A Rose By Any Other Name: The Impact of Consumer Perceptions of Buy Now Pay Later on BNPL Use by Young Adults

Qian Wang[1], Aaron Gilbert[2], Sommer Kapitan[3], Ayesha Scott[4]

Abstract: This paper examines the relationship between consumers' perceptions of Buy Now Pay Later (BNPL) products and their subsequent usage patterns. Based on the literature on consumer perceptions, marketing strategies and financial product promotions, this study employs dual information processing theory as a lens for understanding how perceptions drive adoption and use of BNPL products. We employ ordered logistic regressions to analyze responses from a survey of young consumers aged 18-34 in New Zealand conducted via Qualtrics to assess the impact of consumer perceptions of BNPL, consumers' use of BNPL, whether consumers borrow to repay BNPL debt, and their frequency of incurring late fees. The main findings suggest that consumer acceptance of the attractive features of BNPL appears to mask the financial risks involved, resulting in greater use and use consistent with impulse purchasing and possible subsequent debt accumulation.

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[1] Qian Wang (khv6762@autuni.ac.nz). PhD Candidate, Auckland University of Technology.
[2] Corresponding author. (agilbert@aut.ac.nz). Professor of Finance, Auckland University of Technology.
[3] Sommer Kapitan (sommer.kapitan@aut.ac.nz). Associate Dean Academic, Auckland University of Technology.
[4] Ayesha Scott (Ayesha.scott@griffith.edu.ac). Senior Lecturer of Finance and Financial Planning, Griffith University. Adjunct Senior Lecturer, Auckland University of Technology.

I. INTRODUCTION

Buy Now Pay Later (BNPL) has grown rapidly worldwide as an alternative to traditional consumer debt products, with forecasts of continued rapid growth. A recent report predicts that BNPL spending will grow from $316 billion in 2023 (WorldPay, 2024) to $911.8 billion by 2030 with a compounded annual growth rate (CAGR) of more than 10% (Fintech Futures, 2025). One prediction for the growth in the New Zealand market is over 35% CAGR from 2024 to 2030. In contrast, other forms of consumer credit are expected to grow at just 6.5% over the same period (Dataintelo, n.d.).

BNPL provides zero-interest short-term financing that is quick and easy to access, and available without traditional credit checks (Hung, 2024). These features have fueled its rapid growth. A growing body of research shows that the features and perceptions of BNPL are influencing its use, particularly among the target demographic of young adults (Coffey et al., 2023). For instance, rather than being perceived as credit, BNPL is often marketed as a 'way to pay' (Duong et al., 2022), or where it is acknowledged as debt, it is pitched as more 'responsible' (Aalders, 2023). Additionally, young adults adopt BNPL partly because they believe peers view it as a better choice (Ackert et al., 2024). BNPL providers have been able to exploit young adults' mistrust of banks (Sawatzki et al., 2020) and perception of credit options like credit cards as risky (Deloitte Australia, 2018). This can result in young adults replacing credit cards with BNPL (Gerrans et al., 2022b). However, BNPL use encourages higher spending due to its lower immediate cost (Dadra et al., 2024). It also promotes impulsive and compulsive purchases (Raj et al., 2023). As a result, around 20% of users incur late fees (ASIC, 2020; AFM, 2025), and some rely on other forms of debt such as credit cards to repay BNPL debts (Guttman-Kenney et al., 2023; de Haan et al., 2024).

This research explores how consumers' perceptions of BNPL shape their use of these products, drawing on dual information processing theory. We focus on three key features of BNPL advertising: specifically, not seeing BNPL as a type of debt, being cheaper than other delayed payment options, and BNPL's positioning as having fewer negative consequences for users. We consider how acceptance of these perceptions affects both the frequency and quality of BNPL use. Quality is proxied by whether consumers repay on time (avoiding late fees) or resort to other debt to cover repayments. We employ a nationally representative sample of 705 young people, by ethnicity and gender, aged 18-34 in New Zealand collected in 2022. The survey collected information on financial status, financial capability and knowledge, debt use, and detailed questions on BNPL usage. The survey asked questions relating to the frequency of BNPL use to explore if perceptions are related to how often a consumer uses BNPL. We also asked several questions related to how well consumers use BNPL, specifically around whether consumers use other forms of debt products to repay BNPL instalments, and the frequency of incurring late penalties, both of which would indicate impulsive and unconsidered use of BNPL.

The results support our hypothesis that consumer perceptions shape BNPL use. Specifically, those who see BNPL as unlike traditional debt, cheaper, and low-consequence use BNPL more frequently, even after controlling for other debt usage. In addition to finding it is used more, we find some evidence it is related to poor debt management, with consumers relying on other debt to repay BNPL more often, although they do incur late fees less often. This may indicate that consumers understand the need to avoid incurring late fees, hence using other forms of debt to repay their BNPL. Of some concern, financial education appears unhelpful, with educated consumers less likely to recognize BNPL as debt. Overall, perceptions matter and drive intuitive rather than deliberative responses. The study finds that viewing BNPL as benign is linked to heavier use.

This research adds to a growing literature that considers consumer perceptions of BNPL, a rapidly growing financial product that is often overlooked in consumer finance regulations. As a result, the behavior of providers, especially in terms of how they target intuitive processing in consumers, may be critically important given the normal protections available to consumers and restrictions on advertising are absent. Provider marketing positions BNPL apps as accessible, responsible finance budgeting tools that are alternatives to credit cards, fueling consumer perceptions that increase uptake of BNPL products. However, our findings suggest that consumer protections typically associated with financial and debt literacy (Lusardi & Tufano, 2015; Galariotis & Monne, 2023; Martin et al., 2021) may be less effective in the context of BNPL

products. By framing BNPL as something other than traditional debt, providers may influence how consumers perceive and engage with these products. Consistent with this possibility, we find that perceptions of BNPL as non-debt, cheaper, and lower consequence are associated with greater use and some indicators of poorer repayment behavior. This raises questions as to whether traditional financial education remains sufficient in an environment characterized by rapidly evolving financial products and fintech innovations.

The rest of the paper is structured as follows. Section 2 provides a review of the literature on dual information processing, consumer perceptions of financial payment methods and BNPL. Section 3 outlines the data and methodologies employed. Section 4 covers the empirical results before we conclude in section 5.

II. THEORETICAL BACKGROUND: CONSUMER PERCEPTIONS

The core theoretical framework of this research is information processing, which explores intuitive versus deliberative consumer processing (Kahneman & Frederick, 2002). Financial technology (fintech) products involve both deliberative engagement for financial decisions, and intuitive or superficial engagement grounded on habitual use and consumer perceptions about branding or ease, convenience accessibility of use. That means a product that might at first involve deliberative, controlled thinking (selecting a Buy Now Pay Later provider, evaluating repayment timelines, reviewing missed payment fees) can become an ingrained habit that involves more intuitive, automatic and superficial (using one BNPL brand at checkout as habit). Yet fintech marketing targets intuitive, superficial, fast processing, which shapes perceptions and downstream behaviors. In this paper, we propose to test the perceptions of financial consumers, which are shaped by intuitive processing.

Information processing scholars highlight the limitations of rational decision-making and the influence of perception on human behaviors. People cannot make careful, rational decisions for every choice, which would result in information overload. The intuitive system developed to make decision-making easier and more automatic (Kahneman & Frederick, 2002). Thus, many decisions occur with intuitive perceptions and rely less on complex cognitive processes (Bargh & Chartrand, 1999). Perception, often more powerful and accessible than cognition, allows quick processing and response to stimuli but requires cognitive resources for accuracy (Fresco, 2022). Perceptions emerge as beliefs, expectations and evaluations of a product, shaped by consumer experience with the product. Perceptions also emerge as key determinants of behavior with regard to that product, especially in financial product uptake from mobile banking to Buy Now Pay Later app usage (Kumar & Rani, 2024; Schomburgk & Hoffmann, 2023).

In fintech contexts, this intuitive pathway is deliberately engaged through marketing tactics that highlight convenience, transparency, and community belonging, allowing consumers to adopt BNPL products with minimal deliberation. These perceptions, typically formed quickly and affectively in consumer information processing, often outweigh deeper cognitive analysis of fees, risks or long-term consequences (Lim et al., 2023).

This means consumers perceive financial products via (1) deliberative thinking based on product features and benefits, and (2) emotional, subjective perceptions based on personal feelings and experiences (Yu & Fang, 2009). A fintech app using engaging visuals and simple language claiming to be fairer than traditional debt appeals to intuitive processing. Compelling visuals grab attention, creating a stronger connection to the product and leading to rapid adoption often bypassing in-depth analysis. This stresses the need to address not only the role of perceptions in marketing but also their impact on financial decision-making. Thus, we focus in this work on rapidly formed perceptions as intuitive responses to BNPL marketing, rather than deliberative analysis of choices driven by deeper cognitive engagements.

A. *Perception of payment mechanism*

Payment mechanism design exploits intuitive processing (Soman, 2001; Mazar et al., 2016). The more frictionless the payment method, the easier it becomes for consumers to part with their money precisely because they bypass deliberative thinking. Chatterjee and Rose (2012) found that credit card users are more likely to perceive product benefits over costs. This is in contrast to cash users who are more aware of costs, as cash transactions require immediate physical loss of money, amplifying the 'pain' of consumption.

This effect is accelerated with digital payment mechanisms that are ever more easy, convenient, accessible, and frictionless. Consumers feel lower levels of pain of paying when paying via mobile phones and watches as opposed to credit cards (Pisani & Atalay, 2018). Digital payment methods, known for convenience and speed, alleviate the psychological pain of paying and lower the threshold for deliberative thinking required to make a purchase. Fintech providers, from Apple Pay to Buy Now Pay Later lenders, often aim to eliminate friction in payment as they increase ease of accessibility via mobile payment options. These tools target intuitive processing as they curate easy, convenient, effortless and seamless ways to pay without deep cognitive engagement required.

The frictionless experience of payment method is so potentially problematic that scholars propose consumer mindfulness as an intervention to increase financial self-control and lower usage of Buy Now Pay Later schemes that lead to impulse buying (Schomburgk & Hoffmann, 2023). Here, intuitive perceptions of frictionless convenience override deliberative calculations about costs. Marketing further amplifies these perceptions by framing BNPL as accessible and effortless, explored next.

