for data collection. As a professional panel-based survey service, Credamo draws participants who are already active and comfortable with online platforms. Generation X respondents recruited through this channel are therefore likely to be more digitally engaged than the broader Generation X population in China. This may compress the digital-divide effects on constructs such as perceived behavioral control and sustainability consciousness, and could attenuate the observable cohort differences on these dimensions. Future research should consider supplementing platform-based recruitment for older cohorts with offline or community-based sampling strategies.

Cross-sectional design. The data are cross-sectional, conflating cohort (formative-period socialization) effects with age (life-cycle stage) and period (current environment) effects. The Age–Period–Cohort identification problem (McKercher, 2023) cannot be resolved with cross-

sectional data alone. The cohort interpretation offered here is consistent with the qualitative material but should not be read as a strong causal claim about formative-period socialization in isolation from contemporaneous age and period factors.

Construct under-specification. As detailed in Section 5.2, the survey PBC construct under-captures real-world logistical friction and pre-purchase prevention, and the SUST construct under-discriminates contemporary environmental belief from thrift-based item-cherishing. Future cohort-comparative work in this domain would benefit from instruments designed explicitly to disaggregate these layers.

Social desirability and self-report bias. Wardrobing in particular is plausibly underreported across all cohorts, as reflected in the very low self-reported frequencies ($M = 0.09$ to 0.15 on a 0–4 scale) and the lack of variance above 2. Methodological extensions using indirect measurement (vignettes, third-person framing) or platform-level behavioral data would strengthen the validity of wardrobing measurement.

Cultural and contextual scope. The findings are situated in the Chinese fashion e-commerce context and the generational boundaries are defined for that context following Hung et al. (2007). Generalization to non-Chinese settings should be undertaken cautiously, particularly given the cultural-specific findings on the thrift register and on the family-norm structure.

Interview sample size. With 14 interview participants distributed across three cohorts (4 / 5 / 5), the qualitative phase achieves thematic adequacy but does not approach the upper bound of within-cohort saturation. Some sub-themes (e.g., emotional returns in Generation X) are represented by a small number of participants and should be treated as suggestive rather than definitive.

Qualitative reliability and sample depth. The qualitative analysis was carried out jointly by both researchers at every stage, from initial coding through theme development to final interpretation, with each transcript read and all coding decisions made collaboratively. Formal inter-rater reliability statistics were not computed, as the collaborative design prioritized iterative joint discussion over independent parallel rating; future work applying this coding framework could supplement the present approach with inter-rater reliability checks to further strengthen the credibility of qualitative claims.

5.7 Future research directions

Disaggregated normative measurement. The MICOM non-invariance finding and the qualitative SN analysis jointly argue for revised normative measurement that distinguishes

injunctive close-other norms from descriptive digital-peer norms. Multi-component SN instruments validated in cohort-comparative designs would substantially strengthen TPB applications to platform-mediated consumer behavior.

Multi-layer PBC measurement. The three-layer qualitative decomposition of PBC (platform support, real-world friction, internal prevention) should be operationalized as a survey instrument with separate sub-scales. The current single PBC construct compresses theoretically distinct dimensions and obscures the cohort-distinguishing variance.

Two-register sustainability measurement. The thrift and contemporary-environmentalism distinction warrants explicit measurement. A scale distinguishing climate-related belief, system-responsibility attribution, and frugality or item-cherishing would resolve the construct-validity problem identified in this study.

Longitudinal designs. Cohort identification requires comparing the same cohort at the same life-cycle stage across time, ideally with longitudinal panels following Generation Z and Generation X through equivalent age windows. Although demanding, such designs would substantially clarify the Age-Period-Cohort decomposition.

Conditional moderation modeling. The qualitative material identified the conditions under which sustainability consciousness restrains return intention. Survey-based confirmation should test conditional moderation models in which the $SUST \times ATT$ interaction is itself moderated by item-acceptability, return-benefit, and responsibility-attribution dimensions.

Wardrobing measurement innovation. As noted in the limitations, wardrobing measurement faces a severe floor-effect and social-desirability problem. Future studies should test vignette-based, third-person-framed, and platform-behavioral measurement approaches against the standard self-report items used here.

Cross-cultural replication. The generational differences identified here are situated in the Chinese context. Comparative studies in Western contexts (where Generation X is not anchored in the planned-to-market-economy transition and the thrift register may be weaker) and in other Asian contexts (where family-norm structure and platform infrastructure differ) would clarify which findings are culturally specific and which generalize

Platform-level intervention experiments. The practical implications outlined in Section 5.5 generate testable hypotheses about which interventions reduce return-related supply-chain costs without suppressing legitimate fit-uncertainty returns. Field experiments collaborating with platform operators on intervention design and outcome measurement would translate the present descriptive findings into evidence-based reverse-logistics practice.

6 Conclusion

This thesis investigated generational differences in online fashion return behavior in China through a sequential explanatory mixed-methods design, combining a PLS-SEM and multi-group analysis of 225 survey respondents with thematic analysis of 14 in-depth interviews. The study tested an integrated framework combining the Theory of Planned Behavior with Generational Cohort Theory, focusing on two return behaviors of particular supply-chain consequence, namely wardrobing and bracketing, across Generation X, Generation Y (Millennials), and Generation Z consumers operating in a mature Chinese fashion e-commerce ecosystem.

The quantitative findings revealed a pattern that is, at first reading, paradoxical. Attitude emerged as the dominant predictor of return intention in both models ($\beta = 0.74$ for wardrobing; $\beta = 0.84$ for bracketing), with very large effect sizes; the path coefficients did not differ significantly across the three cohorts in any of the six hypothesized comparisons; and the hypothesized negative moderation by sustainability consciousness was rejected for both behaviors. The single cohort difference observed at the construct-score level, namely Generation X scoring higher on sustainability consciousness than Generation Z (Tukey $p = .028$), directly contradicts the dominant Western expectation that younger cohorts hold stronger environmental orientations. Yet the qualitative findings show that cohorts differ substantively, not in how strongly attitudes translate into intentions, but in the moral grammar through which those attitudes are constructed: Generation Z reasons through rules and platform-design entitlements, Generation Y through real-need adequacy and tangible consequence, Generation X through relational ethics and responsibility boundaries. The MICOM finding that subjective norm is not compositionally invariant between Generation X and Generation Z, driven by item SN_1, is itself an empirical fingerprint of these differently structured normative landscapes, not merely a measurement artifact. The Generation X sustainability advantage reflects a thrift-based item-cherishing register distinct from contemporary environmental belief, illustrating that the construct measured by standard SUST scales has heterogeneous content across cohorts and cultures.

