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RESEARCH ARTICLE

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The relationship between responsible financial behaviours and financial wellbeing: The case of buy-now-pay-later

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Abstract

Buy-now-pay-later (BNPL) in Australia is a rapidly growing payment innovation. Regulators and consumer groups have expressed concerns at the financial risks posed by BNPL. As BNPL is not regulated under consumer credit law, financial regulator and consumer groups have recommended that BNPL users adopt a range of responsible financial behaviours for their financial wellbeing. This study, using a survey of BNPL users and structural equation modelling, shows a link between most of these recommended financially responsible behaviours and financial wellbeing and that the financial behaviours of younger users (aged under 25) place them at greater risk of reduced financial wellbeing.

KEYWORDS

buy-now-pay-later, financial wellbeing, responsible financial behaviours

JEL CLASSIFICATION

G40, G53, I31

1 | INTRODUCTION

Buy-now-pay-later (BNPL) has experienced rapid growth in Australia. According to the Australian Securities and Investments Commission (ASIC, 2020), there are more than 6 million Australian BNPL users, representing almost 30% of the Australian adult population, and more than 50,000 active BNPL merchants. BNPL usage trebled over the 2 years to 2020, and it experienced growth of 34% in the most recent 2021–2022 year (Reserve Bank of Australia, 2021, 2022). As BNPL is not regulated by Australian consumer law in the same way as other credit products such as credit cards, various regulatory and consumer groups such as ASIC (2020) and Financial Counselling Australia (Guthrie, 2021) have expressed concerns that BNPL can cause financial problems for some BNPL users, particularly for vulnerable young users with limited financial experience, which in turn can impact on their financial wellbeing. These regulatory and consumer groups have proposed that BNPL users adopt a number of recommended financially responsible behaviours (RFRBs) to help mitigate this financial risk. This study, using a survey approach, investigates the relationship between these RFRBs (which are explained later in this section) and financial wellbeing, in relation to BNPL in Australia.

There is no universally accepted definition or measurement of financial wellbeing (Bruggen et al., 2017). In an Australian context, Muir et al. (2017, p. 1) defined financial wellbeing as 'when a person is able to meet expenses and has some money left over, is in control of their finances and feels financially secure, now and in the future'. Also in an Australian context, Comerton-Forde et al. (2018, p. 6; 2022, p. 137) define financial wellbeing as the extent to which people both perceive and have 'financial outcomes in which they meet their financial obligations, financial freedom to make choices that allow them to enjoy life, control of their finances, and financial security – now, in the future, and under possible adverse circumstances'. These definitions, according to their authors, include both objective elements (such as income, debt and savings which can be verified) and subjective elements (which capture a person's perception of things like satisfaction with financial security or standard of living).

Many factors have the potential to influence financial wellbeing. These include financial behaviours, household characteristics, financial inclusion, external conditions and expectations about the future (Comerton-Forde et al., 2018, 2022; Muir et al., 2017; West & Cull, 2020). The scope of our study is, however, confined to the study of the relationship between financial behaviours and the financial wellbeing of BNPL users.

Financial wellbeing has been measured in various ways in an Australian context. The Commonwealth Bank of Australia and Melbourne Institute of Financial Wellbeing Scales (Comerton-Forde et al., 2018; Melbourne Institute: Applied Economic & Social Research, 2020) were developed using survey and banking data to measure financial wellbeing across the dimensions of meeting financial obligations, financial freedom, control over finances and financial security. Muir et al. (2017) developed a model of financial wellbeing using interviews and surveys to measure the three dimensions of meeting expenses, having control over their finances, and feeling financially secure. The Prawitz et al. (2006) Incharge Financial Distress/Financial Well-Being (IFDW) Scale is frequently used to measure financial wellbeing globally, with a modified version having been used to measure financial wellbeing in Australia by Gerrans et al. (2014). Xue et al. (2019) measure financial wellbeing in Australia on a purely subjective basis with a single question as to how the respondent views their financial wellbeing on a 5-point scale from 'poor' to 'very good'. To measure financial wellbeing in our study, we use the abovementioned Commonwealth Bank of Australia and Melbourne Institute of Financial Wellbeing definition and measurement scales (Comerton-Forde et al., 2018; Melbourne Institute: Applied Economic & Social Research, 2020) given that these have been specifically developed and extensively tested for reliability and validity in an Australian context as discussed in Section 2 of this article.

Buy-now-pay-later is a relatively new form of credit and allows users to pay for goods and services using a mobile app either online or at the merchant outlet. The user receives the goods and services upfront and pays for them in weekly or fortnightly instalments over a specified period using their debit or credit cards. BNPL is popular for a number of reasons. A recent survey conducted for the Australian Financial Industry Association (AFIA, 2022) found that 54% of users said that they used BNPL because they were able to pay in instalments without having to incur interest charges, while 54% said that BNPL gave them more control over their money as they could align their repayment timings with their salary pay periods.

There are, however, risks involved in using BNPL as a payment method for goods and services. In Australia, BNPL, unlike other forms of consumer credit, is not required to comply with the provisions of the National Consumer Credit Protection Act 2009 (Cth) (NCCPA) and the National Credit Code (NCC). As no interest is charged, a BNPL contract does not fall within the definition of a consumer credit contract under s. 5 of the NCC. The statutory obligations imposed on credit providers, such as adequate disclosure, responsible lending, hardship variations and postponement of enforcement, which would normally apply to consumer credit contracts, do not apply to BNPL contracts. To pre-empt statutory regulation, AFIA (2021) developed a BNPL Code of Practice which came into effect on 1 March 2021. The aims of the Code are to set out best practice standards for the BNPL industry and strengthen consumer protection. Codes of practice, however, are non-mandatory and do not offer the same level of protection to consumers as formal regulation. The current approach to BNPL regulation has been referred to as a 'light-touch' approach (Flannery, 2020; Gerrans et al., 2021).

The lack of formal regulation means that BNPL offers an alternative form of credit for those who cannot access traditional credit products due to affordability or poor credit history. It has proven very popular among younger consumers with a recent survey (ASIC, 2020) showing that 67% of BNPL buyers were aged under 35 years, and 27% aged under 25 years. According to ASIC (2018), 44% of BNPL users surveyed had incomes below $40,000 per annum and most of them are either students or in part-time employment.