B. *BNPL product distinctions*

BNPL is a consumer financing method available in store and online, providing a straightforward application process without extensive credit checks. Ease of access differentiates BNPL from credit options such as credit cards and personal loans, making it an increasingly popular choice among consumers. By 2024 in New Zealand, BNPL accounted for 11% of all e-commerce transactions, despite having been available for less than 10 years (Worldpay, 2024). The Consumer Financial Protection Bureau's 2023 report indicates a notable increase in average purchase amounts financed by BNPL, suggesting broader acceptance and reliance on BNPL for larger purchases. In New Zealand, retailers report a 20-30% increase in basket sizes when consumers opt for BNPL at checkout (PYMNTS, 2022). Despite the increasing usage, BNPL products are a form of debt that allows for the deferral of payment, creating an obligation that mirrors traditional indebtedness.

Importantly, factors key to BNPL uptake from ease of signup, instant access to make a purchase, and small instalments, are stimuli that feed intuitive processing. BNPLs allow users to acquire value now with a promise to repay in the future, with additional charges if terms are not met (Graeber, 2012). Afterpay, Klarna, and Zip divide the payment into four equal instalments over six weeks, with the first instalment made at the time of the purchase (25% of the cost). These structured payments propose to allow users to manage their cash flow more effectively, granting them immediate access to what they need without the upfront capital (Johnson et al., 2021; Ah Fook & McNeill, 2020).

Registration with a BNPL app provider is quick, often requiring minimal financial information, and only requiring email or phone verification. Regulations are patchy on consumer protections: Though laws in Australia and the UK in 2025 and 2026 mandate affordability checks, in New Zealand providers still skip credit checks. Upon verification, users have a credit limit that the provider sets when they join. For instance, Afterpay allows users to borrow up to $600 when they first join, but demonstrated ability to repay on time will see this increase to $2,000 over time. BNPL has become commonly available at stores and e-commerce sites for products from apparel to tattoos, medical costs, groceries, and even liquor stores (Kohere, 2022). BNPL market penetration is such that the payment mechanism can be used just about anywhere a digital payment option is offered.

While BNPL advertises itself as having no interest rate, no joining fees and no ongoing fees, this is only true if repayments are made on time. A consumer who fails to make a payment on time is subject to late fees which, while capped, can markedly increase the cost of the purchase. Afterpay for instance charges 25% of the original purchase of a below-$40 purchase when a payment is missed. For each purchase above $40, consumers are charged a $10 late fee, with additional late fees of $7 if the payment remains unpaid 7 days after the due date (Afterpay, 2023b) up to a maximum of 25% of the original purchase value. To reduce the risk of accumulating more debt, consumers in arrears can be temporarily suspended from further borrowing. Some BNPL providers also report late payments to credit bureaus, so missed payments may negatively impact a consumer's credit score. Continued non-payment is

dealt with in a similar fashion to other consumer finance debts including the use of debt recovery companies and legal proceedings.

The instant gratification provided by BNPL products has also led to concerns it is creating over-indebtedness and increase in non-planned, impulse purchases (Schomburgk & Hoffmann, 2023). Users can be repaying multiple BNPL purchases concurrently, or aided by the lack of reporting to credit agencies, have purchases with multiple BNPL providers increasing available credit. As a result, BNPL has been shown to increase debt accumulation (ASIC, 2020) and is criticized for facilitating over-indebtedness and overspending (Consumer NZ, 2022; Ministry of Business, Innovation & Employment, 2021).

Each of these product features of BNPL are marketed as simple and transparent, fostering intuitive perceptions of affordability and responsibility that reduce perceptions of risk and curate more uptake and usage.

C. *Marketing of BNPL Products*

BNPL providers deploy strategic marketing techniques that deliberately target consumers' intuitive, fast, and superficial information processing. Rather than encouraging deep cognitive engagement with costs or risks, marketing appeals shape perceptions that lower perceived risk, increase perceived convenience, and foster perceptions of trust and even belonging. These intuitive perceptions appear to encourage more rapid uptake and habitual use of BNPL products, an association we probe in our study.

BNPL providers actively frame themselves as ethical and transparent compared with traditional debt products (Gerrans et al., 2022a). Zip markets itself as a responsible credit provider, emphasizing transparency and fairness compared to traditional credit card models. While providers portray themselves as fairer than other debt products, late fees are still a significant revenue source. More than 25% of Laybuy's revenue comes from late penalties (Laybuy, 2020). These fees, though capped, can accumulate quickly and contribute to financial hardship. The perception of BNPL as a fintech product, seen as less expensive and more affordable than other credit and debt services, enhances its appeal (Gębski et al., 2025). Yet by downplaying these risks, BNPL marketing reduces psychological barriers to adoption.

These marketing strategies illustrate how BNPL providers target intuitive information processing to shape consumer perceptions that drive uptake and habitual use. BNPL products have revolutionized consumer finance with their user-friendly models. But these products present regulatory challenges. The lack of regulation leads to inconsistencies in consumer protection, disclosure, and lending practices, leaving loopholes that can be exploited (Bea & Bley, 2022). This lack of safeguards puts young and vulnerable consumers at risk of over-crediting and falling into debt traps (Johnson et al., 2021).

D. *Research gap*

This work notes a literature gap in understanding the relationships between consumer perceptions of BNPLs and their actual usage and management of BNPL products. Prior studies have shown that more financially literate (Martin et al., 2021) and debt literate (Lusardi & Tufano, 2015; Galariotis & Monne, 2023) consumers are likely to avoid the use of costly debt products. However, BNPL providers have attempted to frame their products as something other than traditional debt. This raises the possibility that BNPL providers, in the way that they have framed their products, may change the way that even financially literate consumers behave when it comes to BNPL. The literature has not yet clarified how BNPL marketing leverages intuitive information processing to shape perceptions of risk, convenience, affordability and trust, and how these perceptions in turn drive financial decision-making involving usage and management of BNPL products. Given the defined gap, this paper explores the relationship between BNPL perceptions that are shaped by marketing and consumer responses and corresponding BNPL usage. We probe the intuitive information processing that results in consumer perceptions of BNPL to explore relationships, rather than surveying or testing more deliberative choices of financial consumers.

III. DATA AND METHODOLOGY

A. *Survey*

We collected data on consumer perceptions of BNPL, BNPL use, and other relevant factors based on a survey of 705 young adults (aged 18-34) in New Zealand in late 2022. The survey was conducted by Qualtrics which resulted in a diverse national sample of respondents. We measured consumer perceptions, driven by intuitive processing, of BNPL based on three factors that were prominent in design and advertising of BNPL products; that BNPL is not a form of debt, that BNPL is a more affordable way to buy products than other forms of consumer finance, and that it comes with little or no consequences. Providers such as Afterpay, the largest BNPL provider in NZ, were particularly prominent in marketing as not debt, as a result of the lack of fees or interest if it was repaid on time, and that they did not conduct credit checks or disclose missed payments to credit providers which would affect credit scores (Afterpay, 2023a). Consumers were asked to rate their agreement with three statements (see Appendix 1 for question details) on a five-point Likert scale. This was reduced to a three-point scale where people either disagreed, were neutral, or agreed with the statement.

We hypothesize that the messaging from providers regarding BNPL products will have influenced consumers' adoption and use of these products. In particular, the messaging around BNPL is likely designed to increase use of BNPL by making it seem relatively benign, triggering intuitive decision-making rather than more cognitive processes. By making BNPL seem safe, encouraging impulsive and habitual use of BNPL, consumers are more likely to fail to consider the future repayments and whether these were affordable. A failure to plan for future repayments would likely increase the incidence of users incurring late penalties. Additionally, consumers are more likely to use other forms of debt to meet their BNPL repayment obligations. As such, we asked users about how frequently they used BNPL, whether they had incurred late penalties, and whether they used other debts like credit cards to repay their BNPL purchases. The formulation of these questions is available in Appendix 1.

We also collect and measure other factors that may influence the frequency and way that BNPL is used. Specifically, we control for respondents' financial capability, a concept that incorporates both general financial knowledge, self-efficacy, and good financial behaviors. More financially capable individuals are less likely to engage in costly debt behaviors (Lusardi, 2011) and make poor financial decisions in general (Lučić et al., 2023). Additionally, specific knowledge of debt, debt literacy, has been linked to over indebtedness and poor use of debt (Lusardi & Tufano, 2015), while having a more favorable attitude towards debt that can increase the use of consumer debt (Muradoglu et al., 2012). We also control for respondents' money management skills, which have been shown to negatively correlate with debt use, and materialism which is positively associated with debt use (Garðarsdóttir & Dittmar, 2012). Finally, we captured a range of demographics that may influence the use of age, gender, employment status, ethnicity, and living circumstances. Details of the questions and sources of the scales are contained in Appendix 1.

B. *Methodology*

To understand the association between consumer perceptions of BNPLs and the frequency of BNPL use we employed ordered logistic regressions. The frequency of BNPL use was coded so that a higher score from a respondent indicates greater use. Given the ordered nature of this outcome, ordered logistic regression is the most appropriate estimation technique, as it explicitly models the probability of being in higher versus lower response categories without treating the categories as continuous. We confirmed that the proportional odds assumption holds, supporting the use of this model. For our other two dependent variables, the variables were coded as binary outcomes, 1 if the respondent had incurred late fees or used other debt to repay BNPL. As such, we used logistic regressions for these variables. We report odds ratios in all regressions. Odds ratios predict the respondent having a particular outcome based on a characteristic i.e. incurring a late penalty if they perceive BNPL as debt. An odds ratio above 1 indicates a greater probability of experiencing that outcome, while an odds ratio below 1 indicates a lesser probability of that outcome.

In addition to the controls mentioned above, we also consider two additional controls to ensure the robustness of our findings. The first is debt class. The usage patterns of other forms of consumer debts may in turn influence the use of BNPL. Those using more debts

may be more open to using BNPL while debt experience may influence the wisdom with which BNPL is used. We collect information on whether users currently use 10 other current forms of commonly available debt; mortgages, student loans, personal loans, non-bank loans (third tier lenders), car loans, credit cards, overdrafts (revolving credit), hire purchases, and fixed term contracts. We then employ latent class analysis to identify patterns in debt use across the range of debts that people currently had, resulting in the identification of four distinct classes. Heavy debt users generally had the highest probability of currently using 7 out of the 10 debt types although they had lower than average use of 'good' debts (mortgages and student loans). Moderate debt users had higher than average exposures to most debt, but lower than heavy users, and no exposure to credit cards. Mortgagees tended to have low exposure to all debts except mortgages where they were twice as likely as the rest of the sample to have a mortgage, and every member of this class had a credit card. Debt avoiders had almost no exposure to any form of debt except student loans. Our second additional control was to include a dummy variable if the respondent currently had an active BNPL contract.