The study's central methodological-substantive contribution is the demonstration that, in a sequential explanatory mixed-methods design, null path-coefficient differences and non-invariance findings are not analytical failures to be apologized for, but substantive findings to be interpreted: cohort differences in this Chinese fashion e-commerce context operate primarily at the level of construct meaning and antecedent-belief content, not at the level of belief-intention translation. This insight clarifies for both researchers and managers that effective cohort-targeted interventions in return-policy design and reverse-logistics planning

should engage the moral grammars and normative landscapes that generate evaluative beliefs, rather than attempting to differentially shift the well-attested translation of attitude into intention.

From a supply chain management perspective, the findings reframe bracketing from deviance to be suppressed into a normalized structural feature of digital fashion retail that demand-forecasting and reverse-logistics practice should treat as expected rather than aberrant. They reframe wardrobing, though morally rejected across cohorts, from a target for consumer-facing moral suasion into a target for platform-level risk-management systems. And they identify the residual cohort-differentiated return volume, beyond planned behaviors, as the locus where future supply chain interventions targeted at unplanned and emotional returns are most likely to yield returns-reduction benefit. For Chinese fashion e-commerce platforms operating at the scale at which return-flow volumes have become an industry-strategic concern, this evidence-based reframing offers a basis for cohort-aware policy and infrastructure design that respects both consumer agency and supply-chain sustainability.

Bibliography

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, Theories of Cognitive Self-Regulation*, 50(2), 179–211.
[https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 32(4), 665–683.
<https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
- Amasiatu, V. C., & Shah, M. H. (2014). First party fraud: A review of the forms and motives of fraudulent consumer behaviours in e-tailing. *International Journal of Retail & Distribution Management*, 42(9), 805–817. <https://doi.org/10.1108/IJRDM-05-2013-0112>
- Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471–499.
<https://doi.org/10.1348/014466601164939>
- Chang, H.-H., & Yang, T.-S. (2022). Consumer rights or unethical behaviors: Exploring the impacts of retailer return policies. *Journal of Retailing and Consumer Services*, 64, 102779. <https://doi.org/10.1016/j.jretconser.2021.102779>
- Chen, X., Tan, L., & Wang, F. (2024). Managing consumer bracketing purchases: Optimal return policy analysis. *International Journal of Production Economics*, 275, 109321.
<https://doi.org/10.1016/j.ijpe.2024.109321>
- Chen, Z., & Xiao, T. (2026). Returnable-after-deep-trial policies in e-commerce supply chains with opportunistic consumers. *Transportation Research Part E: Logistics and Transportation Review*, 209, 104728. <https://doi.org/10.1016/j.tre.2026.104728>
- Cohen, J. (1998). *Statistical power analysis for the behavioral sciences* (2nd ed., Vol. 14). Lawrence Erlbaum Associates, Publishers.
- Conner, M., & Armitage, C. J. (1998). Extending the Theory of Planned Behavior: A Review and Avenues for Further Research. *Journal of Applied Social Psychology*, 28(15), 1429–1464. <https://doi.org/10.1111/j.1559-1816.1998.tb01685.x>
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.

- Das, L., & Kunja, S. R. (2024). Why do consumers return products? A qualitative exploration of online product return behaviour of young consumers. *Journal of Retailing and Consumer Services*, 78, 103770. <https://doi.org/10.1016/j.jretconser.2024.103770>
- Duong, Q. H., Zhou, L., Meng, M., Dang, L. T. A., & Nguyen, T. D. (2025). Striking the right balance: Customising return policy leniency for managing customer online return proclivity and satisfaction. *Journal of Retailing and Consumer Services*, 85, 104315. <https://doi.org/10.1016/j.jretconser.2025.104315>
- Egri, C. P., & Ralston, D. A. (2004). Generation Cohorts and Personal Values: A Comparison of China and the United States. *Organization Science*, 15(2), 210–220. <https://doi.org/10.1287/orsc.1030.0048>
- Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley. <https://people.umass.edu/aizen/f&a1975.html>
- Global Market Insights. (2025, December). *Reverse Logistics Market Size & Share 2026-2035*. Global Market Insights. <https://www.gminsights.com/industry-analysis/reverse-logistics-market>
- Hagger, M. S., & Hamilton, K. (2024). Longitudinal tests of the theory of planned behaviour: A meta-analysis. *European Review of Social Psychology*, 35(1), 198–254. <https://doi.org/10.1080/10463283.2023.2225897>
- Hair, J., G. Tomas M. Hult, Ringle, C., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3rd ed.). Sage Publishing.
- Harris, L. C. (2010). Fraudulent consumer returns: Exploiting retailers' return policies. *European Journal of Marketing*, 44(6), 730–747. <https://doi.org/10.1108/03090561011032694>
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., Ketchen, D. J., Hair, J. F., Hult, G. T. M., & Calantone, R. J. (2014). Common Beliefs and Reality About PLS: Comments on Rönkkö and Evermann (2013). *Organizational Research Methods*, 17(2), 182–209. <https://doi.org/10.1177/1094428114526928>
- Hjort, K., & Lantz, B. (2016). The impact of returns policies on profitability: A fashion e-commerce case. *Journal of Business Research*, 69(11), 4980–4985. <https://doi.org/10.1016/j.jbusres.2016.04.064>
- Hjort, K., Lantz, B., Ericsson, D., & Gattorna, J. (2013). Customer segmentation based on