While some BNPL providers carry out credit checks, most do not carry out any form of affordability assessments and they base credit increases on the past repayment history of users. ASIC (2018) reported that 21% of BNPL users had missed a BNPL payment and many users, especially those in the younger age group, went without essentials or missed payments on other bills such as utilities or groceries. In a survey undertaken by Financial Counselling Australia (2021), 84% of financial counsellors said that about half, most or all their clients that were experiencing financial difficulty had a BNPL debt.

Affordability is foremost among the concerns that have been expressed about BNPL. A survey by the New Zealand Government (2021) found that BNPL made it easier for users to spend more than they can afford, as the purchase cost appears cheaper when split into smaller repayments. Even though interest is not charged for the use of credit, there are fees imposed on users for missed instalment payments, account keeping and transaction processing. If payment is made from the user's credit card and the balance is not settled in full, interest is charged on that credit card balance. All these fees and charges can quickly add to the overall costs of a BNPL purchase. BNPL can also have an impact on the credit score of users. If a user defaults on any instalment payment, BNPL providers reserve the right to report the default to credit reporting bureaus. An adverse credit report can affect the user's future ability to obtain mainstream credit such as housing and vehicle loans.

At the time of writing, the BNPL industry is still self-regulated but there are growing calls for BNPL to be regulated like other forms of consumer credit due to the regulatory approach being perceived as offering inadequate consumer protection (Guthrie, 2021; Rizk, 2021). In relation to financial products, it is generally recognised that regulation has an important role to play and that early regulatory intervention in the product cycle is likely to have a much better consumer impact (O'Brien, 2012). Gerrans et al. (2021) find that, as BNPL is unregulated, it places greater responsibility on the financial behaviours of the purchaser, which is problematic given that the primary users are younger adults who are a vulnerable group with relatively low financial literacy.

In response to the concerns that have been expressed about the regulation of BNPL, the Australian Government Treasury (2022) recently consulted with a range of stakeholders (e.g., consumer groups, retailers, BNPL providers and regulators) and identified a number of concerns such as poor affordability leading to financial stress, insufficient complaints handling practices and hardship provisions, and excessive default fees. As a result, the Treasury has commenced a formal submission process on options for regulatory intervention ranging from strengthening the code of practice, to limited regulation, to full regulation under the NCCPA.

ASIC (2021) and various consumer groups such as the Financial Counselling Network (2021) have proposed that BNPL users adopt a number of RFRBs in order to help mitigate the risks associated with BNPL. Common RFRBs include the following: taking time to carefully read the terms and conditions (T&Cs); comparing key financial information such as fees charged by other providers; carefully planning and budgeting for purchases; avoiding spontaneous, reckless or excessive purchases (impulsive or compulsive behaviours); using a debit card instead of a credit card to make payments; and avoiding having multiple payments on the go at once.

This study has two main aims. The first aim is to determine whether there is any significant relationship between the adoption of RFRBs identified above and the financial wellbeing of BNPL users. Given that specific concerns have been expressed about the vulnerability of younger BNPL users, the second aim of this study is to determine whether there are any significant differences between the younger BNPL users (aged under 25, hereafter referred to as the '<25' group) and other BNPL users (hereafter referred to as the '25+' group) with regard to the adoption of RFRBs. To achieve these aims, we surveyed a total of 360 BNPL users in Australia using primarily Likert scales, supplemented with multiple-choice questions and open-ended questions to gain an insight into their financial behaviours. Structural equation modelling (SEM) was undertaken to determine the relationship between the RFRBs and financial wellbeing. Nonparametric testing was undertaken to determine differences in responses between age groups.

Our study of BNPL users found that RFRBs such as carefully reading and comparing the BNPL T&Cs, planning and budgeting for BNPL purchases and compulsive buying had the most significant impact on financial wellbeing. Impulse buying had no direct impact on financial wellbeing; only an indirect one by virtue of its influence on compulsive buying. Using a credit card instead of a debit card, or having more than one BNPL purchase on the go at once, were found not to have any significant impact on financial wellbeing of users. The <25 group was found to have spent less time examining BNPL T&Cs, and they were less likely to plan and budget for purchases than the +25 group. The <25 age group was also more prone to compulsive buying and had a lower financial wellbeing.

This rest of this article is organised as follows: Section 2 examines the relevant academic literature in relation to financial wellbeing and financially responsible behaviours. Section 3 develops the hypotheses and Section 4 provides details of our survey and the methodology used. Section 5 presents and discusses the results of our study and Section 6 concludes with a number of recommendations.

2 | LITERATURE SURVEY

In this section, we review the academic literature on financial wellbeing and responsible lending behaviours. We include literature on impulse buying tendencies and compulsive buying behaviour, given their relevance to the RFRBs as noted in the introduction. As BNPL is a relatively new form of credit, there has been little research on the financial behaviours or financial wellbeing of BNPL users as compared to users of other products such as credit cards and loans. Our study draws on the research of these traditional products, as they are relevant notwithstanding that BNPL is different from those products. Given the Australian context of our study, we have incorporated reference to key Australian studies which we have identified through a combination of our own research and through bibliometric studies which have undertaken comprehensive reviews of research in the Asia-Pacific area (Benson et al., 2014, 2015; Linnenluecke et al., 2016; Linnenluecke, Birt, et al., 2017; Linnenluecke, Chen, et al., 2017).

A few studies have been undertaken on financial wellbeing in an Australian context. Moulang and Strydom (2018) find that an individual's well-being is positively associated with their propensity to take financial risks. Brown and Gray (2016) find that household levels of net wealth and assets have a positive association with financial satisfaction and overall life satisfaction, whereas levels of debt have a negative association. Tahir and Ahmed (2021) also find a negative association between financial wellbeing and levels of household debt. Tahir et al. (2021) find that impulsiveness and financial capability have a moderating effect on the relationship between financial literacy and financial wellbeing. Boedker et al. (2022) find that individuals with higher levels of financial wellbeing experience greater life satisfaction. Bruhn (2015) finds that significant financial loss can have a devastating impact on overall personal wellbeing. Gerrans et al. (2014) investigated gender differences in the determinants of financial satisfaction, and they found that the main source of financial satisfaction for females is financial status as compared to financial knowledge for males.