While 705 respondents replied to the sample, some respondents did not provide answers to all questions. As a result, our regressions were only able to use 655 respondents. Additionally, for the question regarding late penalties, only those respondents who had used BNPL were asked about late penalties resulting in 465 respondents.

C. *Data analysis*

Table 1 presents summary statistics of the measures used in this study. Panel A summarizes the percentage of respondents who were classified into each category for our BNPL use and consumer perception of BNPL variables along with providing the average score. In terms of the frequency of BNPL use we observe that about 28.5% of the sample have never used BNPL, nearly half of respondents have used it infrequently, either once or twice or use it no more often than once every 2-3 months, while about a quarter of respondents use it at least monthly suggesting that they constantly have at least one active BNPL contract. Over 43% of respondents have had to use other forms of debt like a credit card to repay their BNPL loan. Given BNPL advertises as an alternative to traditional debt, this suggests many BNPL users are failing to plan for repayments suggesting poor debt management practices. Interestingly, fewer respondents had incurred late penalties with just under 30% having had at least one late penalty. This is however higher than figures reported by ASIC (2020) in relation to Australian's BNPL use where around 20% had incurred late penalties.

With regards to consumer perceptions of BNPL 60% of respondents agreed that BNPL is debt, however nearly 1 in 5 respondents disagreed, a concerningly higher percentage, while around the same were not sure. This suggests that BNPL providers have been somewhat successful in distinguishing BNPL from traditional debt products. Just under half of respondents agreed that BNPL is always cheaper than traditional debt, with nearly 30% unsure. Similar percentages of respondents also saw BNPL as having fewer consequences.

Panel B provides summary statistics of our key control variables. We observe a very wide range in financial capability with a minimum of just 1.71 up to a maximum of 18.75 (out of 20). The average respondent scored 10.43 with a similar median suggesting that financial capability in young adults is relatively low, supporting international evidence (Garg & Singh, 2018). Debt literacy was even lower with an average of just 1.12 out of 3 questions. This is concerning given evidence that debt literacy plays an important role in predicting debt use (Lusardi & Tufano, 2015). In terms of debt attitudes, on average, respondents had a neutral attitude towards debt. A score of 3.07 suggests that the average response was around a 3 on a five-point Likert scale. However, we see a wide range of attitudes with some people being very risk tolerant (score of 5) while others were very debt averse (score of 1). Money management was measured as the average of respondent's performance (on a 5-point scale) of good money management practice such as keeping an eye on their financial situation and repaying bills on time. We observe that on average respondents leaned slightly towards agreeing that they undertook these practices with a score of 3.6 although some respondents indicated very poor money management practices (score of 1). Finally, we observe that our respondents were slightly above neutral with regards to the agreement with questions about their materialism. Respondents' income was measured as the last month's income, winsorized at 1 and 99 percentiles, and then logged to deal with a strong skew in the data. On average respondents

reported an average monthly income of around $3,800 with a median of $3,000. The maximum after winsorizing reported was $13,000 per month, the equivalent of around $156,000 annually.

TABLE I

SUMMARY STATISTICS

Panel A: BNPL Frequency and Use and Consumer Perceptions					
Variable	**0**	**1**	**2**	**3**	**Mean**
Frequency of use BNPL products		28.51	47.23	24.26	1.96
Borrow to repay BNPLs	56.83	43.17		-	-
Incurred late penalty	71.49	28.51		-	-
Perceived as debt		21.84	18.16	60	2.38
Perceived as cheaper		20.57	29.79	49.65	2.29
Perceived as fewer consequences		21.7	30.21	48.09	2.26
Panel B: Control Variables					
Variable	**Mean**	**Median**	**SD**	**Min**	**Max**
Financial Capability	10.43	10.44	3.43	1.71	18.75
Debt Literacy	1.115	1.000	0.759	0	3
Debt Attitudes	3.067	3.000	0.639	1	5
Money Management	3.633	3.667	0.742	1	5
Materialism Value Scale	3.226	3.333	0.711	1	5
After-tax Income (monthly)	7.54	8.0	1.71	0	10.37
Panel C: Demographics					
Variable			**% Respondents**		
Gender					
Men			43.70		
Women			56.30		
Age					
18-20			16.45		
21-23			20.99		
24-26			18.16		
27-29			14.75		
30-32			20.28		
33-34			9.36		
Ethnicity					
Māori			20.43		
NZ European			64.82		
Pacific Islander			9.50		
Asian			9.79		
Indian			6.24		
Employment Status					
Working Full Time			59.57		
Working Part Time			19.01		
Studying			19.15		
Stay at home			5.39		
Unemployed			4.82		
Has financial dependents			44.26		
Living Situation					
Living Alone			9.79		
Living with partner (no children)			23.97		
Living with partner (with children)			24.11		

Panel C: Demographics	
Variable	**% Respondents**
Living with children (no partner)	3.83
Live with parents/relatives	36.17
Flatting	1.99
Debt Class – Heavy Debt Use	16.74
Debt Class – Moderate Debt Use	23.40
Debt Class – Mortgagee	15.32
Debt Class – Debt Avoider	44.54
Current BNPL	35.04

Note. This table presents summary statistics of the consumer perception, BNPL usage, and control variables employed. Panel A presents the percentage of respondents categorized into each category for the consumer perception variables; Perceived as Debt, Perceived as Cheaper, Perceived as having fewer consequences, and the BNPL usage variables, Frequency of Use, Borrow to repay BNPLs, Incurred late penalty. Panel B presents the sample average of respondents scores for each of the control measures. Details of the measures are contained in Table 1. Panel C presents the sample demographics. Debt Class variables were calculated based on latent class analysis of respondents current exposure to other types of consumer debt. Current BNPL is a dummy variable that equals 1 if the respondent had a current BNPL contract.

Panel C presents sample demographics. On average our sample was slightly over-represented by women, a widely recognized issue with the use of online survey panels. Our sample was well spread across age groups with 21-23 and 30-32 age groups having the largest percentage of respondents, while 33-34 having the smallest but also featuring only two years compared to the three of other bands. In terms of ethnicity the sample was broadly representative of the New Zealand population with a slight over-representation of Māori and a slight under-representation of NZ European respondents. Nearly 60% of respondents were in full-time employment, with around 19% of respondents either working part-time or studying, although there was a relatively high overlap within this group as students often work part-time. Roughly 10% of respondents were out of work, either not looking for work (stay at home) or looking for work. The majority of our respondents were still living at home (36%) with nearly 50% living with a significant other either with or without children. 44% of respondents had a financial dependent. In terms of debt classes, we see that most of our respondents were in the No Debt class, a group that tends to be younger suggesting that many may not have started building experience with debt yet. Our mortgagee class was the smallest class, likely driven by the high cost of homes in New Zealand which is delaying home ownership (Bourassa & Shi, 2017). 35% of our sample had an active BNPL at the time the survey was taken.

IV. EMPIRICAL RESULTS

A. *Consumer perceptions of BNPL*

We begin our analysis of the impact that consumer perceptions of BNPL have on the way they use and repay their BNPL by looking at whether BNPL is viewed as a form of debt. As noted earlier, BNPL providers have attempted to distinguish BNPL from debt by highlighting the fact it has no cost, if paid on time, and has fewer negative consequences (Afterpay, 2023c). This has result in two in five respondents being unsure or disagreeing that BNPL is a type of debt. As we can see in Table 2, this is related to the way in which consumers interact with BNPL. The results of the ordered logistic regressions are presented as odds ratios. In ordered logistic regression, odds ratios indicate how a predictor shifts the likelihood of being in a higher rather than a lower category of the outcome. For example, when examining consumer perceptions of BNPL as debt, an odds ratio greater than 1 would mean that those who view BNPL as “debt” are more likely to fall into higher categories of BNPL use (e.g., moving from no use to infrequent use, or from infrequent to high use). An odds ratio less than 1 would mean the opposite—that stronger perceptions of BNPL as debt reduce the likelihood of frequent use.

The first three columns of Table 2 present the results where the dependent variable is the frequency of BNPL use, either no use (1), infrequent use (2), or high use (3). The results show consistent odds ratios that are significantly lower than 1 indicating that those respondents who perceive BNPL as debt are about 25% less likely to wind up in a higher frequency of use group.

This is robust to the inclusion of debt classes and current use of BNPL, although adding current use reduces the likelihood by 32.5%. This pattern also holds for our other two outcome variables, incurring a late fee and using other debt to repay BNPL. In both cases we observe that perceiving BNPL as a form of debt is associated with a reduced likelihood of misusing BNPL, resulting in late fees or the need to use other debt to cover repayments, by around 25% before we include debt classes and current use. This presents consistent evidence that not viewing BNPL as debt is associated with an increase in the use of BNPL and in poor outcomes. It is worth noting that Duong et al. (2022) shows that, especially for low value items, the late fees on BNPL result in a higher implied interest rate than would be associated with even high-cost debt items like credit cards.

In terms of our controls, we find that NZ Europeans and Pacific Island respondents were consistently more likely to use BNPL more often, and, along with Māori, to use other debt to repay BNPL. Interestingly, those respondents that are not working, either stay at home or unemployed, were between 220% and 350% more likely to be in a higher BNPL use group. This is especially worrying for unemployed respondents who already face low or uncertain incomes. Unemployed respondents were also more likely to incur a late penalty once we control for debt classes. Those living with a partner and children are also nearly twice as likely to be in a higher use group and between two and four times as likely to incur a late penalty. We also see elevated odds ratios for single parents although the small number of respondents is likely responsible for the lack of significance.

In terms of our other controls, we observe that financial capability doesn't have the expected association, with more financially capable respondents not using BNPL less and being about 16% more likely to report they incur a late penalty. Given we would expect financially capable respondents to be better about using debt, including using it less often and ensuring that they minimize the cost of debt, this is an anomaly. One possibility is that BNPL, which doesn't look like traditional debt, may result in respondents not treating it with the same caution they would more traditional debt. Additionally, the late fees may appear small given they are expressed in dollars and are generally around $10. In contrast, higher debt literacy is associated with a 25-30% reduction in incurring a late penalty, although it doesn't relate to the frequency with which people use BNPL. We see a strong relationship for debt attitudes, with more permissive attitudes towards debt associated with higher use of BNPL, more likelihood of using other debt to repay BNPL (suggesting not planning their BNPL repayments), and higher likelihood of incurring a penalty. Better money management is related in this study to fewer poor outcomes from using BNPL, with around 55% less likelihood of using other debt to repay BNPL and nearly 70% reduction in the likelihood of incurring a late penalty. Materialism is associated with the frequency of using BNPL once we control for current use and debt classes, and has a positive relationship with the likelihood of using other debt to repay BNPL, perhaps indicating impulsive use of BNPL. Higher income was also associated with slightly higher use of BNPL and slightly lower incidence of late penalties. Compared to heavy debt users, all our debt classes had lower likelihoods of using BNPL, using debt to repay BNPL and incurring late penalties.