- buying and returning behaviour. *International Journal of Physical Distribution & Logistics Management*, 43(10), 852–865. <https://doi.org/10.1108/IJPDLM-02-2013-0020>
- Hung, K. H., Gu, F. F., & Yim, C. K. (2007). A social institutional approach to identifying generation cohorts in China with a comparison with American consumers. *Journal of International Business Studies*, 38(5), 836–853. <https://doi.org/10.1057/palgrave.jibs.8400288>
- Janakiraman, N., Syrdal, H. A., & Freling, R. (2016). The Effect of Return Policy Leniency on Consumer Purchase and Return Decisions: A Meta-analytic Review. *Journal of Retailing*, 92(2), 226–235. <https://doi.org/10.1016/j.jretai.2015.11.002>
- Jeong, D., & Kim, Y. S. (2025). Generational differences in AI adoption among fashion curation platform users. *Fashion and Textiles*, 12(1), 41. <https://doi.org/10.1186/s40691-025-00448-5>
- Mannheim, K. (2013). The problem of generations [eBook]. In *Essays on the Sociology of Knowledge* (1st ed., Vol. 5, pp. 276–322). Routledge. <https://www.taylorfrancis.com/books/mono/10.4324/9781315005058/essays-sociology-knowledge-karl-mannheim> (Original work published 1952, Taylor & Francis Group)
- McKercher, B. (2023). Age or generation? Understanding behaviour differences. *Annals of Tourism Research*, 103, 103656. <https://doi.org/10.1016/j.annals.2023.103656>
- Nageswaran, L., Cho, S.-H., & Scheller-Wolf, A. (2020). Consumer Return Policies in Omnichannel Operations. *Management Science*, 66(12), 5558–5575. <https://doi.org/10.1287/mnsc.2019.3492>
- National Retail Federation & Happy Returns. (2024). *2024 Consumer Returns in the Retail Industry* (p. 17). <https://nrf.com/research/2024-consumer-returns-retail-industry>
- Noble, S. M., & Schewe, C. D. (2003). Cohort segmentation: An exploration of its validity. *Journal of Business Research*, 56(12), 979–987. [https://doi.org/10.1016/S0148-2963\(02\)00268-0](https://doi.org/10.1016/S0148-2963(02)00268-0)
- Parment, A. (2013). Generation Y vs. Baby Boomers: Shopping behavior, buyer involvement and implications for retailing. *Journal of Retailing and Consumer Services*, 20(2), 189–199. <https://doi.org/10.1016/j.jretconser.2012.12.001>
- Parry, E., & Urwin, P. (2011). Generational Differences in Work Values: A Review of Theory and Evidence: Generational Differences in Work Values. *International Journal of*

- Management Reviews*, 13(1), 79–96. <https://doi.org/10.1111/j.1468-2370.2010.00285.x>
- Pavlou, P. A., & Fyngenson, M. (2006). Understanding and Predicting Electronic Commerce Adoption: An Extension of the Theory of Planned Behavior. *MIS Quarterly*, 30(1), 115–143. <https://doi.org/10.2307/25148720>
- Phau, I., Akintimehin, O. O., Shen, B., & Cheah, I. (2022). “Buy, wear, return, repeat”: Investigating Chinese consumers’ attitude and intentions to engage in wardrobing. *Strategic Change*, 31(3), 345–356. <https://doi.org/10.1002/jsc.2503>
- Putra, M. (2026, March 12). *Average eCommerce Return Rate by Category (2026 Data)*. Eightx. <https://eightx.co/blog/average-ecommerce-return-rate>
- Rintamäki, T., Spence, M. T., Saarijärvi, H., Joensuu, J., & Yrjölä, M. (2021). Customers’ perceptions of returning items purchased online: Planned versus unplanned product returners. *International Journal of Physical Distribution & Logistics Management*, 51(4), 403–422. <https://doi.org/10.1108/IJPDLM-10-2019-0302>
- Rosenbaum, M. S., Kuntze, R., & Wooldridge, B. R. (2011). Understanding unethical retail disposition practice and restraint from the consumer perspective: Understanding Unethical Retail Disposition Practice and Restraint from the Consumer Perspective. *Psychology & Marketing*, 28(1), 29–52. <https://doi.org/10.1002/mar.20379>
- Rozenkowska, K. (2023). Theory of planned behavior in consumer behavior research: A systematic literature review. *International Journal of Consumer Studies*, 47(6), 2670–2700. <https://doi.org/10.1111/ijcs.12970>
- Ryder, N. B. (1965). The Cohort as a Concept in the Study of Social Change. *American Sociological Review*, 30(6), 843–861. <https://doi.org/10.2307/2090964>
- Serravalle, F., Vannucci, V., & Pantano, E. (2022). “Take it or leave it?”: Evidence on cultural differences affecting return behaviour for Gen Z. *Journal of Retailing and Consumer Services*, 66, 102942. <https://doi.org/10.1016/j.jretconser.2022.102942>
- Škapa, R. (2013). Application of the theory of planned behavior to fraudulent returning. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 60(7), 379–386. <https://doi.org/10.11118/actaun201260070379>
- Strauss, W., & Howe, N. G. (1991). *Generations: The history of America’s future, 1584 to 2069* (1. ed). Morrow.
- Strutton, D., Vitell, S. J., & Pelton, L. E. (1994). How consumers may justify inappropriate behavior in market settings: An application on the techniques of neutralization.

Journal of Business Research, 30(3), 253–260. [https://doi.org/10.1016/0148-2963\(94\)90055-8](https://doi.org/10.1016/0148-2963(94)90055-8)

The Centre for Market Insights of the Amsterdam University of Applied Sciences (Ed.). (2025). *European E-Commerce Reports 2025* (p. 100).

<https://www.eurocommerce.eu/european-e-commerce-report/>

Twenge, J. M. (2023). *Generations: The real differences between Gen Z, Millennials, Gen X, Boomers, and Silents--and what they mean for America's future*. Atria Books,.

Wang, J. (2023). The consumption behaviors of Generation Z: Evidence from China. *Advances in Economics and Management Research*, 7(1), 568–568.

<https://doi.org/10.56028/aemr.7.1.568.2023>

Wang, Y., Yu, B., & Chen, J. (2026). Effects of product online reviews on product returns: A review and classification of the literature. *International Transactions in Operational Research*, 33(1), 143–176. <https://doi.org/10.1111/itor.13502>

Xu, Y., Hua, G., Cheng, T. C. E., Choi, T.-M., Li, Y., & Liu, S. (2023). Retailing and ordering strategies for online apparel retailers facing bracketing purchase behaviour.

International Journal of Production Research, 61(9), 2841–2853.

<https://doi.org/10.1080/00207543.2022.2070045>

Appendix

Appendix A: Survey Questionnaire

中国网络时装退货行为中的代际差异：跨队列分析

Generational Differences in Online Fashion Return Behavior in China: A Cross-Cohort Analysis

你好!