Financial literacy has widely been found to be associated with making appropriate personal financial decisions (Disney & Gathergood, 2013; Earl et al., 2015; Gerrans & Heaney, 2016; Grohmann, 2018; Lusardi & Mitchell, 2011; Mandell & Klein, 2009; Remund, 2010; Xue et al., 2019). Those with high financial literacy would also be less likely to face financial disputes (Shen et al., 2016). There are concerns that young people such as college students are more vulnerable to accumulating excessive debt because of their limited financial knowledge and experience (Beal & Delpachitra, 2003; Gerrans & Heaney, 2016; Sevim et al., 2012; Xiao et al., 2014). An analysis of the over-indebtedness of UK consumers showed that consumers from low-income households with low levels of financial literacy and poor credit histories are vulnerable to lenders who offer easily accessible consumer credit facilities (Disney et al., 2008). Perception of the benefits and risks of BNPL have been found to be related to financial literacy in a study among Australian university students (Gerrans et al., 2021). Those with a higher level of financial literacy believe that BNPL is riskier and less beneficial than people with a lower level of financial literacy. While financial literacy is not a form of behaviour and therefore not one of our identified RFRBs, the allied issue of obtaining financial knowledge through examination of the T&Cs is one of the RFRBs. Poor financial decisions can occur when people do not have essential financial information or the ability to properly understand and use that information (García, 2013; Hilgert et al., 2003; Thaler & Sunstein, 2008). ASIC (2021) has stressed the importance of researching BNPL facilities and making comparisons between providers on aspects such as the fees charged, before using them. However, studies show that consumers who purchase items online generally do not pay a great deal of attention to small print or T&Cs (Bakos et al., 2014; European Union, 2016; Plaut & Bartlett, 2011). A European Union (2016) study found that if online consumers had to open a separate link to read the T&Cs, a mere 9.4% of them read some parts of the T&Cs, compared to 77.9% if they had to scroll through the T&Cs as part of the online purchasing process. That study found that lengthy T&Cs or the use of jargon were key barriers to reading the T&Cs. It also found that the factors that improved the reading of T&Cs included shortening and simplifying the T&Cs, informing consumers about how long it will take to read the T&Cs, and adding 'quality cues' to build trust, such as a positive customer feedback cue, or an endorsement by a national consumer organisation. This is consistent with the findings in earlier studies (such as Iyengar et al., 2004; Lusardi, 2004) which showed that excessive information can impede financial decision making whereas simplifying the information can improve the quality of financial decisions. The simplification of information would, however, have to be balanced with the need for the provision of sufficient critical information. A possible reason why some borrowers do not read the T&Cs properly is overconfidence in their own knowledge, a trait which is found to be more common among people engaging in risky borrowing behaviour. They overestimate their financial knowledge or future income, which in turn leads to overconfidence in their capacity to incur and repay debt (Bird et al., 2014; Loewenstein et al., 2003).

The importance of planning and budgeting for purchases and expenses is a common theme in studies on financially responsible behaviours and financial wellbeing (e.g., Barbić et al., 2019; Bird et al., 2014; Lusardi & Mitchell, 2011). Those who engage in better budgeting, planning and savings behaviour have been found to have better reported and observed financial wellbeing (Comerton-Forde et al., 2018). Positive associations have been found between people's attitudes towards financially responsible behaviours (such as planning and budgeting) and the actual engagement in those behaviours (Cloutier & Roy, 2020; Kidwell et al., 2003; Serido et al., 2015; Shim et al., 2010; Xiao et al., 2011). This is consistent with the theory of planned behaviour (Ajzen & Fishbein, 1980), where attitudes towards behaviour have been found to precede the actual behaviour. In Australia, both ASIC (2021) and the Financial Counselling Network (2021) have stressed the importance of planning and budgeting when using BNPL as a payment method.

In relation to debit cards and credit cards, various studies (Agrawal & Gentry, 2019; Ganotis, 2018; Simon et al., 2010) have examined why customers choose one type of card over the other. The findings indicate that credit cards can provide the benefits of rewards and access to free credit (if repaid within the interest-free period), but they can be expensive if not paid in full. Conversely, debit cards can help avoid debt and improve the management of the user's current expenses and financial situation, which can result in a sense of financial wellbeing. Credit cards provide the ability to buy things that are not affordable right now, whereas debit cards make it more difficult to spend money that the user currently does not have. Several studies (Erasmus & Lebani, 2008; Limbu, 2014; Lo & Harvey, 2011) have expressed concern about how the convenience of credit facilities (such as credit cards or store cards) or pay-later products can lead to overspending or irresponsible purchases by consumers. This is particularly the case with young buyers who may lack sufficient financial experience or knowledge (Erasmus & Lebani, 2008; Xiao et al., 2014). Erasmus and Lebani (2008) found that store cards, in particular, can encourage overspending as (similar to BNPL) they are generally easier to obtain than other credit products such as credit cards and bank loans. Linking a BNPL account to a debit card instead of a credit card is one of the recommendations made by ASIC (2018) to ensure a BNPL user does not incur credit card interest.

Ottaviani and Vandone (2011, 2018) found that impulsivity plays a significant role in predicting consumer indebtedness, as impulsive consumers tend to take on more consumer debts for spending. Gathergood (2012) revealed that self-control had a strong impact on over-indebtedness. The author found that people with impulse buying tendencies are more likely to default or miss consumer credit payments and thus are more likely to take easily applied and high-cost forms of credit such as store cards and payday loans. Bellini et al. (2017), found that the higher the level of pre-shopping preparation (such as comparing prices between vendors), the lower the level of impulse buying. A study by Fook and McNeil (2020) of young females (18–25 years) in New Zealand found that BNPL buyers have higher impulse buying tendencies than non-BNPL buyers, with the increased likelihood of future purchases if they have access to BNPL facilities, which in turn can lead to over-consumption.

Another factor that can lead to over-commitment is compulsive spending behaviour, which is related to but distinct from impulse buying. Compulsive behaviour has been defined as 'an overpowering, uncontrollable, chronic and repetitive urge to shop and spend' (Edwards, 1993). Yurchisin and Johnson (2004) found evidence of compulsive spending behaviour in young people and that this behaviour was negatively related to self-esteem and positively related to perceived social status with buying and materialism. Compulsive buying behaviour was found to be higher among American college-aged students than among the general public (Brougham et al., 2011). The authors found that there is a lower level of compulsive buying among students who have a future time perspective (those who planned for the future) and who paid for their own credit card debts, than for students who had a present time perspective and who relied on their parents to pay their debts. Although impulse buying is distinct from compulsive buying, it has been shown that impulsiveness can influence compulsive buying. Darrat et al. (2016) found that impulse buying increases anxiety in consumers which, in turn, is linked to compulsive buying.