One anomalous finding is that while current use of BNPL is associated with greater likelihood of being in a higher use category by six times and also more likelihood of using debt to repay BNPL, it is also related to a reduction in the likelihood of incurring a late penalty. One explanation is that active users of BNPL, in the interest of retaining access to the service, may be juggling their repayments by using other debt sources to make repayments. In this way, they avoid the immediate costs of late penalties, but at the expense of shifting their obligations elsewhere, potentially compounding their overall indebtedness.

Table 3 presents the results where we consider consumer perceptions of BNPL as cheaper than other forms of debt. BNPL actively promotes the zero interest, no fees nature of the product. Of note however is that this perception may not be accurate. A BNPL user missing a repayment may incur an effective cost of debt that is higher than if they used a credit card.

TABLE II

ORDINAL REGRESSION OUTPUT (PERCEPTIONS OF IS DEBT)

	Frequency of use BNPL products			**Borrow to repay BNPL products**			**Late penalty**		
	Org	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**
Perceived as debt	0.74***	0.75***	0.68***	0.75**	0.76**	0.73**	0.72**	0.62***	0.64***
	(0.07)	(0.08)	(0.07)	(0.09)	(0.10)	(0.09)	(0.10)	(0.10)	(0.10)
Age	1.06	1.03	1.03	0.94	0.91	0.91	1.03	1.02	1.02
	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)	(0.07)	(0.08)	(0.09)	(0.09)
Gender	1.27	1.32	1.16	0.94	0.93	0.88	0.42***	0.43***	0.46***
	(0.21)	(0.23)	(0.21)	(0.20)	(0.20)	(0.19)	(0.10)	(0.11)	(0.11)
Māori	1.42*	1.33	1.34	2.68***	2.59***	2.60***	0.74	0.77	0.78
	(0.29)	(0.29)	(0.30)	(0.69)	(0.70)	(0.70)	(0.22)	(0.24)	(0.26)
NZ European	2.11***	2.06***	2.06***	2.50***	2.39***	2.34***	0.84	0.91	0.91
	(0.48)	(0.48)	(0.51)	(0.77)	(0.75)	(0.72)	(0.29)	(0.34)	(0.36)
Pasifika	1.79**	1.85**	1.76*	2.30**	2.44**	2.37**	0.86	0.99	0.93
	(0.50)	(0.52)	(0.56)	(0.85)	(0.93)	(0.88)	(0.35)	(0.44)	(0.42)
Asian	0.69	0.66	0.65	2.07*	2.09*	2.07*	1.09	1.11	1.11
	(0.20)	(0.20)	(0.21)	(0.80)	(0.87)	(0.87)	(0.54)	(0.57)	(0.58)
India	2.48**	2.34**	1.84	2.04	1.91	1.83	0.81	0.69	0.76
	(0.97)	(0.95)	(0.70)	(0.88)	(0.89)	(0.80)	(0.39)	(0.35)	(0.39)
Full time work	1.87**	1.68*	1.57	1.72	1.62	1.59	1.09	0.95	0.95
	(0.54)	(0.48)	(0.46)	(0.61)	(0.60)	(0.57)	(0.47)	(0.46)	(0.47)
Part time work	1.20	1.25	1.08	0.10	1.09	1.06	0.81	0.82	0.84
	(0.33)	(0.35)	(0.31)	(0.35)	(0.41)	(0.39)	(0.36)	(0.40)	(0.40)
Studying	0.87	0.86	0.86	0.79	0.75	0.75	0.75	0.90	0.90
	(0.21)	(0.21)	(0.22)	(0.28)	(0.27)	(0.27)	(0.31)	(0.37)	(0.37)
Stay at home	2.99***	2.70**	2.28**	1.25	1.08	1.01	0.84	0.85	0.85
	(1.23)	(1.12)	(0.96)	(0.66)	(0.58)	(0.54)	(0.50)	(0.54)	(0.55)
Unemployed	3.50**	3.37**	2.68**	2.46	2.36	2.21	2.76	3.62*	3.78*
	(1.77)	(1.69)	(1.33)	(1.60)	(1.48)	(1.32)	(1.94)	(2.57)	(2.84)
With financial dependents	0.72	0.60**	0.64*	1.11	1.01	1.02	1.13	0.72	0.70
	(0.17)	(0.14)	(0.16)	(0.31)	(0.29)	(0.30)	(0.41)	(0.29)	(0.28)
Live with partner (no children)	1.39	1.45	1.48	1.13	1.17	1.19	1.22	1.51	1.49
	(0.42)	(0.43)	(0.47)	(0.44)	(0.44)	(0.44)	(0.52)	(0.64)	(0.63)
Live with partner (and children)	2.05*	2.20**	1.98*	1.79	1.93	1.87	2.51*	4.07**	4.17**
	(0.78)	(0.84)	(0.78)	(0.79)	(0.84)	(0.82)	(1.29)	(2.25)	(2.32)
Live with children	1.51	1.48	1.76	2.53	2.51	2.54	1.14	1.34	1.22
	(0.78)	(0.78)	(0.89)	(1.63)	(1.57)	(1.57)	(0.72)	(0.90)	(0.85)

	Frequency of use BNPL products			Borrow to repay BNPL products			Late penalty		
	Org	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**
Live with parents/relatives	1.31	1.41	1.26	1.22	1.28	1.24	1.12	1.45	1.53
	(0.37)	(0.39)	(0.37)	(0.46)	(0.46)	(0.45)	(0.46)	(0.60)	(0.65)
Live with non-relatives	0.77	0.89	1.11	2.39	2.72	2.98	1.41	2.68	2.62
	(0.45)	(0.53)	(0.63)	(1.57)	(1.87)	(2.03)	(1.59)	(2.57)	(2.65)
Financial capability	0.97	0.98	1.01	0.94*	0.95	0.95	1.17***	1.17***	1.16***
	(0.03)	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.05)	(0.06)	(0.06)
Debt literacy	0.99	1.01	0.96	0.99	1.01	0.10	0.75*	0.69**	0.70**
	(0.11)	(0.11)	(0.11)	(0.13)	(0.14)	(0.14)	(0.12)	(0.11)	(0.12)
Debt attitudes	1.57***	1.50***	1.51**	1.51**	1.45*	1.46*	1.75***	1.84***	1.80**
	(0.25)	(0.23)	(0.24)	(0.28)	(0.28)	(0.29)	(0.38)	(0.42)	(0.41)
Money management	0.97	1.06	0.92	0.45***	0.46***	0.44***	0.31***	0.32***	0.34***
	(0.13)	(0.15)	(0.13)	(0.08)	(0.08)	(0.08)	(0.07)	(0.08)	(0.08)
Materialism value scale	1.18	1.18	1.24*	1.57***	1.59***	1.61***	1.35	1.32	1.28
	(0.15)	(0.15)	(0.16)	(0.25)	(0.25)	(0.26)	(0.26)	(0.26)	(0.25)
After tax income	1.12**	1.13**	1.12**	0.95	0.95	0.94	0.84**	0.83**	0.83**
	(0.05)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)	(0.08)	(0.07)
Debt Class Moderate Debt		0.40***	0.90		0.41***	0.50**		0.45**	0.35***
		(0.10)	(0.24)		(0.13)	(0.17)		(0.15)	(0.14)
Debt Class Mortgagees		0.18***	0.59*		0.21***	0.30***		0.10***	0.07***
		(0.05)	(0.18)		(0.09)	(0.13)		(0.06)	(0.04)
Debt Class Debt avoiders		0.45***	0.64**		0.62*	0.70		0.19***	0.17***
		(0.10)	(0.14)		(0.16)	(0.19)		(0.06)	(0.06)
Current BNPL			6.10***			1.64**			0.61*
			(1.25)			(0.37)			(0.17)
Observations	655	655	655	655	655	655	465	465	465
Pseudo R-squared	0.070	0.097	0.16	0.15	0.17	0.18	0.22	0.28	0.29

Note. This table presents the ordinal logistic regression results for the association between respondents' perception of whether BNPL is debt and BNPL use. Perceived as debt is measured on a three-point scale where 1 is disagree it is debt, 2 is neutral and 3 is agree. Frequency of use is measured on a three-point scale with those who score 0 never having used it, 1 used in infrequently, 2 used it occasionally and 3 used it frequently. Borrow to repay is a binary variable that is 1 if a respondent has used debt to repay their BNPL, and late penalties is a dummy that equals 1 if a respondent reported incurring late penalties. In addition, the analysis controls for demographic factors such as age, gender, and ethnicity, as well as financial factors including employment status, financial dependents, living arrangements, financial capability, debt literacy, attitudes towards debt, money management skills, materialism values, and after-tax income. Details of the measures are contained in Table 1. Panel C presents the sample demographics. Debt Class variables were calculated based on latent class analysis of respondents' current exposure to other types of consumer debt. Current BNPL is a dummy variable that equals 1 if the respondent had a current BNPL contract. The coefficients are reported as odds ratios. Asterisks denote statistical significance (*p < 0.1, **p < 0.05, ***p < 0.01). The numbers in parentheses in the regression tables represent the standard errors of the coefficients.

The framing of the question asks whether BNPL is always cheaper than other forms of debt. As noted in Table 1, about half of respondents agreed with these statements.

We observe that those who agree that BNPL is always cheaper are about 40-64% more likely to be in a higher BNPL use group. This suggests that the perceived benefit of BNPL, no cost delayed purchase costs for goods, is effectively related to use of BNPL products. Consumers can be using BNPL to delay payment while they have the money to purchase now or have planned for repayment. However, we do also see some evidence that consumers may be enticed into spending without adequate planning. Specifically, we note that users have about a 26-32% higher likelihood of using other debt to repay BNPL, although this becomes insignificant once we control for current use. In contrast, we observe that respondents are between 25% and 35% less likely to incur late penalties. A possible explanation for these conflicting findings is that BNPL users who are conscious of the lower cost of using BNPL prioritize repayment to ensure they gain this benefit but may not be adequately planning how to repay their BNPL so are using other forms of debt to avoid incurring fees. Other controls are broadly consistent with Table 2 so are not discussed. Overall the results for Table 3 suggest that consumer perception that BNPL is a cheap form of financing is effective in encouraging higher use of BNPL, but is not effective in ensuring that users are able to manage the cost of the repayments, as noted by the debt juggling consumers engage in.