我们是瑞典隆德大学供应链管理硕士的两名学生，正在进行硕士论文研究项目。我们的研究旨在考察不同年龄群体的网络时装购物和退货行为。您的回答将帮助我们获得对这些主题的宝贵见解，**问卷没有标准答案，请根据您的实际经历和看法作答!**

完成调查大约需要 8-10 分钟。

如果您对调查有任何疑问，请随时通过以下方式联系我们：

email: jj6587qi-s@student.lu.se

本研究还包括后续访谈阶段，将通过线上视频/通话进行，时长约 40-60 分钟，将更深入地探究您的网购和退货经历。参与完全出于自愿，与本次问卷相互独立。**我们为积极参与的小伙伴额外准备了小奖励，期待有机会与您一起聊聊您的网购与退货经历!** 如您愿意参与访谈，可通过以上联系方式联系我们。

您的参与完全出于自愿，所有回答都将保密和匿名。收集到的数据将仅用于学术研究目的，并在研究结束后安全删除。只有研究人员和课程主考官才能访问这些数据。

感谢您抽出时间参与调查，您的意见对我们而言非常宝贵!

Hello!

We are two master's students in Supply Chain Management at Lund University, Sweden, conducting a thesis research project. Our study examines online fashion shopping and return behaviors across different age groups. Your responses will provide valuable insights. **There are no right or wrong answers. Please respond based on your actual experiences and opinions!**

This survey takes approximately 8-10 minutes to complete.

For any questions, please contact us:

email: jj6587qi-s@student.lu.se

This study also includes a follow-up interview phase conducted via online video/phone call (approx. 40-60 min) to explore your shopping and return experiences in greater depth. Participation is entirely voluntary and independent of this questionnaire. Small rewards are prepared for active participants. Please contact us via the above if you are willing to participate in an interview.

Your participation is entirely voluntary, and all responses will be kept confidential and anonymous. Data will be used solely for academic research and securely deleted after the study. Only the researchers and course examiner will have access.

Thank you for your time. Your input is greatly appreciated!

A 部分：资格筛选 Part A: Eligibility Screening

***A1** 您的出生年份是? [填空]

What is your birth year? [Fill in]

***A2** 在过去 12 个月内, 您是否通过网络平台 (如淘宝、京东、天猫、拼多多) 购买过时装或服装?
[单选]

In the past 12 months, have you purchased fashion or clothing through online platforms (e.g., Taobao, JD.com, Tmall, Pinduoduo)? [Single choice]

- 是 / Yes
- 否 / No

***A3** 以下哪项最符合您网购时装或服装的频率? [单选]

Which of the following best describes how often you purchase fashion or clothing online?
[Single choice]

- 每月不足 1 次 / Less than once a month
- 每月 1-2 次 / 1-2 times per month
- 每月 3-4 次 / 3-4 times per month
- 每月 4 次以上 / More than 4 times per month

B 部分：退货行为 (自我报告) Part B: Return Behavior (Self-Report)

***B1** 在过去 12 个月内, 您退还过多少件网购时装或服装? [单选]

In the past 12 months, how many items of online-purchased fashion or clothing have you returned? [Single choice]

- 0次 / 0 times
- 1-2次 / 1-2 times
- 3-5次 / 3-5 times
- 6-10次 / 6-10 times
- 10次以上 / More than 10 times

***B2** 您是否曾以短暂穿着后退回为目的网购时装? [单选]

Have you ever purchased fashion online with the intention of wearing it briefly and then returning it? [Single choice]

- 从未 / Never
- 偶尔 / Rarely
- 有时 / Sometimes
- 经常 / Often
- 总是 / Always

***B3** 您是否曾同时网购同款服装的多种尺码或颜色, 仅保留最合适的一件, 其余退回? [单选]

Have you ever ordered multiple sizes or colors of the same fashion item online, keeping only the best fit and returning the rest? [Single choice]

- 从未 / Never
- 偶尔 / Rarely
- 有时 / Sometimes
- 经常 / Often
- 总是 / Always

C 部分: 对退货行为的态度 Part C: Attitude Toward Return Behavior

***C1** 请对以下关于试穿后退货 (wardrobing) 的表述表明您的同意程度 [矩阵量表]

Please indicate your level of agreement with the following statements about wardrobing (purchasing a fashion item, wearing it briefly, and returning it). [Matrix scale]

	完全不同意 Strongly Disagree	不同意 Disagree	比较不同意 Somewhat Disagree	一般 Neutral	比较同意 Somewhat Agree	同意 Agree	完全同意 Strongly Agree
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我认为购买一件时装、短暂穿着后退

-

款是可以接受的

I think it is acceptable to purchase a fashion item, wear it briefly, and then return it.

试穿后退货是一种无需承担全部费用即可享受时装的聪明方式

Wardrobing is a smart way to enjoy fashion without bearing the full cost.

我对于购买一件计划穿着后退回的时装感到自在

I feel comfortable purchasing a fashion item with the plan to wear it and then return it.

与消费者所获得的利益相比，试穿后退货给零售商造成的损害微乎其微

Compared to the benefits consumers gain, wardrobing causes minimal harm to retailers.

***C2** 请对以下关于多件试选 (bracketing) 的表述表明您的同意程度 [矩阵量表]

Please indicate your level of agreement with the following statements about bracketing (ordering multiple sizes/colors to try at home and returning those that do not fit). [Matrix scale]

	完全不同意 Strongly Disagree	不同意 Disagree	比较不同意 Somewhat Disagree	一般 Neutral	比较同意 Somewhat Agree	同意 Agree	完全同意 Strongly Agree
我认为同时订购同款时装的多种尺码、退回不合适的做法是合理的 I think it is reasonable to order multiple sizes of the same fashion item and return those that do not fit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
多件试选是应对网购时装不确定性的实用策略 Bracketing is a practical strategy for dealing with uncertainty when shopping for fashion online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我认为订购多件商品、退回部分的做法是对零售商退货政策的合理利用 I consider ordering multiple items and returning some as a legitimate use of retailer return policies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

将网络退货作为在线试衣间是一种高效的网购时装方式

Using online returns as a virtual fitting room is an efficient way to shop for fashion online.