Prior studies have commonly re-used (or modified) existing established measurement scales, which have demonstrated reliability and validity, to measure financial wellbeing, impulse buying tendencies and compulsive buying behaviour. We therefore turn to the identification of such scales. The Prawitz et al. (2006) Incharge Financial Distress/Financial Well-Being (IFDW) Scale is frequently used to measure financial wellbeing. It is an eight-item model with questions such as 'What do you feel is the level of your financial stress today?' (highest factor loading), with responses provided on a 10-point continuum.

In Australia, the Commonwealth Bank of Australia and Melbourne Institute of Financial Wellbeing Scales (Comerton-Forde et al., 2018; Melbourne Institute: Applied Economic & Social Research, 2020) were developed using survey and banking data to measure financial wellbeing. There is a 10-item version and a shorter five-item version with items such as 'I can enjoy life because of the way I'm managing my money' and 'I could handle a major unexpected expense', answered on a five-point Likert scale according to how well the statement describes the respondent, from 'completely' to 'not at all'. The scales categorise financial wellbeing into four descriptive bands, including *having trouble*, *just coping*, *getting by* and *doing great*. The scales have been used in various academic studies, such as those investigating how labour market shocks during the COVID-19 pandemic impacted on financial wellbeing (Botha et al., 2021), as well as by industry, such as the Commonwealth Bank of Australia (2021) financial wellbeing online survey.

The Rook and Fisher (1995) impulse scale is frequently used and has nine items. It includes items such as 'I often buy things spontaneously', and 'buy now think about it later describes me'. An example of its adapted use is that a three-item Rook and Fisher (1995) based model was used to demonstrate that individuals who exhibit high levels of materialism and impulsivity tend to buy on credit more (Mette et al., 2019).

Verplanken and Herabadi (2001) developed another frequently used impulsiveness scale with 20 items which includes cognitive aspects (e.g., lack of planning and deliberation) and affective aspects (e.g., feelings of pleasure, excitement, compulsion, lack of control, regret). Fook and McNeil (2020) used a modified version of the scale to demonstrate a close positive relationship between the impulse online purchasing behaviour of young adult females and their ongoing use of BNPL credit platforms.

A widely used scale for measuring compulsive behaviour was developed by Faber and O'Guinn (1992), which includes seven items such as 'bought things even though I couldn't afford them' (the highest factor loading, which the authors have found to be the most discriminatory) and 'felt others would be horrified if they knew of my spending habits'. Respondents are asked to measure feelings or behaviour in relation to these seven items on a five-point Likert scale ranging from 'very often' to 'never'.

Development of the abovementioned scales typically commenced with a wider number of potential items identified in the literature, which were then refined to only include items of significance and to ensure internal consistency (reliability), and content, criterion and construct validity. For example, through exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), the Commonwealth Bank of Australia and Melbourne Institute Financial Wellbeing Scales were reduced from 33 original potential items to 10 items and the Rook and Fisher (1995) model was reduced from 35 potential items to nine items.

In summary, the literature survey has identified several studies which confirm a relationship between financial wellbeing and the RFRBs to be explored in our study, including financial knowledge (in our case the extent to which T&Cs are explored), planning and budgeting, impulse buying and compulsive buying. However, the vast majority of these studies were carried out in relation to credit cards or other non-BNPL debt. No study has been identified that explores our combination of variables and methods in a BNPL context. Our study aims to fill this gap. In undertaking the literature review, we observed a number of studies which commented that the number of qualitative studies in finance is very low and only emerging as compared to quantitative studies, and that Asia-Pacific finance journals have great opportunity to benefit from more studies using qualitative methods such as interviews, surveys or behavioural experiments (Cheah et al., 2015; de Villiers et al., 2019; Gippel, 2013; Kaczynski et al., 2014; Salmona et al., 2015). Thus, a further contribution of our survey-based study is that it adds to this emerging body of qualitative finance studies. The literature survey has also identified some potential scales for measuring RFRBs and financial wellbeing. The methodology for the measurement of financial wellbeing that we have adopted in this study is discussed in Section 4.

3 | HYPOTHESIS FORMULATION

Based on the relationships between the RFRBs identified in the introduction (Section 1), and financial wellbeing as shown in the literature survey (Section 2), we predict that the following relationships will exist among BNPL users (hypotheses are shown in the alternate format):

H1. Increased thoroughness in the examination of the T&Cs by BNPL users has a significantly positive impact on financial wellbeing.

H2. Planning and budgeting for purchases by BNPL users has a significantly positive impact on financial wellbeing.

H3. Lower impulse buying tendencies lead to significantly lower compulsive buying by BNPL users.

H4. Lower compulsive buying by BNPL users has a significantly positive impact on financial wellbeing.

H5. Using a debit card instead of a credit card for BNPL purchases has a significantly positive impact on financial wellbeing.

H6. Having only one BNPL purchase on the go at the same time has a significantly positive impact on financial wellbeing.

H7. There is a significant difference between the <25 and 25+ groups in financially responsible behaviours relating to BNPL.

The above hypotheses are summarised in Figure 1 in Section 5. With the exception of H3 (impulse buying), all the factors are predicted to have a direct impact on financial wellbeing. As identified in the literature survey, impulsive tendencies can lead to compulsive buying which in turn can impact on financial wellbeing; hence, this is the relationship that has been hypothesised.

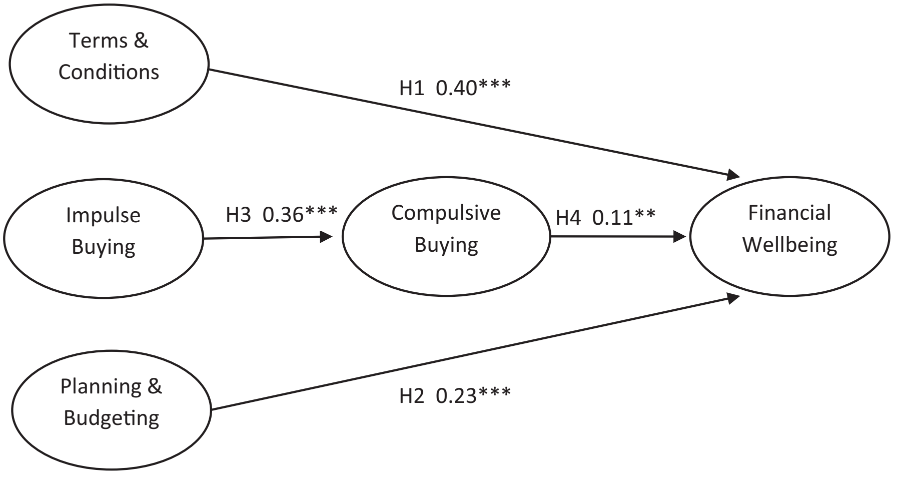

FIGURE 1 Structural equation model.