Table 4 examines our third consumer perception, that BNPL has fewer negative consequences than other forms of debt. BNPL providers have advertised the fact that they do not conduct credit checks and do not report late fees to credit agencies thus other forms of debt are riskier to use. Again, we see evidence that this framing is effective in getting consumers to use BNPL more often with users around 40-50% more likely to be in a higher frequency of use category if they believe BNPL has fewer consequences. Of interest though is that beliefs about the consequences of BNPL are not associated with either using other forms of debt to repay BNPL or late fees. This is somewhat surprising as a perception that BNPL is relatively benign might be expected to result in consumers failing to prioritize late fees or having to use other debt more often. The absence of a link between low-consequence perceptions and repayment difficulties may reflect features of BNPL design — such as automatic deductions and reminders — that limit late payment risk, even among consumers who view BNPL as relatively benign. It is also possible that repayment behavior is shaped by cost perceptions or debt awareness, while "low consequence" beliefs are primarily associated with adoption. Together, this suggests that while such perceptions are related to expand BNPL uptake, they do not necessarily degrade repayment quality. Because our survey measures associations, it is unclear what the driving factors are, though we probe clear and significant relationships in the collected data.

The findings of the ordinal logistic regression (See Table 4) demonstrate significant findings related to the perception of BNPL as cheaper (is cheaper) in three different contexts: frequency of using BNPL products, borrowing to repay BNPL products, and incurring late penalties.

B. *Principal Components Analysis*

Given the three consumer perception variables are not independent, we next conduct principal components analysis (PCA) to uncover broader perception dimensions that capture different combinations of perceptions giving us a better understanding of a respondent's overall perception of BNPL. We use PCA to reduce the dimensionality of the data and allow for parsimony in results presentation and analyses. As shown in Table 5, the first two components explain nearly 80% of the total variance. Additionally, the first two components give theoretically meaningful dimensions. Component 1 which loads positively on all three perceptions represents a strong positive perception of BNPL that it is both good and benign despite being viewed as debt. Component 2 in contrast represents a more cautious perception of BNPL where respondents view it as debt and are skeptical of the benefits and recognize the risks associated with BNPL, the negative loadings on the cheaper and consequences perceptions. We would therefore expect that component 1 is associated with greater use of BNPL and those respondents scoring higher on component 1 are also more likely to misuse BNPL with more associations with incurring late fees and using other debt to repay BNPL. Component 2 in contrast should be associated with less use of BNPL and where it is used, better use such as less likelihood of late fees and using other debt.

TABLE III

ORDINAL REGRESSION OUTPUT (PERCEPTIONS OF IS CHEAPER)

	Frequency of use BNPL products			Borrow to repay BNPL products			Late penalty		
	Org	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**
Perceived as Cheaper	1.64***	1.54***	1.40***	1.32**	1.26*	1.23	0.75*	0.66**	0.68**
	(0.17)	(0.16)	(0.15)	(0.19)	(0.17)	(0.17)	(0.11)	(0.11)	(0.11)
Age	1.01	0.99	0.99	0.91	0.89*	0.89*	1.03	1.01	1.01
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.08)	(0.09)	(0.09)
Gender	1.20	1.25	1.10	0.91	0.91	0.87	0.42***	0.44***	0.47***
	(0.20)	(0.21)	(0.19)	(0.19)	(0.20)	(0.19)	(0.10)	(0.11)	(0.12)
Māori	1.49*	1.40	1.40	2.75***	2.65***	2.65***	0.73	0.76	0.77
	(0.31)	(0.30)	(0.31)	(0.69)	(0.69)	(0.67)	(0.21)	(0.24)	(0.25)
NZ European	1.97***	1.95***	1.95***	2.33***	2.25***	2.21***	0.83	0.90	0.89
	(0.44)	(0.46)	(0.48)	(0.68)	(0.67)	(0.66)	(0.29)	(0.33)	(0.35)
Pasifika	1.74**	1.82**	1.77*	2.19**	2.33**	2.29**	0.85	0.96	0.89
	(0.48)	(0.52)	(0.57)	(0.76)	(0.85)	(0.82)	(0.34)	(0.42)	(0.40)
Asian	0.69	0.68	0.66	2.13*	2.16*	2.15*	1.10	1.13	1.13
	(0.21)	(0.21)	(0.22)	(0.83)	(0.90)	(0.90)	(0.54)	(0.57)	(0.57)
India	2.17**	2.10*	1.71	1.87	1.82	1.75	0.80	0.69	0.77
	(0.83)	(0.84)	(0.65)	(0.80)	(0.83)	(0.77)	(0.38)	(0.34)	(0.39)
Full time work	1.89**	1.70*	1.57	1.70	1.63	1.61	1.03	0.91	0.92
	(0.54)	(0.48)	(0.46)	(0.60)	(0.59)	(0.58)	(0.44)	(0.44)	(0.45)
Part time work	1.26	1.31	1.17	1.03	1.13	1.11	0.85	0.90	0.91
	(0.34)	(0.36)	(0.33)	(0.36)	(0.42)	(0.41)	(0.37)	(0.43)	(0.44)
Studying	0.84	0.83	0.82	0.80	0.74	0.74	0.71	0.85	0.86
	(0.21)	(0.20)	(0.20)	(0.27)	(0.27)	(0.26)	(0.30)	(0.35)	(0.36)
Stay at home	2.56**	2.34**	2.07*	1.05	0.95	0.91	0.87	0.93	0.93
	(1.06)	(0.97)	(0.86)	(0.55)	(0.51)	(0.49)	(0.52)	(0.60)	(0.61)
Unemployed	3.24**	3.11**	2.52*	2.31	2.23	2.11	2.79	3.61*	3.77*
	(1.56)	(1.45)	(1.24)	(1.49)	(1.37)	(1.26)	(1.92)	(2.46)	(2.73)
With financial dependents	0.86	0.72	0.76	1.27	1.14	1.15	1.17	0.77	0.75
	(0.20)	(0.17)	(0.18)	(0.36)	(0.33)	(0.34)	(0.44)	(0.32)	(0.31)
Live with partner (no children)	1.41	1.47	1.47	1.06	1.10	1.10	1.11	1.30	1.29
	(0.43)	(0.44)	(0.46)	(0.40)	(0.40)	(0.40)	(0.46)	(0.54)	(0.54)
Live with partner (and children)	1.74	1.88*	1.70	1.52	1.67	1.61	2.28	3.40**	3.54**
	(0.64)	(0.69)	(0.65)	(0.66)	(0.71)	(0.69)	(1.18)	(1.87)	(1.97)

	Frequency of use BNPL products			Borrow to repay BNPL products			Late penalty		
	Org	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**
Live with children	1.31	1.31	1.56	2.25	2.26	2.28	1.21	1.46	1.31
	(0.67)	(0.69)	(0.79)	(1.40)	(1.38)	(1.39)	(0.75)	(0.96)	(0.90)
Live with parents/relatives	1.18	1.28	1.13	1.06	1.13	1.09	0.97	1.16	1.25
	(0.32)	(0.34)	(0.32)	(0.38)	(0.39)	(0.38)	(0.40)	(0.48)	(0.53)
Live with non-relatives	0.60	0.70	0.85	1.91	2.23	2.36	1.38	2.52	2.44
	(0.33)	(0.40)	(0.47)	(1.21)	(1.48)	(1.56)	(1.51)	(2.32)	(2.31)
Financial capability	0.98	0.98	1.01	0.94	0.95	0.96	1.17***	1.17***	1.16***
	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.06)	(0.06)	(0.06)
Debt literacy	0.89	0.92	0.88	0.93	0.95	0.94	0.72**	0.67**	0.68**
	(0.10)	(0.10)	(0.10)	(0.12)	(0.13)	(0.13)	(0.11)	(0.11)	(0.11)
Debt attitudes	1.44**	1.40**	1.43**	1.44*	1.38*	1.39*	1.81***	1.91***	1.86***
	(0.23)	(0.22)	(0.23)	(0.28)	(0.27)	(0.28)	(0.39)	(0.44)	(0.43)
Money management	0.874	0.951	0.838	0.415***	0.421***	0.409***	0.311***	0.323***	0.341***
	(0.12)	(0.13)	(0.11)	(0.07)	(0.08)	(0.07)	(0.07)	(0.08)	(0.08)
Materialism value scale	1.09	1.09	1.14	1.45**	1.48**	1.49**	1.34	1.30	1.27
	(0.14)	(0.14)	(0.15)	(0.23)	(0.23)	(0.24)	(0.26)	(0.26)	(0.25)
After tax income	1.08*	1.09*	1.08	0.92	0.92	0.92	0.84**	0.83**	0.84**
	(0.05)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)	(0.07)
Debt Class Moderate Debt		0.42***	0.86		0.48***	0.51**		0.45**	0.35***
		(0.10)	(0.22)		(0.13)	(0.16)		(0.16)	(0.13)
Debt Class Mortgagees		0.20***	0.57*		0.22***	0.28***		0.10***	0.07***
		(0.06)	(0.17)		(0.10)	(0.13)		(0.06)	(0.04)
Debt Class Debt avoiders		0.49***	0.68*		0.67	0.73		0.21***	0.19***
		(0.11)	(0.15)		(0.17)	(0.19)		(0.07)	(0.06)
Current BNPL			5.23***			1.45*			0.60*
			(1.03)			(0.38)			(0.16)
Observations	655	655	655	655	655	655	465	465	465
Pseudo R-squared	0.080	0.10	0.16	0.15	0.17	0.17	0.22	0.27	0.28

Note. This table presents the ordinal logistic regression results for the association between respondents' perception of whether BNPL is debt and BNPL use. Perceived as cheaper is measured on a three-point scale where 1 is disagree it is debt, 2 is neutral and 3 is agree. Frequency of use is measured on a three-point scale with those who score 0 never having used it, 1 used in infrequently, 2 used it occasionally and 3 used it frequently. Borrow to repay is a binary variable that is 1 if a respondent has used debt to repay their BNPL, and late penalties is a dummy that equals 1 if a respondent reported incurring late penalties. In addition, the analysis controls for demographic factors such as age, gender, and ethnicity, as well as financial factors including employment status, financial dependents, living arrangements, financial capability, debt literacy, attitudes towards debt, money management skills, materialism values, and after-tax income. Details of the measures are contained in Table 1. Panel C presents the sample demographics. Debt Class variables were calculated based on latent class analysis. The coefficients are reported as odds ratios. Asterisks denote statistical significance (*p < 0.1, **p < 0.05, ***p < 0.01). The numbers in parentheses in the regression tables represent the standard errors of the coefficients.