D 部分：主观规范 Part D: Subjective Norms

*D1 请对以下说法表明您的同意程度 [矩阵量表]

Please indicate your level of agreement with the following statements. [Matrix scale]

	完全不同意 Strongly Disagree	不同意 Disagree	比较不同意 Somewhat Disagree	一般 Neutral	比较同意 Somewhat Agree	同意 Agree	完全同意 Strongly Agree
对我重要的大多数人认为在网上退回购买的时装是可以接受的 Most people important to me consider returning online fashion purchases to be acceptable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我的亲友会支持我在网上退回时装的决定 My family and friends would support my decision to return fashion items purchased online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我的社交圈（包括社交媒体）中的人经常讨论或分享网购退货的经历 People in my social circle (including social media) frequently discuss or share their online return experiences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我觉得在我的社交圈里，充分利用网购退货政策是一种普遍被认可的做法 I feel that making full use of online return policies is a widely accepted practice in my social circle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E 部分：感知行为控制 Part E: Perceived Behavioral Control

*E1 请对以下说法表明您的同意程度 [矩阵量表]

Please indicate your level of agreement with the following statements. [Matrix scale]

	完全不同意 Strongly Disagree	不同意 Disagree	比较不同意 Somewhat Disagree	一般 Neutral	比较同意 Somewhat Agree	同意 Agree	完全同意 Strongly Agree
我觉得在我用于网购时装的平台上发起退货很容易 I find it easy to initiate a return on the platform I use for online fashion shopping.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我有信心能够顺利完成退货流程，不会遇到困难 I am confident that I can complete the return process without difficulty.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我所使用平台的退货流程便捷，无需花费太多精力 The return process on the platform I use is convenient and does not require much effort.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
是否退回一件时装完全在我的掌控之中 Whether or not to return a fashion item is entirely within my control.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

F 部分：退货意向 Part F: Return Intention

*F1 请对以下关于试穿后退货（wardrobing）的表述表明您的同意程度 [矩阵量表]

Please indicate your level of agreement with the following statements about wardrobing.

[Matrix scale]

	完全不同意 Strongly Disagree	不同意 Disagree	比较不同意 Somewhat Disagree	一般 Neutral	比较同意 Somewhat Agree	同意 Agree	完全同意 Strongly Agree
我打算在未来三个月内为特定场合购买一件时装，并在之后退回 I plan to purchase a fashion item for a specific occasion and return it afterwards within the next three months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

如果有活动场合需要穿着新装但不想永久保留，我会考虑试穿后退货
If I need a new outfit for an event but do not want to keep it permanently, I would consider wardrobing.

我将来在网购时装时很可能会进行试穿后退货
I am likely to engage in wardrobing when shopping for fashion online in the future.

***F2** 请对以下关于多件试选 (bracketing) 的表述表明您的同意程度 [矩阵量表]

Please indicate your level of agreement with the following statements about bracketing.

[Matrix scale]

	完全不同意 Strongly Disagree	不同意 Disagree	比较不同意 Somewhat Disagree	一般 Neutral	比较同意 Somewhat Agree	同意 Agree	完全同意 Strongly Agree
我打算同时订购网络时装的多种尺码或颜色，在家试穿后退回不合适的 I plan to order multiple sizes or colors of online fashion items, try them at home, and return those that do not fit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
在不确定时装合身度或外观时，我会考虑通过多件试选来辅助决策 When unsure about the fit or appearance of a fashion item, I would consider using bracketing to aid my decision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我将来在网购时装时很可能会采用多件试选策略 I am likely to use the bracketing strategy when shopping for fashion online in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

G 部分：可持续发展意识 Part G: Sustainability Awareness

***G1** 请对以下说法表明您的同意程度 [矩阵量表]

Please indicate your level of agreement with the following statements. [Matrix scale]

	完全不同意 Strongly Disagree	不同意 Disagree	比较不同意 Somewhat Disagree	一般 Neutral	比较同意 Somewhat Agree	同意 Agree	完全同意 Strongly Agree
<p>我关注网购时装退货对环境的影响 (如额外运输排放、包装废弃物)</p> <p>I am concerned about the environmental impact of returning online fashion purchases (e.g., additional transportation emissions, packaging waste).</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>在决定是否退回时装时，我会考虑退货行为的环境后果</p> <p>When deciding whether to return a fashion item, I take into account the environmental consequences of the return.</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>我尽量减少不必要的退货，以降低对环境的影响</p> <p>I try to minimize unnecessary returns in order to reduce my environmental impact.</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>可持续发展是我进行网购时装和退货决策的重要考量因素</p> <p>Sustainability is an important consideration in my online fashion purchasing and return decisions.</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

H 部分：人口统计学信息 Part H: Demographic Information

***H1** 您的性别是？ [单选]

What is your gender? [Single choice]

- 男 / Male
- 女 / Female
- 非二元性别 / Non-binary
- 不愿透露 / Prefer not to say

***H2** 您的最高学历是？ [单选]

What is your highest level of education? [Single choice]

- 高中及以下 / High school or below
- 大专/本科 / Associate's / Bachelor's degree
- 硕士研究生及以上 / Master's degree or above

***H3** 您的月均个人收入大约是多少（人民币）？[单选]

What is your approximate average monthly personal income (RMB)? [Single choice]

- 3000 元以下 / Below ¥3,000
- 3000–8000 元 / ¥3,000–¥8,000
- 8001–15000 元 / ¥8,001–¥15,000
- 15001–25000 元 / ¥15,001–¥25,000
- 25000 元以上 / Above ¥25,000

***H4** 您目前居住的城市等级是？[单选]

What tier is the city where you currently live? [Single choice]

- 一线城市（如北京、上海、广州、深圳） / Tier-1 city (e.g., Beijing, Shanghai, Guangzhou, Shenzhen)
- 二线城市 / Tier-2 city
- 三线及以下城市 / Tier-3 or below city

***H5** 您最常用于网购时装的平台是？[单选]

Which platform do you most frequently use for online fashion shopping? [Single choice]

- 淘宝 / Taobao
- 天猫 / Tmall
- 京东 / JD.com
- 拼多多 / Pinduoduo
- 小红书 / Xiaohongshu (RED)
- 抖音 / Douyin (TikTok)
- 其他 / Other

H5.1 您最常用于网购时装的平台是？[填空]

What platform do you most frequently use for online fashion shopping? [Fill in]

I 部分：访谈同意 Part I: Interview Consent

***I1** 本研究还包括后续访谈阶段，将通过线上视频/通话进行，时长约 40–60 分钟，将更深入地探究您

的网购和退货经历。参与完全出于自愿，与本次问卷相互独立。我们为积极参与的小伙伴准备了小奖励，期待有机会与您一起聊聊您的网购与退货经历！您是否愿意作为本研究的后续访谈参与者？[单选]

This study also includes a follow-up interview phase conducted via online video/phone call (approx. 40–60 min) to explore your online shopping and return experiences in greater depth. Participation is entirely voluntary and independent of this questionnaire. Small rewards are prepared for active participants. Would you be willing to participate as a follow-up interview participant in this study? [Single choice]