4 | METHODOLOGY

4.1 | Sample

Online survey questionnaires were developed in Qualtrics. As part of the refinement process, a pilot survey was undertaken among the general Australian public for which we collected 30 fully completed responses from BNPL users. The final refined survey was then sent to the general Australian public at the end of 2020, for which we received 360 fully completed and useable returns from BNPL users meeting our target profile. This profile included 50% (180) of users in the <25 group and 50% (180) in the 25+ group. As identified in our literature survey, the younger users are considered financially vulnerable. They represent approximately half of all BNPL users who have experienced financial difficulties. So, by surveying the two age groups, we were able to compare their results. Australian states were represented according to their population size. The gender breakdown was 60% female and 40% male, which is similar to the breakdown of users reported by BNPL companies. Screening out questions were used to exclude respondents that were not BNPL users, or who did not meet the profile requirements. The survey respondents had to complete all the questions in the questionnaire before it was submitted. This ensured that there was no missing data. An attention checking question was included in the questionnaire to screen out respondents who might be skimming questions.

4.2 | Survey approach and sections

The survey questionnaire primarily used five-point Likert scales which were supplemented by multiple-choice questions and open-ended questions. In line with approaches identified in Section 1, the study included both subjective and objective elements. For example, respondents were asked to respond on a Likert scale which included ‘completely’, ‘very well’, ‘somewhat’, ‘very little’ or ‘not at all’ in relation to how well the respondents thought their behaviour was described by the statement ‘I make a thorough examination of the terms and conditions of my own buy-now-pay-later provider when I open my account’. This was followed by a drop-down question about the number of minutes they actually spent examining the T&Cs and an open-ended question as to the reasons why they did (or did not) pay thorough attention to the T&Cs. Consistency was shown when comparing the subjective and objective elements for these questions, with the following average times taken by respondents to read the T&Cs for each point on the Likert scale: 'completely' (15 min), 'very well' (11 min), 'somewhat' (8 min), 'very little' (5 min) and 'not at all' (2 min).

The four main sections of the questionnaire are outlined below:

- Section 1 of the survey identified the user profile, such as age, gender, state of residence, income and frequency of use of BNPL.
- Section 2 of the survey identified the financial behaviour of users at the time they opened their BNPL account. The financial behaviours included the extent to which they read the T&Cs of the BNPL provider; whether they compared the T&Cs of BNPL providers; whether they planned their purchases and used a budget; their use of credit cards or debit cards to pay their BNPL instalments and how many BNPL accounts they had on the go at once. The literature survey in this study revealed a link between beliefs and behaviours, so questions were also included about participants' beliefs, such as the importance they placed on reading T&Cs and planning for purchases, as well as their actual behaviour in relation to these beliefs.
- Section 3 of the survey looked at impulse buying behaviour and compulsive buying behaviour. The Likert scales used in this section were based on the impulse buying scale of Rook and Fisher (1995) and the compulsive buying scale of Faber and O'Guinn (1992). These scales were selected for their widespread use and reliability as discussed in our literature review.
- Section 4 of the survey tested the financial wellbeing of the users using the Commonwealth Bank of Australia and Melbourne Institute of Financial Wellbeing Scale which was discussed in our review of the literature. The scale was chosen for two reasons: first, because of its demonstrated reliability and validity, and second, because it was developed in an Australian context, and our study is on Australian BNPL users.

4.3 | Procedure

The Likert items in our study were subjected to principal component analysis (PCA) and EFA in SPSS, including rotated component analysis, to identify their principal components, indicated factor loadings and internal consistency. The factors were then subjected to CFA and SEM in AMOS to confirm the latent constructs and their component items, to test our hypotheses and to analyse the structural relationships between the measured variables and latent constructs. Note that the analysis commenced with all the original items from existing scales (i.e., nine items for the impulse scale, seven items for the compulsive scale and 10 items for the financial wellbeing scale), which is in line with general practice. They were then refined during the PCA and CFA analysis to ensure that all items had acceptable factor loadings, and also to ensure the reliability and validity of the constructs, using generally accepted reliability, validity and model fit benchmarks (see, e.g., Byrne, 2010; Hair et al., 2017).

It should be noted that, while this study will determine whether it is possible to achieve significant relationships in the model, non-significant outcomes would also serve to answer the research question as to whether there are significant relationships between the RFRBs and financial wellbeing.

A comparative analysis of the <25 and 25+ groups was then undertaken. Given that the findings of our analysis in the results section (Section 5) show significant internal consistency for the measured variables for each of the latent constructs we used (i.e., they all reliably measure the same construct), we created combined scales from the means of the measured variables of each latent construct to facilitate comparison. To determine whether parametric or nonparametric comparison tests were appropriate, tests of normality in distribution were undertaken for all individual items as well as all the combined scales, using both Shapiro–Wilk and Kolmogorov–Smirnov tests. As expected, given the ordinal nature of our survey, all items were found to be non-normally distributed at significant levels (in most cases $p < 0.01$ and in all cases $p < 0.05$), confirming the use of nonparametric tests for comparing items. We adopt the nonparametric Mann–Whitney *U* test, commonly used for comparing scales.

5 | RESULTS

5.1 | Constructs and underlying items

Our PCA and CFA analyses identified five separate latent constructs: *terms and conditions*; *planning and budgeting*; *impulse buying*; *compulsive buying*; and *financial wellbeing*. We also have two individual items: *credit cards* (use of debit card as opposed to credit card), and *on the go* (whether the buyer had no more than one BNPL purchase at any one time). For our analyses, in line with general practice, the constructs were refined to ensure reliability. The final constructs and their underlying measured variables included in our study are shown in Table 2. Survey respondents were asked to provide their responses specifically in relation to BNPL. The original scales for compulsive buying and impulse buying were reduced during our analysis to four and five items respectively. The final financial wellbeing scale used is the five-item version of the Commonwealth Bank of Australia and Melbourne Institute of Financial Wellbeing Scale identified in the literature survey, as this had better model fit than the 10-item version. All of the final constructs showed acceptable reliability. Cronbach's alpha, in all cases, was greater than the acceptable 0.7 (and in most cases was >0.8). Eigenvalues for the highest factor loading in each construct exceeded the acceptable 2.0 level. Composite reliability undertaken during CFA was higher than the acceptable 0.7 in all cases and higher than 0.8 in most (Table 1).