TABLE IV

ORDINAL REGRESSION OUTPUT (PERCEPTIONS OF FEWER CONSEQUENCES)

	Frequency of use BNPL products			Borrow to repay BNPL products			Late penalty		
	Org	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**
Perceived as having fewer consequences	1.52***	1.45***	1.40***	1.24	1.19	1.17	0.82	0.79	0.81
	(0.16)	(0.15)	(0.15)	(0.16)	(0.16)	(0.15)	(0.12)	(0.13)	(0.13)
Age	1.05	1.02	1.02	0.93	0.90	0.90	1.01	0.98	0.99
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.08)	(0.08)	(0.08)
Gender	1.21	1.26	1.10	0.90	0.90	0.86	0.42***	0.43***	0.46***
	(0.20)	(0.22)	(0.19)	(0.19)	(0.19)	(0.19)	(0.10)	(0.11)	(0.12)
Māori	1.44*	1.36	1.38	2.72***	2.62***	2.62***	0.74	0.77	0.77
	(0.30)	(0.29)	(0.31)	(0.69)	(0.69)	(0.69)	(0.21)	(0.24)	(0.25)
NZ European	2.01***	1.20***	1.20***	2.35***	2.28***	2.23***	0.82	0.86	0.87
	(0.46)	(0.47)	(0.48)	(0.69)	(0.69)	(0.67)	(0.28)	(0.32)	(0.33)
Pasifika	1.74**	1.83**	1.78*	2.20**	2.36**	2.30**	0.87	0.97	0.90
	(0.47)	(0.50)	(0.54)	(0.78)	(0.87)	(0.84)	(0.35)	(0.42)	(0.41)
Asian	0.77	0.76	0.73	2.18**	2.21*	2.19*	1.05	1.07	1.07
	(0.23)	(0.23)	(0.24)	(0.85)	(0.93)	(0.92)	(0.50)	(0.55)	(0.56)
India	2.38**	2.26**	1.80	1.95	1.88	1.80	0.78	0.66	0.74
	(0.89)	(0.89)	(0.66)	(0.84)	(0.87)	(0.78)	(0.38)	(0.33)	(0.38)
Full time work	1.83**	1.62*	1.51	1.67	1.59	1.56	1.06	0.95	0.95
	(0.54)	(0.47)	(0.43)	(0.61)	(0.59)	(0.57)	(0.45)	(0.45)	(0.46)
Part time work	1.30	1.32	1.17	1.05	1.14	1.11	0.86	0.89	0.90
	(0.36)	(0.37)	(0.33)	(0.38)	(0.43)	(0.42)	(0.38)	(0.42)	(0.43)
Studying	0.86	0.85	0.83	0.78	0.76	0.76	0.71	0.82	0.84
	(0.21)	(0.20)	(0.20)	(0.29)	(0.28)	(0.28)	(0.30)	(0.35)	(0.36)
Stay at home	2.91**	2.60**	2.18*	1.16	1.02	0.97	0.82	0.86	0.87
	(1.23)	(1.10)	(0.90)	(0.61)	(0.55)	(0.52)	(0.49)	(0.55)	(0.56)
Unemployed	3.55**	3.38**	2.70**	2.39	2.30	2.16	2.67	3.27*	3.48*
	(1.84)	(1.71)	(1.33)	(1.56)	(1.43)	(1.30)	(1.79)	(2.23)	(2.51)
With financial dependents	0.81	0.69*	0.74	1.22	1.10	1.11	1.20	0.82	0.80
	(0.18)	(0.16)	(0.18)	(0.34)	(0.32)	(0.33)	(0.45)	(0.34)	(0.32)
Live with partner (no children)	1.33	1.39	1.41	1.06	1.11	1.11	1.13	1.32	1.32
	(0.39)	(0.41)	(0.43)	(0.41)	(0.41)	(0.41)	(0.47)	(0.55)	(0.56)
Live with partner (and children)	1.69	1.84*	1.64	1.55	1.71	1.64	2.24	3.20**	3.37**

	Frequency of use BNPL products			Borrow to repay BNPL products			Late penalty		
	Org	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**	**Org**	**Debt class**	**Current use**
	(0.62)	(0.68)	(0.63)	(0.67)	(0.73)	(0.71)	(1.16)	(1.75)	(1.84)
Live with children	1.24	1.24	1.49	2.18	2.23	2.25	1.22	1.44	1.29
	(0.62)	(0.64)	(0.73)	(1.37)	(1.36)	(1.37)	(0.76)	(0.96)	(0.90)
Live with parents/relatives	1.09	1.18	1.04	1.02	1.11	1.06	1.00	1.19	1.28
	(0.29)	(0.31)	(0.29)	(0.38)	(0.39)	(0.38)	(0.41)	(0.50)	(0.55)
Live with non-relatives	0.56	0.66	0.80	1.86	2.19	2.33	1.32	2.17	2.13
	(0.32)	(0.39)	(0.44)	(1.21)	(1.50)	(1.58)	(1.43)	(1.94)	(2.00)
Financial capability	0.98	0.98	1.01	0.94	0.95	0.95	1.17***	1.17***	1.16***
	(0.03)	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.06)	(0.06)	(0.06)
Debt literacy	0.95	0.97	0.91	0.95	0.97	0.95	0.71**	0.65***	0.67**
	(0.10)	(0.11)	(0.10)	(0.13)	(0.13)	(0.13)	(0.11)	(0.10)	(0.11)
Debt attitudes	1.38**	1.34*	1.37*	1.42*	1.37	1.38	1.86***	1.93***	1.88***
	(0.22)	(0.21)	(0.23)	(0.27)	(0.27)	(0.27)	(0.41)	(0.45)	(0.43)
Money management	0.94	1.02	0.88	0.43***	0.44***	0.42***	0.29***	0.30***	0.32***
	(0.13)	(0.14)	(0.12)	(0.08)	(0.08)	(0.08)	(0.07)	(0.07)	(0.08)
Materialism value scale	1.13	1.13	1.18	1.48**	1.52***	1.52***	1.32	1.28	1.24
	(0.15)	(0.15)	(0.15)	(0.23)	(0.24)	(0.24)	(0.26)	(0.26)	(0.25)
After tax income	1.10*	1.11**	1.09	0.93	0.93	0.93	0.84**	0.82**	0.83**
	(0.05)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)	(0.07)
Debt Class Moderate Debt		0.47***	0.90		0.43***	0.52**		0.46**	0.35***
		(0.10)	(0.23)		(0.13)	(0.16)		(0.16)	(0.13)
Debt Class Mortgagees		0.19***	0.56*		0.21***	0.28***		0.11***	0.07***
		(0.05)	(0.17)		(0.09)	(0.13)		(0.06)	(0.04)
Debt Class Debt avoiders		0.48***	0.67*		0.66	0.73		0.22***	0.20***
		(0.10)	(0.14)		(0.17)	(0.19)		(0.07)	(0.06)
Current BNPL			5.46***			1.50*			0.57**
			(1.09)			(0.33)			(0.16)
Observations	655	655	655	655	655	655	465	465	465
Pseudo R-squared	0.076	0.10	0.16	0.14	0.17	0.17	0.22	0.27	0.27

Note. This table presents the ordinal logistic regression results for the association between respondents' perception of whether BNPL is debt and BNPL use. Perceived as having fewer consequences is measured on a three-point scale where 1 is disagree it is debt, 2 is neutral and 3 is agree. Frequency of use is measured on a three-point scale with those who score 0 never having used it, 1 used in infrequently, 2 used it occasionally and 3 used it frequently. Borrow to repay is a binary variable that is 1 if a respondent has used debt to repay their BNPL, and late penalties is a dummy that equals 1 if a respondent reported incurring late penalties. In addition, the analysis controls for demographic factors such as age, gender, and ethnicity, as well as financial factors including employment status, financial dependents, living arrangements, financial capability, debt literacy, attitudes towards debt, money management skills, materialism values, and after-tax income. Details of the measures are contained in Table 1. Panel C presents the sample demographics. Debt Class variables were calculated based on latent class analysis. The coefficients are reported as odds ratios. Asterisks denote statistical significance (*p < 0.1, **p < 0.05, ***p < 0.01). The numbers in parentheses in the regression tables represent the standard errors of the coefficients.

TABLE V

PRINCIPAL COMPONENTS ANALYSIS DETAILS

	Comp 1	Comp 2	Comp 3
Perceived as debt	0.41	0.90	0.15
Perceived as cheaper	0.66	-0.18	-0.73
Perceived as fewer consequences	0.63	-0.39	0.67
Proportion	0.48	0.31	0.21

This table presents the components of the principal components analysis looking at components of the three consumer perception variables. Proportion is the proportion of variance explained by each of the three components.

We next re-run our ordered logistic regressions but replace the consumer perceptions as the independent variable with the two components. The PCA-based components reveal contrasting implications for BNPL behavior. The first component, reflecting benign perceptions of BNPL as cheap and low consequence, is associated with greater frequency of BNPL use but does not have a relationship with more risk of repayment difficulties. In contrast, the second component, reflecting perceptions of BNPL as debt, is linked to lower frequency of use, less reliance on other debt for repayments, and fewer late fees. Together, these results suggest that while positive framings of BNPL are related to uptake, perceiving BNPL as debt is associated with more cautious and disciplined engagement.

While individual perception items showed associations with repayment difficulties, these effects diminish when using PCA, as the components capture broader, orthogonal mindsets. In effect, the sharper risks observed at the item level cancel out when perceptions are combined into latent frames. The results therefore indicate that while individual perceptions may be associated with risky repayment behavior, when taken together as broader mindsets, repayment patterns are less consistently related.