- 是, 我愿意参与 / Yes, I am willing to participate
- 不, 谢谢 / No, thank you

12 您对本次作答还有什么疑问吗？[填空]

Do you have any further questions or comments about this survey? [Fill in]

Appendix B: Interview Guide

In Chinese:

半结构化访谈提纲

第一部分：访谈基本信息

1. 您好！非常感谢您参与不同年龄群体如何对待网络时尚购物与退货问题的访谈。今天我们会聊几个核心话题，但整体氛围是开放的，您可以想到什么就随时分享。在正式开始前，为了保护您的个人权益，我简单跟您确认三点：
 - (1) 您的所有回答仅用于本次研究，最终报告会做完全匿名处理。您后续随时有权要求查看、修改或彻底删除您的数据记录。
 - (2) 这是一次轻松的交流，没有标准答案。如果有任何您不想回答的问题，直接告诉我‘跳过’就好；您也可以在任何时候要求暂停或终止访谈。
 - (3) 为了我能专心听您分享而不是一直低头记笔记，您介意我开启录音吗？录音文件只有我们内部团队可以访问并严格保密。请问您准备好了吗？
2. 年龄确认

第二部分：一般退货经历（约 8–10 分钟）

1. 好的，那我们就正式开始啦。首先，想请您简单聊聊您在国内的时候平时网购的习惯？比如您最常用哪些平台购买时尚产品？您大约多久网购一次时尚产品？
2. 您有没有让您感到‘麻烦’或‘折腾’的退货经历。当时是因为什么退的？从点下‘申请退货’到快递被取走，哪个环节让您觉得最心烦
3. 您对自己常用平台的退货流程有什么感受？比如说方便、有压力，还是习以为常

追问：

- 如果您退了一件大家都说好的衣服，您会觉得自己‘挑剔’或‘要求高’吗？
- 如果这件事让您的父母（或您的朋友）知道了，他们会觉得您在‘浪费时间和资源’，还是觉得‘退了很正常’？您会为此解释吗？

第三部分：对试穿退货与多件试穿行为的态度（约 12–15 分钟）

试穿退货 (Wardrobing)：

1. 有个人为了去一些特定的场合而买一些特定的衣服，比如冲锋衣或者礼服。使用完后就利用‘七天无理由’退了，还发帖教大家怎么避开吊牌被剪。你或者你身边的朋友有过类似这种‘零成本租衣’的经历吗？

追问：

- 你当时看到这种操作，第一反应是觉得她‘很聪明、把规则玩明白了’，还是觉得‘有点过分’？为什么？”
- 如果你把你刚才的这个看法告诉你父母，你觉得他们会是什么反应？他们会理解这种做法吗？

多件试穿 (Bracketing) :

刚才我们聊的是‘穿去特定场合后再退的情况。现在我们换个场景

1. 很多人现在把电商平台当成了‘线上试衣间’，比如拿不准尺码或颜色，就一口气拍下好几件，回家试完留下最满意的 1 件，剩下的直接退掉。您或者您的朋友在平时买衣服时，你会用这种‘多件试穿’策略吗？

追问:

- **(如果有)**：通常是什么原因（比如尺码表不准、模特图太夸张，或者单纯横向比较）让您觉得必须这么操作？”
2. 在这种‘买多退余’的过程中，平台的哪些服务可以保障咱们的买多对余权利。
 3. 假设今天淘宝或拼多多突然取消了‘运费险’和‘免费上门取件’，甚至退货需要您自己承担运费，您还会像现在这样豪放地下单然后退货吗？”
 4. 对于这种多件试穿，有人觉得退货浪费了物流资源和包装；也有人觉得，既然网购摸不着实物，试错就是商家的责任，消费者有权力这么做。您更倾向于哪种看法？并且因为退货肯定会产生‘快递费’和‘包装成本’，你觉得这部分成本到底该由谁来买单？”
 5. 假设您双十一一口气买了 8 件衣服，试完之后退了 6 件。如果您的父母（或长辈）看到您每天拿着一堆快递回来，最后又退回去大半，他们通常会怎么评价您这个行为？您觉得在他们那个年代的观念里，为什么很难接受这种‘买来只为了试’的消费心态？”（如果受访者本人是 X 世代，“如果您的孩子或年轻同事这么做，您会怎么评价他们？您觉得为什么现在的年轻人把退货当成了家常便饭？”）

第四部分：社会影响与规范 (约 8-10 分钟)

1. 现在的电商平台退货是完全私密的。假设从明天起，平台上线一个新功能，您的平台好友都能看到您的‘退货率’和‘买多退余记录’，您觉得这会立刻改变您的下单习惯吗？

追问:

- (会就问，不会不问) 为什么这层‘隐私保护’对我们如此重要？”

2. 在社交媒体上，经常有博主发《教你如何跟客服理论拉满运费险》、《退货防坑指南》甚至《仅退款攻略》。您有没有收藏过或者实际用过这些套路？当您看到点赞量几万的这种帖子时，会不会觉得‘我不这么干我就亏了’？
3. 现在很多平台会根据您的信用分提供‘极速退款’（甚至还没寄出钱就到账了），但如果退货太多，这个权利可能会被取消。您在退货时，会为了维持这个‘系统里的好信用’而在退货的时候有所顾忌吗？
4. 针对 Z 世代/Y 世代问：“您觉得您父母那一辈人，在遇到货不对板时有时会选择‘吃哑巴亏’而不是退货，是因为什么原因呢？原因备选（用于提示：是他们不懂操作，还是因为他们觉得‘退货很丢人、惹麻烦’）？您觉得他们在电商生态里是不是处于弱势地位）？”
5. 针对 X 世代问：“现在很多年轻人遇到一点线头就利规则要求平台‘仅退款’，甚至觉得这是常规操作。您怎么看待年轻人这种‘极度维权’甚至有些‘薅羊毛’的网络风气？”

第五部分：感知控制与障碍（约 5–8 分钟）

1. 您有没有这种‘本来很想退，但最后硬生生被自己塞回衣柜吃灰’的经历？在那个瞬间，到底是什么‘压垮’了您退货的动力？（停顿，听受访者怎么说，如果受访者有思考的情况就提供原因）是没有运费险心疼那些运费、还是没有原包装袋了、还是纯粹想到要跟客服沟通就觉得疲惫？
2. 在中国买衣服，平台规则对我们的决策影响很大。假设一件一模一样、拿不准尺码的衣服，您在淘宝买和在拼多多买，您在点击‘申请退货’那一刻的心理压力一样吗？
（如果不一样就追问）为什么很多人在拼多多上敢闭眼退，在别的平台却要犹豫？
3. 当我们说长辈们（X 世代）退货‘不如年轻人顺手’时，您觉得他们是真的学不会在手机上点几下，比起年轻人，他们网购时是不是有一道看不见的‘心理围墙’？