5.2 | Structural equation modelling

Structural equation modelling showed the *credit cards* and *on the go* items to have no significant contribution to financial wellbeing and they were thus excluded from the model. The remaining items were included in the model, and they are shown in Figure 1 with all the path coefficients and significance levels (where *** denotes significance at the 1% level and ** at the 5% level).

There is good model fit. All the underlying items in the model have good factor loadings >0.7 (Table 2). The model had a relative chi-square (CMINDF: the chi-square/degree of

TABLE 1 Composite reliability measure of latent constructs.

Construct	Items	Composite reliability
Terms and conditions	3	0.828
Planning and budgeting	3	0.846
Compulsive buying	4	0.776
Impulse buying	5	0.856
Financial wellbeing	5	0.875

Note: The first column shows the latent constructs and the second column shows the number of measured items for each construct (as detailed in Table 2). The third column shows the composite reliability of these items that was obtained during our confirmatory factor analysis. Composite reliability measures the internal consistency of the construct items where values between 0.7 and 0.9 are generally considered desirable (see, for example, Hair et al., 2017).

TABLE 2 Loadings of the underlying measured variables for each factor.

Factors and measured variables	Loading
1. Terms and conditions:	
I make a thorough comparison of the terms and conditions of other buy-now-pay-later providers when I open a buy-now-pay-later account	0.84
I make a thorough examination of the terms and conditions of my own buy-now-pay-later provider when I open my account	0.80
I think it is important to make a thorough examination of terms and conditions when opening a buy-now-pay-later account	0.73
2. Planning and budgeting:	
In relation to your buy-now-pay-later purchases:	
I set a formal budget for bills, loan payments and buy-now-pay-later payments	0.82
I plan my purchases	0.90
I think it is important to plan my purchases	0.72
3. Impulse buying:	
In relation to your buy-now-pay-later purchases:	
I often buy things spontaneously using buy-now-pay-later	0.71
Just do it, describes the way I buy things	0.80
I often buy things without thinking	0.85
I see it, I buy it describes me	0.87
Buy now, think about it later, describes me	0.79
4. Compulsive buying:	
In relation to your spending habits using buy-now-pay-later:	
I bought things even though I could not afford them	0.79
I felt others would be horrified if they knew of my spending habits	0.82
I bought something when I knew I did not have enough money in the bank to cover it	0.77
If I have any money left at the end of the pay period, I just have to spend it	0.73
5. Financial wellbeing:	
I can enjoy life because of the way I manage my money	0.76
I could handle a major unexpected expense	0.72
I feel on top of my day-to-day finances	0.79
I am comfortable with my current levels of spending relative to the funds I have coming in	0.79
I am on track to have enough money to provide for my financial needs in the future	0.80

Note: This table shows the five factors (i.e., the latent variables in bold, numbered 1–5) and their underlying measured variables (items measured by our Likert scales). These are the final items after having undertaken confirmatory factor analysis. The factor loading in the final column shows the extent to which each of the measured variables are related to each factor. While there is no universal cut-off for factor loadings, they should ideally be 0.7 or higher (see, for example, Hair et al., 2017).

freedom) of 1.794. The comparative fit index (CFI) was 0.965, root mean square of error approximation (RMSEA) = 0.047 and p-value of the null hypothesis that RMSEA ≤0.05 (PCLOSE) = 0.702. Discriminant validity was demonstrated by average variance extracted (AVE) exceeding the correlation coefficient in all cases.[1]

Findings from the SEM modelling for each hypothesis will now be discussed.

[1]Although there are some varying benchmarks in the literature, commonly accepted benchmarks (see, e.g., Byrne, 2010; Hair et al., 2017) are factor loadings >0.7, CMIN/DF <2, CFI >0.9 (or better still 0.95), RMSEA <0.05 and PCLOSE >0.5.

5.2.1 | H1: Increased thoroughness in the examination of the T&Cs by BNPL users has a significantly positive impact on financial wellbeing, is supported at the 0.01 level.

This item had the largest coefficient of 0.40 and highest significance in the model. This supports what was identified in our literature review, namely, that financial knowledge is an important contributor to financial wellbeing. Taking time to understand the T&Cs and comparing BNPL facilities offered lead to better financial decision making. Respondents' beliefs about the importance of T&Cs and their actual behaviour relating to reading the T&Cs both loaded well into the same T&Cs latent construct, showing internal consistency, confirming what was identified in the literature review that people who believe in responsible financial behaviour are more likely to act in a financially responsible way.

Additional questions included in our survey showed that, in many cases, the time spent reading the T&Cs was very low. Of the respondents who spent time reading the T&Cs, 47.0% spent <5 min reading the T&Cs (with half of those spending <2 min). Less than half of respondents (48.7%) agreed or strongly agreed that they clearly understood the T&Cs. Around 30% of respondents disagreed or strongly disagreed that they understood how missed repayments might affect their credit record or how their missed payment fees compared with that charged by other providers. Common reasons provided for not reading the T&Cs were: 'too long'; 'not enough time'; 'busy'; 'boring'; 'complicated'; or 'couldn't be bothered'. Of the respondents who claimed they read the T&Cs thoroughly, common reasons given were: 'to know what I'm getting into'; 'to be careful'; 'to understand'; and 'to avoid scams'. When asked for suggestions on how to improve the T&Cs, 'shorter' or 'simpler' were the most common suggestions. Other less common suggestions were 'make them more interesting', 'less legal jargon' and 'use a video' or 'FAQs' to explain the T&Cs.

5.2.2 | H2: Planning and budgeting for purchases by BNPL users has a significantly positive impact on financial wellbeing, is supported at the 0.01 level.