C. *Role of Financial Education*

As we have observed, how consumers perceive BNPL impacts how consumers use BNPL with those not seeing it as debt, and those thinking it is cheaper and having fewer consequences are also more likely to use BNPL more often, while those not viewing it as debt or those who think it is cheaper seem to fail to plan their BNPL repayments effectively. We next test whether financial education impacts consumer perceptions of BNPL. In effect, we test whether financial education allows consumers to see through the marketing efforts of BNPL providers. BNPL represents an innovative financial product that is unlikely to have been covered explicitly by financial education at the time the survey was undertaken. Given BNPL providers have attempted to distinguish themselves from traditional debt products, there is the risk that financial education may prove ineffective in protecting consumers.

The majority of our sample reported some financial education, 541 out of the 705 respondents. Financial literacy has been included in the New Zealand Secondary School curriculum, although not as a compulsory topic, since 2013 which explains the high positive response. Table 7 presents the average category for those who have had financial education and those who have not had financial education as well as testing the significance of the difference in the means. Contrary to expectations, financially educated respondents were more likely to disagree or be unsure whether BNPL is debt, as evidenced by the lower average category, 2.34 vs 2.53.

TABLE VI

ORDERED LOGISTIC REGRESSION OF CONSUMER PERCEPTION DIMENSIONS

	Frequency of Use	**Repay**	**Late Penalties**
Component 1	1.16**	1.06	0.72***
	(0.08)	(0.10)	(0.08)
Component 2	0.62***	0.72***	0.80*
	(0.06)	(0.08)	(0.10)
Age	1.04	0.91	1.02
	(0.06)	(0.07)	(0.09)
Gender	1.14	0.85	0.47***
	(0.20)	(0.19)	(0.12)
Māori	1.37	2.66***	0.76
	(0.32)	(0.71)	(0.25)
NZ European	2.02***	2.31***	0.94
	(0.51)	(0.71)	(0.37)
Pasifika	1.70*	2.29**	0.98
	(0.55)	(0.85)	(0.44)
Asian	0.74	2.28**	1.04
	(0.28)	(0.94)	(0.53)
India	1.76	1.79	0.79
	(0.67)	(0.78)	(0.41)
Full time work	1.63*	1.60	0.95
	(0.48)	(0.58)	(0.48)
Part time work	1.11	1.07	0.86
	(0.31)	(0.40)	(0.43)
Studying	0.88	0.77	0.87
	(0.22)	(0.28)	(0.37)
Stay at home	2.19*	1.00	0.90
	(0.91)	(0.53)	(0.59)
Unemployed	2.81**	2.23	3.98*
	(1.39)	(1.34)	(2.99)
With financial dependents	0.68	1.06	0.67
	(0.17)	(0.31)	(0.28)
Live with partner (no children)	1.56	1.18	1.47
	(0.50)	(0.44)	(0.62)
Live with partner (and children)	1.86	1.76	4.42***
	(0.74)	(0.76)	(2.48)
Live with children	1.41	2.22	1.42
	(0.72)	(1.36)	(0.98)

	Frequency of Use	Repay	Late Penalties
Live with parents/relatives	1.22	1.18	1.55
	(0.36)	(0.42)	(0.66)
Live with non-relatives	0.90	2.56	3.20
	(0.51)	(1.74)	(3.21)
Financial capability	1.01	0.95	1.16***
	(0.03)	(0.04)	(0.06)
Debt literacy	0.95	0.98	0.71**
	(0.10)	(0.14)	(0.12)
Debt attitudes	1.30	1.36	1.95***
	(0.21)	(0.27)	(0.46)
Money management	0.92	0.43***	0.34***
	(0.13)	(0.08)	(0.08)
Materialism value scale	1.22	1.57***	1.31
	(0.16)	(0.27)	(0.26)
After tax income	1.11*	0.93	0.84**
	(0.06)	(0.06)	(0.08)
Debt Class Moderate Debt	0.91	0.52**	0.34***
	(0.24)	(0.17)	(0.13)
Debt Class Mortgagees	0.64	0.31***	0.06***
	(0.20)	(0.14)	(0.04)
Debt Class Debt avoiders	0.64**	0.69	0.17***
	(0.14)	(0.19)	(0.06)
Current BNPL	5.72***	1.57**	0.64
	(1.18)	(0.35)	(0.18)
Observations	655	655	465
Pseudo R-squared	0.17	0.18	0.29

Note. This table presents the ordinal logistic regression results for the association between respondents' PCA component scores and BNPL use. Component 1 and Component 2 are the PCA scores from a PCA of the three consumer perception variables. This table presents the ordinal logistic regression results for the association between respondents' perception of whether BNPL is debt and BNPL use. Perceived as having fewer consequences is measured on a three-point scale where 1 is disagree it is debt, 2 is neutral and 3 is agree. Frequency of use is measured on a three-point scale with those who score 0 never having used it, 1 used in infrequently, 2 used it occasionally and 3 used it frequently. Borrow to repay is a binary variable that is 1 if a respondent has used debt to repay their BNPL, and late penalties is a dummy that equals 1 if a respondent reported incurring late penalties. In addition, the analysis controls for demographic factors such as age, gender, and ethnicity, as well as financial factors including employment status, financial dependents, living arrangements, financial capability, debt literacy, attitudes towards debt, money management skills, materialism values, and after-tax income. Details of the measures are contained in Table 1. Panel C presents the sample demographics. Debt Class variables were calculated based on latent class analysis. The coefficients are reported as odds ratios. Asterisks denote statistical significance (*p < 0.1, **p < 0.05, ***p < 0.01). The numbers in parentheses in the regression tables represent the standard errors of the coefficients.

TABLE VII

IMPACT OF FINANCIAL EDUCATION ON CONSUMER PERCEPTIONS OF BNPL PRODUCTS

	No Fin Ed	Fin Ed	Difference
Perception of "Is debt"	2.53	2.34	-0.19***
Perception of "Is cheaper"	2.40	2.26	-0.14**
Perception of "Fewer consequences"	2.25	2.26	0.02
Number of Respondents	164	541	

Note. This table presents statistical difference in the average score for the three consumer perception variables Perceived as Debt, Perceived as Cheaper, Perceived as having fewer consequences between those respondents with (Fin Ed) and without a financial education (No Fin Ed). A t-test was conducted to assess the significance of the statistical differences. Difference is calculated as with education minus without. Asterisks denote statistical significance (*p < 0.1, **p < 0.05, ***p < 0.01).

The difference is also statistically significant. However, while financially educated respondents were less likely to see BNPL as debt, they were also more likely to disagree or be unsure as to whether BNPL is always cheaper than other forms of credit. There are also no difference perceptions around the consequences of BNPL.

We next conduct ordered logistic regressions regressing consumer perceptions as the dependent variable against our controls and whether a respondent had experienced financial education as the independent variable. The results in Table 8 are again reported as odds ratios such that a value less than 1 indicates that a financially educated respondent is less likely to agree with the consumer perception statements. The first column supports the univariate results in Table 7 by indicating that a financially educated respondent was 37% less likely to either be unsure or agree that BNPL is debt compared to someone who has not had financial education. We also observe that those who are more financially educated were also less likely to be in either the neutral or agree groups with regards to BNPL always being cheaper than other debts. This suggests financial education improves cost awareness but frames debt categories in ways that leave consumers less able to recognize BNPL as debt, highlighting a gap between traditional curricula and new fintech products.

V. CONCLUSION

This study examined how consumer perceptions are related to BNPL usage and repayment behavior. We find strong evidence that not viewing BNPL as debt, or perceiving it as cheaper and lower in consequence, is associated with greater use. The evidence for misuse is more mixed. Consumers who recognize BNPL as debt are less likely to run into repayment difficulties, either through late fees or reliance on other debt. Viewing BNPL as cheaper is related to a reduction in the likelihood of late fees but an increase in the likelihood of covering repayments with other debt. This suggests consumers may strive to preserve the illusion of low cost by borrowing elsewhere. By contrast, perceiving BNPL as having fewer consequences has no significant relationship with repayment behavior.

When we employ principal components analysis to examine broader dimensions of consumer perception we find two main components; perceiving BNPL as relatively benign or good where all the consumer perceptions load positively, and being more cautious where debt loads positively while the other two perceptions load negatively. Those who score higher in component 2 are relatedly less likely to use BNPL. They are also less likely to report they incur late fees or need to use other debt. Those who score higher in component 1 use BNPL more frequently and are less likely to use other debt but have no impact on the probability of incurring late fees. This suggests that more cautious framing of BNPL is associated with more measured use. These consumers gain the benefits of BNPL but avoid the pitfalls. BNPL providers however have tended to advertise BNPL in a way that plays more into the benign framing. Finally, we find that financial education doesn't appear to be preparing users for new financial products like BNPL. Financially educated respondents were less likely to agree BNPL was debt. They were also less likely to agree that BNPL is always cheaper to use.

TABLE VIII

ORDINAL REGRESSION ANALYSIS OF CONSUMER PERCEPTIONS AND FINANCIAL EDUCATION

VARIABLES	Perceived as debt	Perceived as cheaper	Perceived as having fewer consequences
Financial ed	0.63**	0.60**	0.75
	(0.14)	(0.12)	(0.15)
Age	1.16**	1.08	0.90*
	(0.07)	(0.06)	(0.05)
Gender	1.22	1.17	1.12
	(0.23)	(0.21)	(0.19)
Māori	0.82	0.77	0.87
	(0.18)	(0.17)	(0.19)
NZ European	1.10	1.24	1.02
	(0.25)	(0.30)	(0.25)
Pasifika	0.81	1.27	1.21
	(0.23)	(0.38)	(0.39)
Asian	0.89	0.72	0.39***
	(0.27)	(0.23)	(0.14)
India	0.85	1.40	0.89
	(0.29)	(0.49)	(0.32)
Full time work	0.70	0.90	0.96
	(0.20)	(0.23)	(0.29)
Part time work	1.47	1.16	1.10
	(0.43)	(0.32)	(0.33)
Studying	1.39	1.99	1.33
	(0.66)	(0.91)	(0.57)
Stay at home	1.38	1.31	0.89
	(0.58)	(0.61)	(0.41)
Unemployed	0.55**	0.61**	0.76
	(0.13)	(0.14)	(0.18)
With financial dependents	1.58	1.24	1.74
	(0.59)	(0.45)	(0.62)
Live with partner (no children)	1.28	1.87	3.58**
	(0.67)	(0.95)	(2.05)
Live with partner (and children)	1.90**	0.84	1.69*
	(0.60)	(0.24)	(0.49)
Live with children	2.45	1.27	3.56*
	(1.47)	(0.75)	(2.50)
Live with parents/relatives	1.03	1.03	1.01
	(0.04)	(0.04)	(0.03)
Live with non-relatives	1.44***	1.24**	0.94
	(0.18)	(0.13)	(0.11)
Financial capability	1.36**	1.21	0.88
	(0.20)	(0.18)	(0.13)
Debt literacy	1.52***	1.32**	1.06
	(0.23)	(0.17)	(0.14)
Debt attitudes	1.17***	1.12**	1.05
	(0.06)	(0.06)	(0.05)
Money management	1.22	1.19	0.79
	(0.34)	(0.34)	(0.21)