追问：

- 原因备选：（还是因为他们心里对‘退回去了商家不认账’、‘快递员上门有安全隐患’？）

第六部分：可持续性与代际价值观（约 5–8 分钟）

1. 假设你花了钱买了一件内衣，收到发现稍微有点线头或者上身效果一般，但完全能穿。你有运费险，退货一分钱不花，但你也知道这件衣服退回去商家不会再卖，直接报废。这种情况下，你是会觉得‘反正是商家的责任，我必须退’，还是会觉得‘为了点小钱折腾一趟不环保，不如留下’？说实话，你在这种情况下。当时真实的想法是什么？”
2. 现在网上很多人有一个有趣的矛盾现象：咱们 Z 世代明明是环保意识最强的一代，但在电商的实际数据里，年轻人的退货率又是最高的。从您的想法来看，您觉得为什么现在的年轻人会被困在这个‘观念环保’和‘行为高耗能’的夹缝里？”

第七部分：结束语

1. 关于您的网络时尚购物或退货行为，有没有什么我们还没有谈到、但您认为重要的方面？你有什么要补充的吗？
2. 感谢受访者

In English:

Semi-Structured Interview Guide

Part One: Basic Information of the Interview

1. Hello! Thank you very much for participating in the interview about how different age groups approach online fashion shopping and return issues. Today, we will discuss several core topics, but the overall atmosphere is open, and you can share anything that comes to mind at any time. Before we officially start, to protect your personal rights, I would like to confirm three points with you:
 - (1) All your answers will be used solely for this research, and the final report will be completely anonymized. You have the right to request to view, modify, or completely delete your data records at any time in the future.
 - (2) This is a relaxed conversation, and there are no standard answers. If there are any questions you do not wish to answer, just tell me to 'skip'; you can also request to pause or terminate the interview at any time.
 - (3) So that I can focus on listening to your sharing rather than constantly taking notes, would you mind if I turn on the recording? The recording files will only be accessible to our internal team and will be kept strictly confidential. Are you ready?
2. Age Confirmation

Part Two: General Return Experiences (Approximately 8–10 Minutes)

1. Alright, let's officially begin. First, could you briefly talk about your online shopping habits when you were in your home country? For example, which platforms do you most frequently use to purchase fashion products? How often do you shop online for fashion products?
2. Have you ever had a return experience that felt 'troublesome' or 'bothersome'? What was the reason for the return? From the moment you clicked 'request return' to when the courier picked it up, which part of the process did you find most frustrating?

3. What are your feelings about the return process on the platforms you commonly use? For example, is it convenient, stressful, or just something you are used to?

Follow-up:

- If you returned a piece of clothing that everyone said was good, would you feel that you are 'picky' or 'demanding'?
- If your parents (or your friends) found out about this, would they think you are 'wasting time and resources' or would they feel that 'returning is normal'? Would you explain this to them?

**Part Three: Attitudes Towards Wardrobing and Trying on Multiple Items
(Approximately 12–15 Minutes)**

Wardrobing:

1. Some people buy specific clothes for certain occasions, such as a rain jacket or a formal dress. After using them, they take advantage of the 'seven-day no-reason return' policy and even post about how to avoid having the tags cut off. Have you or your friends ever had a similar experience of 'zero-cost clothing rental'?

Follow-up:

- When you saw this kind of operation, did your first reaction feel that she was 'smart and understood the rules' or did you think it was 'a bit excessive'? Why?
- If you told your parents about your opinion just now, what do you think their reaction would be? Would they understand this practice?

Bracketing:

Just now we talked about the situation of 'wearing to a specific occasion and then returning it. Now let's change the scene.

1. Many people now treat e-commerce platforms as an 'online fitting room.' For example, if they're unsure about the size or color, they might order several items at once, try them on at home, and keep the one they like best, returning the rest. Do you or your friends use this 'multiple try-on' strategy when buying clothes?

Follow-up:

- **(If any)** : What are the usual reasons (such as inaccurate size charts, exaggerated model images, or simply horizontal comparisons) that make you feel it is necessary to do so? "
2. In this process of "buy more and refund the excess," which services of the platform can ensure our rights to the excess from buying more?
 3. If today Taobao or Pinduoduo suddenly canceled 'shipping insurance' and 'free pickup', and even required you to bear the shipping cost for returns, would you still place orders as freely as you do now and then return them?
 4. For this kind of multiple fitting, some people feel that returning items wastes logistics resources and packaging; others believe that since online shopping does not allow for physical inspection, trial and error is the responsibility of the seller, and consumers have the right to do so. Which viewpoint do you lean towards? And because returns will definitely incur 'shipping costs' and 'packaging costs', who do you think should bear these costs?
 5. Suppose you bought 8 pieces of clothing during the Double Eleven shopping festival and returned 6 after trying them on. If your parents (or elders) saw you bringing home a pile of packages every day, only to return most of them in the end, how would they typically evaluate your behavior? Why do you think it is hard for them to accept this 'buying just to try' consumer mentality in their era? (If the respondent is from Generation X, "How would you evaluate your child or young colleagues if they did this? Why do you think young people today consider returning items as a common practice?")

Part Four: Social Impact and Norms (Approximately 8–10 Minutes)

1. The current return process on e-commerce platforms is completely private. Suppose starting tomorrow, the platform launches a new feature where your platform friends can see your 'return rate' and 'excess return records.' Do you think this would immediately change your ordering habits?

Follow-up:

- **(If yes):** Why is this layer of 'privacy protection' so important to us?
2. On social media, there are often bloggers posting guides like 'How to argue with customer service for full shipping insurance,' 'Return Pitfall Prevention Guide,' and even 'Refund Only Strategy.' Have you ever saved or actually used any of these tricks?

When you see posts with tens of thousands of likes, do you feel like 'If I don't do this, I'm losing out'?