This item had a coefficient of 0.23 and was statistically significant at the 1% level. Approximately two-thirds of survey respondents felt that planning for BNPL purchases was very or extremely important. There were, however, differences found in the way respondents did their budgeting: 46.4% of respondents use a formal documented budget on a spreadsheet, book or online tool, while 43.1% of respondents have a 'mental' budget, but they felt that they were still keeping track of their finances and spending.

The responses indicate that setting a plan or budget results in less emotionally driven behaviours. Respondents use words such as, 'controlled', 'careful', 'cautious', 'conservative', 'responsible', 'disciplined' and 'planned', indicating that budgeting helps to manage emotions and feelings on their financial wellbeing as they feel prepared for unforeseen payments. In contrast, overspending beyond the budget elicits feelings of guilt, remorse and anxiety with words such as 'bad', 'reckless', 'impulsive' and 'chaotic' commonly found through respondents' comments. Planned behaviour was more prevalent when an individual's income and budget is limited or declining, which is somewhat consistent with the findings by Oehler and Horn (2020) whose research from a financial investment perspective showed that households with lower income are more likely to be cautious in their financial behaviour.

The majority of survey respondents felt fairly positive with their capacity to enjoy life because of the way they manage their money (92.8%), their ability to handle a major unexpected expense (78.9%) and were secure in their financial future (80.6%). We found that the vast majority of self-reported positive comments on buying behaviour were likely due to the respondents' high regard for self-budgeting, as many were saying that they plan and budget well. We discuss our findings on impulsive buying and compulsive spending in the next sections.

5.2.3 | H3: Lower impulse buying leads to significantly lower compulsive buying by BNPL users, is supported at the 0.01 level.

The SEM model finds that impulse buying influences compulsive buying. From an impulse buying perspective, 44.2% of respondents agree or strongly agree that they often use BNPL to make spontaneous purchases. Having a budget or plan can enable an individual to establish the amounts they have for unplanned purchases. An example is the following statement: 'I buy spontaneously, but have a budget for how much I spend each week'. Most respondents were able to report responsible behaviours such as 'thinking carefully', 'taking my time', 'saving for occasional expenses' and 'shopping around or looking for the best deals and promotions', and regard themselves as having self-control.

Survey results on compulsive buying indicate that 68.3% of buyers who made impulsive purchases also reported using BNPL to make compulsive purchases such as spending money they could not afford, or by making purchases in order to feel better.

5.2.4 | H4: Lower compulsive buying by BNPL users has a significantly positive impact on financial wellbeing, is supported at the 0.01 level.

The SEM model shows that lower compulsive buying by BNPL users has a significantly positive impact on financial wellbeing, though the coefficient is lower than the other predicted relationships in the model. This may be due to the larger proportion of our sample respondents who regard their planned spending highly, leaving room for few occasions of impulsive or compulsive buying, thereby improving their financial wellbeing.

On the other hand, 36.9% reported making purchases they could not afford or had no money in the bank to cover the amount and 29.8% felt others would be horrified if their spending habits were made known. Respondents described themselves as lacking self-control in the following terms: 'reckless especially with friends' (social status), 'phases of buying too much and phases of buying nothing' (over-restrictions leads to release of urges, materialism), or 'spend when I'm sad' (emotive spending, materialism).

5.2.5 | H5: Using a debit card rather than a credit card for BNPL purchases has a significantly positive impact on financial wellbeing, is not supported.

Linking BNPL to a debit card instead of a credit card is a strategy recommended by ASIC (2021) to curtail overspending and avoid paying credit charges. The SEM, however, showed that using a debit card rather than a credit card to pay for BNPL purchases had no significantly positive impact on the financial wellbeing of BNPL users. The two main ways of paying for BNPL purchasers are debit cards (65.0%) and credit cards (32.2%). Even among those who held credit cards, payment by debit card was the preferred method of payment.

The preference for debit cards over credit cards is consistent with the reasons why BNPL is popular. Among the reasons given for using BNPL, 62.0% of respondents agreed or strongly agreed that a key reason was that they found it cheaper than credit cards and 67.2% that they did not have to pay interest. Therefore, it would not make much sense to pay for BNPL purchases with a credit card, as the interest rates on credit card balances are high.

But notwithstanding the above, the use of debit cards rather than credit cards did not have any significant positive impact on financial wellbeing. To be eligible for a credit card there are minimum income requirements and the applicant must have a good credit score. Credit card companies carry out affordability assessments. Thus, a BNPL user paying with a credit card is more likely than not to be in full-time employment and have exhibited financially responsible behaviour. Otherwise, they would not be able to hold a credit card. If one of the main purposes of using BNPL is to avoid credit charges, the BNPL user is more likely to settle any outstanding credit card amount every month. This may explain why using a debit card instead of a credit card to pay for BNPL instalments is not likely to have any significant impact on financial wellbeing.

5.2.6 | H6: Having only one BNPL purchase on the go at the same time has a significantly positive impact on financial wellbeing, is not supported.

One of the recommendations from various bodies about being financially responsible vis-à-vis BNPL is to avoid having multiple BNPL payments on the go at once (ASIC, 2021; Financial Counselling Network, 2021). Our results showed that this item had no significant positive impact on the financial wellbeing of the participants in the study. While 59.8% of participants reported having more than one BPNL payment on the go, only 26.2% of respondents felt that they experienced financial difficulty as a result of BNPL. Nevertheless, 43.6% missed at least one payment and, in order to meet payments, 17.4% became overdrawn on their bank accounts, 15.6% had to borrow from family and friends and 13.2% had to delay bills such as electricity and rent.

5.3 | Comparison between age groups

The study now turns to a comparison of RFRBs between the <25 and 25+ age groups (in relation to H7 which hypothesises significant differences between these groups). For reasons discussed in Section 4, we use the nonparametric Mann–Whitney *U* test for comparisons.

Table 3 provides descriptive statistics and comparison outcomes. The younger group (<25) showed a risker profile in most areas, having a significantly riskier profile for the T&Cs item (1% significance) and planning and budgeting (5% significance). The <25 age group also showed slightly higher impulse and compulsive buying, but not at a significant level. The <25 younger group had significantly higher financial distress (1% level). While this group also showed a slightly higher propensity to have multiple BNPL purchases on the go at once, this was not significant. The only area for which the younger group had less risk (slightly, non-significant) than the 25+ group, was that they made more use of debit cards (as opposed to credit cards) than the 25+ group. Thus, while there were differences between the groups for most items, not all were significant, with H7 (differences between the age groups) significantly supported in respect of T&Cs and planning and budgeting.