VARIABLES	Perceived as debt	Perceived as cheaper	Perceived as having fewer consequences
Materialism value scale	1.82*	0.64	0.67
	(0.60)	(0.21)	(0.22)
After tax income	0.78	0.99	0.94
	(0.18)	(0.25)	(0.23)
Debt Class (Debt experienced)	1.32	2.11***	1.51**
	(0.26)	(0.43)	(0.29)
Debt Class (Mortgagees)	0.63**	0.60**	0.75
	(0.14)	(0.12)	(0.15)
Debt Class (Debt Avoiders)	1.16**	1.08	0.90*
	(0.07)	(0.06)	(0.05)
BNPL	1.22	1.17	1.12
	(0.23)	(0.21)	(0.19)
Observations	655	655	655
Pseudo R-squared	0.10	0.098	0.073

Note. This table presents the ordinal regression results for the association between financial education and a respondent's perceptions BNPL. Perceived as Debt, Perceived as Cheaper, Perceived as having fewer consequences are measured on a three-point scale where 1 is disagree it is debt, 2 is neutral and 3 is agree. Financial ed is a dummy variable that equals one if the respondent has had financial education In addition, the analysis controls for demographic factors such as age, gender, and ethnicity, as well as financial factors including employment status, financial dependents, living arrangements, financial capability, debt literacy, attitudes towards debt, money management skills, materialism values, and after-tax income. Details of the measures are contained in Table 1. Panel C presents the sample demographics. Debt Class variables were calculated based on latent class analysis. The coefficients are reported as odds ratios. Asterisks denote statistical significance (*p < 0.1, **p < 0.05, ***p < 0.01). The numbers in parentheses in the regression tables represent the standard errors of the coefficients.

This suggests that financial education may be framing debt in such a way that BNPL look different enough to be misclassified, however financial education does appear to be effective in allowing consumers to see the hidden costs associated with BNPL.

Theoretically, this study contributes to household finance and consumer behavior research by showing that perceptions of new credit products such as BNPL are multidimensional and consequential. Uptake is shaped less by traditional measures of financial capacity than by consumer framing of BNPL as cheap and of low consequence, highlighting the power of product framing in driving financial behavior. At the same time, recognizing BNPL as debt is associated with more cautious and disciplined use. By applying dimensional (PCA) and categorical (LCA) approaches, we also demonstrate that consumer perceptions can be understood as broader latent mindsets that are associated with behavior, offering a richer theoretical lens for analyzing household financial decisions in emerging fintech contexts.

Our results lend themselves to several recommendations. First, framing BNPL as different from debt has confused consumers. Around 40% of our sample were either unsure or disagreed that BNPL is debt. Those who perceived BNPL as not debt or weren't sure it was debt likewise appear to use it more often and without considering the consequences. This leads to late fees and the need to use other debt, such as credit cards. Even more recently, BNPL providers have attempted to frame their products as responsible cashflow management tools. Regulators would be recommended to prevent this framing, instead requiring BNPL providers to more explicitly acknowledge that despite the lack of interest costs, BNPL is a form of consumer debt.

One of the more surprising findings is that respondents who reported financial education were less likely to recognize BNPL as debt. This finding has important implications for both financial education and consumer protection. Traditional financial education typically focus on familiar debt products such as credit cards, personal loans and mortgages. BNPL products blur these categories by presenting credit as a payment mechanism rather than a borrowing decision. As a result, consumers may understand the costs and risks associated with traditional debt while failing to classify BNPL as a debt product. Several possible explanations exist. Prior studies have found that financially literate consumers may attempt to use things like revolving credit, where smart use can be financially beneficial, to their benefit (Disney & Gatherhgood, 2011). This raises the possibility that financially literate consumers may view BNPL as a useful financial tool rather than as a debt product, potentially leading them to underestimate some of the risks associated with BNPL use. Another possible explanation is that financial education, which typically is viewed as a key method of increasing financial literacy, is not currently set up to deal with future innovations. In essence, people may have been taught what actions to take when dealing with a familiar product, but consumers are not equipped to evaluate and determine appropriate actions for new products. In either case, more research is needed to understand why financial education appears effective in improving cost awareness but less effective in helping consumers recognize BNPL as a form of debt.

For financial services professionals, this suggests that BNPL obligations should be explicitly incorporated into discussions of borrowing, affordability and debt management rather than assuming consumers naturally recognize them as debt. For consumers, the findings suggest that the absence of interest charges should not automatically be interpreted as the absence of debt, and that BNPL commitments should be considered alongside other borrowing obligations when evaluating affordability. More broadly, the findings raise questions about whether financial education alone is sufficient to protect consumers in an environment characterized by rapid financial innovation and increasingly sophisticated product marketing, or whether greater attention must also be paid to how financial products are framed and presented to consumers.

Our study does need to be considered within the context of some limitations. Because our study is based on a cross-sectional survey, we cannot draw causal conclusions, only associations. Ideally, longitudinal data may allow for more conclusive findings. Additionally, the use of survey data does mean that we are subject to self-reporting biases which may have influenced our findings. Our study is set within the New Zealand context which may limit the generalizability of our findings, although we note that Australia operates within very similar circumstances with largely the same providers. Additional studies in other contexts, particularly

European countries where BNPL has also been widely adopted would be beneficial. While the model fit statistics are consistent with those commonly observed in cross-sectional behavioral and consumer finance research using ordinal outcomes, the pseudo R^2 values indicate that BNPL usage and repayment behavior are also influenced by factors not captured in the present study. Future research may benefit from incorporating additional psychological, social, and situational determinants of BNPL use.

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APPENDIX

Appendix 1. Survey Question Details

Scale	Questions	Source	Range
Consumer Perceptions	• Buy Now Pay Later is a form of debt? • It is always cheaper to use buy now pay later than debt such as hire purchase or credit card? • Buy now pay later has fewer consequences if I miss a repayment than debt?		1 (Disagree), 2 (Neutral), 3(Agree)
BNPL Use	• How frequently do you use BNPL to make purchases • How often have you incurred late penalties • Have you ever used a credit card or other form of debt (such as a loan from family/friends or an overdraft) to pay for a Buy Now Pay Later repayment?		1 (never), 2 (Once to Once every 2-3 months), 3 (at least monthly) 1 if incurred late fees, 0 otherwise. 0 (No), Yes (1)
Financial Capability		Xiao and O'Neill (2018)	0 – 20 – Objective Financial Knowledge, Subjective Financial Knowledge, Financial Behaviors, and Perceived Financial Capability. Each subcomponent is scaled to sit between 0 and 5.
Objective Financial Knowledge	1. Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow? 2. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account? 3. If interest rates rise, what will typically happen to bond prices? 4. Suppose you owe $1,000 on a loan and the interest rate you are charged is 20% per year compounded annually. If you didn't pay anything off, at this interest rate, how many years would it take for the amount you owe to double? 5. A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less. 6. Buying a single company's shares usually provides a safer return than a managed fund.	Xiao and O'Neill (2018)	0-6 – sum of the number of correct answers. Score is rescaled to a range of 0-5.
Subjective Financial Knowledge	How would you assess your overall financial knowledge?	Xiao and O'Neill (2018)	1 (Far below average) – 7 (far above average).

			Score is rescaled to a range of 0-5.
Financial Behaviors	• Does your monthly income currently allow you to get to the end of the month? • Do you have enough savings to cope with an unexpected expense of $500 today? • Have you ever tried to figure out how much you need to save for retirement? • Does your household have a budget? A household budget is used to decide what share of your household income will be used for spending, saving or paying bills.	Xiao and O'Neill (2018)	0 – 4 based on how many of the four questions respondents answered yes to. Score is rescaled to a range of 0-5.
Perceived Financial Capability	I am good at handling money	Xiao and O'Neill (2018)	0 (Strongly Disagree) – 5 (Strongly Agree)
Debt Literacy	• You owe $100 and you are charged 20% interest per year compounded annually. If you never pay anything off, you pay $20 interest in the first year. In the second year, do you pay • You owe $300 with 1% interest charged each month (i.e., $3). You pay an instalment of $3 each month. How many years would it take to eliminate your debt • You take a loan of $100. To repay, you are given the following two options: (1) Pay 12 monthly instalments of $10 each; (2) Pay back $120 a year from now. Which is the better offer	Schicks (2014)	0-3 sum of the number of correct answers
Money Management	• I keep an eye on how much money is coming and in and how much is going out. • I always know exactly how much money i owe • I monitor my financial statements • I put money away in advance to be able to pay my bills • I always repay my bills on time • I make detailed budgets for my expenses • I stay within my budget(s) • My finances are disorganized	Garðarsdóttir and Dittmar (2012)	0 (Strongly Disagree) – 5 (Strongly Agree) – Averaged over 8 items
Financial Education	• Where have you received financial education?		1 if received financial education anywhere, 0 otherwise
Debt Attitudes	• I trust financial institutions granting loans to consumers • Lending institutions care for the wellbeing of their clients • When I think about loans, it is usually accompanied by positive emotions	Białowolski et al. (2020)	0 (Strongly Disagree) – 5 (Strongly Agree) – Averaged over 7 items

	• There is nothing wrong in taking loans for repayment of previous debts • Life is easier with loans • Loans should be taken only as a last resort (reverse) • Loans represent large and unnecessary risk (reverse)		
Material Values Scale	• I admire people who own expensive homes, cars and clothes • The things I own say a lot about how well I'm doing in life • Buying things gives me a lot of pleasure • I like a lot of luxury in my life • My life would be better if I owned certain things I don't have • I wouldn't be any happier if I owned nicer things	Richins (2004)	0 (Strongly Disagree) – 5 (Strongly Agree) – Averaged over 6 items
Demographics	• What was your age at your last birthday? • What is your gender? • What is your ethnicity (tick as many boxes as applicable)? • Which of the following best describes your employment status (tick all that apply)? • Over the last month, estimate what your after-tax income was? If you are in a relationship where you have joint debts, please include both incomes. • How many people (including children) are depending on you financially? • Which best describes your living arrangements?		