3. Many platforms now offer 'instant refunds' based on your credit score (sometimes the money arrives even before you send the item back), but if you return too many items, this privilege may be revoked. When returning items, do you hesitate to maintain this 'good credit in the system'?
4. For Generation Z/Y: "Why do you think your parents' generation sometimes chooses to 'suffer in silence' rather than return items when they receive something that doesn't match their expectations? Possible reasons (for prompting: Is it because they don't know how to operate, or do they feel that 'returning is embarrassing and causes trouble')? Do you think they are in a disadvantaged position in the e-commerce ecosystem?)
5. For Generation X: " Many young people now demand 'refund only' from the platform at the slightest issue, even considering it a normal practice. What do you think about this 'extreme rights protection' and somewhat 'shearing sheep' mentality among young people online?

Part Five: Perceived Control and Barriers (approximately 5–8 minutes)

1. Have you ever had the experience of 'really wanting to return something, but in the end, you just forced it back into the closet to gather dust'? In that moment, what exactly 'crushed' your motivation to return the item? (Pause, listen to the interviewee's response; if the interviewee is thinking, provide reasons) Is it the shipping costs without insurance that make you reluctant, or is it that you no longer have the original packaging, or do you simply feel exhausted at the thought of having to communicate with customer service?
2. In China, the platform rules have a significant impact on our decision-making when buying clothes. Suppose there is an identical piece of clothing with an uncertain size; do you feel the same psychological pressure when you click 'apply for return' on Taobao as you do on Pinduoduo?

Follow-up:

- (If not, then ask) Why do many people feel comfortable returning items on Pinduoduo with their eyes closed, while they hesitate on other platforms?
3. When we say that the older generation (Generation X) finds returning items 'less convenient than younger people,' do you think they genuinely can't learn to click a

few buttons on their phones? Is there an invisible 'psychological barrier' for them when shopping online compared to younger people?

Follow-up:

- Alternative: (Is it still because they worry about 'the merchant not acknowledging the return' or 'safety risks with the delivery person coming to their door'?)

Part Six: Sustainability and Intergenerational Values (about 5–8 minutes)

1. Imagine you spent money on a piece of lingerie, and upon receiving it, you find a few loose threads or the fit is just okay, but it is still wearable. You have shipping insurance, so returning it costs you nothing, but you also know that the merchant won't sell the returned item again and it will be discarded. In this situation, do you feel that 'it's the merchant's responsibility, I must return it,' or do you think 'it's not environmentally friendly to go through the hassle for a small amount of money, so I might as well keep it'? Honestly, what were your true thoughts at that moment?
2. Nowadays, there is an interesting contradiction online: our Generation Z is clearly the most environmentally conscious generation, yet in actual e-commerce data, young people have the highest return rates. From your perspective, why do you think young people are caught in this gap between 'conceptual environmentalism' and 'high-energy-consuming behavior'?

Part Seven: Conclusion

1. Regarding your online fashion shopping or return behavior, is there anything we haven't discussed that you think is important? Do you have anything to add?
2. Thank you to the respondents.

Appendix C: Consent Form

Consent to participate in a Master Thesis at the Faculty of Social Sciences, Lund University

同意参与隆德大学社会科学学院的硕士论文写作工作

I agree to participate in **Generational Differences in Online Fashion Return Behavior in China: A Cross-Cohort Analysis.**

我同意参与“中国在线时尚退货行为中的代际差异：一项跨群体分析”这项研究。

We are Jiali Qian and Gongxin Wang, the authors of this thesis. We study Service Management, Supply Chain Management, and we are conducting this interview for our master's degree at Lund University. For this interview, all information shared and collected will be treated as confidential, and your name will not appear in the thesis.

我们是本篇论文的作者：钱嘉莉和王公鑫。我们研究领域为服务管理及供应链管理。我们进行这次访谈是为了完成隆德大学的硕士学位论文。在本次访谈中，所有分享和收集到的信息都将被视为保密内容，您的姓名也不会出现在论文中。

Information on the processing of personal data

关于个人数据处理的说明/信息

The following personal data will be processed:

Name, age, gender, generational cohort (derived from birth year / age), city of residence, voice recording.

以下个人数据将被处理：

姓名、年龄、性别、所属代际（根据出生年份/年龄确定）、居住城市、语音记录。

No sensitive personal data will be processed.

不会处理任何敏感的个人信息。

Personal data will be processed in the following ways:

We will send this consent form to interviewees before we conduct interviews. Interviews are conducted online via video call (e.g., WeChat, Tencent Meeting, Zoom) and audio-recorded using a professional recording application. The audio files will be stored on the researchers' password-protected laptops and university cloud storage. Only the two researchers and their supervisor have access to this data. The data will be deleted immediately after the thesis has been submitted and has received a passing grade.

个人数据将以下列方式进行处理：

在开始访谈之前，我们会将这份同意书发送给受访者。访谈通过视频通话的方式在线进行（例如：微信、腾讯会议、Zoom 等），同时会使用专业的录音软件对谈话内容进行录音。录音文件将保存在研究人员拥有密码保护的笔记本电脑上，以及大学的云存储系统中。只有这两名研究人员及其导师有权访问这些数据。在论文提交并获得通过评分后，这些数据将会被立即删除。

We do not share your personal data with third parties.

我们不会将您的个人数据分享给第三方。

Lund University, Box 117, 221 00 Lund, Sweden, with organisation number 202100-3211, is the controller. You can find Lund University's privacy policy at www.lu.se/integritet.

隆德大学是该数据的控制者，地址：瑞典隆德市隆德大学，信箱：117 号，邮编：221 00，组织编号为 202100-3211。您可以在 www.lu.se/integritet 网站上查看隆德大学的隐私政策。

You have the right to receive information about the personal data we process about you. You also have the right to have inaccurate personal data about you corrected. If you have a complaint about our processing of your personal data, you can contact our Data Protection Officer at dataskyddsbud@lu.se. You also have the right to lodge a complaint with the supervisory authority (the Data Protection Authority, IMY) if you believe that we are processing your personal data incorrectly.

您有权了解我们处理的与您的个人数据相关的信息。您还有权要求更正那些不准确的个人数据。如果您对我们处理您的个人数据的方式有意见，可以联系我们的数据保护专员，邮箱地址为 dataskyddsbud@lu.se。如果您认为我们处理您的个人数据的方式有误，您也有权向监管机构（即数据保护局，IMY）提出投诉。

I agree to participate in Generational Differences in Online Fashion Return Behavior in China: A Cross-Cohort Analysis.

我同意参与“中国在线时尚退货行为中的代际差异：一项跨群体分析”这项研究。

Location 位置/地点	Signature 签名
Date 日期	Name Clarification 姓名（拼音）