A larger proportion of the <25 age group reported not having a formal or mental budget, or a clear picture of monthly expenses, than the 25+ age group. Though the differences are statistically significant at the 5% level, the extent of respondents who displayed risky behaviour in this respect is quite low compared to those indicating responsible behaviours of planning and budgeting.

The <25 age group were also less careful in planning their purchases and slightly more spontaneous, or likely to engage in impulsive buying. Table 3 also shows that compulsive buying is more likely in the <25 age group, leading to lower levels of financial wellbeing.

In relation to financial wellbeing, as seen in Table 3, there were 17.1% of the <25 age group (compared to 11.8% of the 25+ group) who disagreed or strongly disagreed with the items on

TABLE 3 Comparison of the recommended financially responsible behaviours of the <25 age group and 25+ age group.

Behaviour	Mann–Whitney *U* <25	Mann–Whitney *U* 25+	Significance	Mean <25	Mean 25+	% Disagree <25	% Disagree 25+
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
T&Cs	**193.92**	167.08	***	**2.23**	2.01	**12.6**	5.4
Planning & budgeting	**193.35**	167.65	**	**2.40**	2.13	**11.5**	6.5
Compulsive buying	**185.08**	175.92	–	**2.80**	2.66	**31.8**	28.8
Impulse buying	**187.90**	173.10	–	**2.89**	2.71	**32.8**	31.8
Financial wellbeing	**194.95**	166.05	***	**2.53**	2.30	**17.1**	11.8
Credit cards	177.50	**183.50**	–	1.33	**1.37**	33.0	**36.7**
On the go	**185.05**	167.95	–	**1.75**	1.69	**12.8**	11.7

Note: Columns (1) and (2) show the Mann–Whitney *U* score for each age group, with a higher score (bold) reflecting the higher risk age group for the behaviour. Column (3) shows the level of significance for the differences between the two age groups, with *** denoting 1% (highest level of significance), ** denoting 5% and '–' denoting not significant. Columns (4) and (5) show the mean score (bold showing the higher risk group). For the first five items (T&Cs through to financial wellbeing), the mean is based on a score of 1–5 with 1 being lowest risk (e.g., 'strongly agree' that the responsible behaviour is being displayed) and 5 being highest risk (e.g., 'strongly disagree'). For credit cards, the score is based on 1 for use of debit cards and 2 for credit cards. For 'on the go' it is based on a score of 1–3 with 1 being only one item on the go at once and 3 for multiple items (more than three). Columns (6) and (7) show the percentage of buyers displaying risky behaviour (e.g., for the first 5 behaviours, they 'disagree' or 'strongly disagree' that they are displaying the relevant responsible behaviour, or in the case of the last two behaviours they use credit cards instead of debit cards or have multiple items on the go at once).

the financial wellbeing scales (i.e., these respondents were experiencing low financial wellbeing). In terms of the Commonwealth Bank of Australia and Melbourne Institute of Financial Wellbeing Scales scoring system (Comerton-Forde et al., 2018; Melbourne Institute: Applied Economic & Social Research, 2020), 25% of our <25 age group respondents fell into in the lower ('having trouble' or 'just getting by') categories compared to 15% of the 25+ group. A total of 48% of the <25 age group had missed at least one payment compared to 39% for 25+. Comments were similar among the two groups. Users had experienced financial distress due to BNPL being 'too easy' to buy things they did not need. On the other hand, others in both groups felt BNPL had 'reduced my stress' or 'made it better' due to the ability to delay payment.

There was little difference between the two age groups in relation to debit card use. The survey found that 66.7% of those in the <25 and 63.3% in the >25 age group used debit cards to pay for BNPL purchases. Those in the <25 age group were, however, less likely to hold a credit card (42.8%) than those in the >25 age group (26.1%). Both groups indicated that overall, they thought BNPL was 'cheaper than a credit card' but a worrying comment was that it was better than credit cards as there were 'rarely any credit checks'.

In terms of having multiple BNPL payments on the go, 62.2% of the <25 had two or more BNPL payments on the go, but 48% had only one BNPL provider account. Nevertheless, in order to meet BNPL payments, 15.6% of the <25 group had to go overdrawn on their bank accounts and 18.5% had to borrow from family and friends. The 25+ group showed a marginally lower percentage that had two or more BNPL payments on the go (57.3%), while a higher portion of this age group had only one BNPL provider account (66%) compared to the <25 group. In meeting BNPL payments, 19.1% of the 25+ group had to go overdrawn on their bank accounts while 13.0% had to borrow from family and friends. Both groups commented on specific payment aspects of BNPL increasing their financial stress where late fees can 'accumulate quickly' and 'payments add up without you realising', but others stated that financial stress was reduced as the 'payments were manageable' and 'as long as you pay it on time or make extra payments'.

6 | CONCLUSIONS

Regulators and consumer groups in Australia have expressed concerns at the impact that BNPL purchases can have on the financial wellbeing of users, particularly for young buyers, and have recommended various financially responsible behaviours to help mitigate negative impacts. This study sought to determine whether there was a significant relationship between financially responsible BNPL behaviours and financial wellbeing, and whether there was a difference between <25 and 25+ buyers. Factors found by the study to influence financial wellbeing included analysis of BNPL T&Cs, budgeting and planning for BNPL purchases and compulsive buying behaviours (the latter being influenced by impulse buying tendencies). Using a debit card as opposed to a credit card, or by having multiple BNPL purchases on the go at once, were not found to significantly influence financial wellbeing of users.

At a significant level, the <25 group was found to spend less time analysing BNPL T&Cs and less likely to plan and budget for purchases. They showed somewhat more compulsive and impulse buying behaviour but not at a significant level. Unsurprisingly, they also showed a significantly lower financial wellbeing score. Overall, these findings tend to support concerns that have been expressed about younger BNPL users being more financially vulnerable. Interventions can encourage users to engage in RFRBs and regulators and BNPL providers should consider not just setting minimum product standards but also various financial wellbeing interventions such as counselling and education to 'nudge' BNPL users into a desired direction.

Given the significance of thoroughly analysing the BNPL T&Cs on financial wellbeing and the comments from the respondents in our study about why they did not spend the requisite time doing so, it could indicate to regulators that it may be necessary to subject BNPL terms and conditions to certain mandated standards. For example, all BNPL terms and conditions must be presented in a prescribed format, contain certain required information and be written in plain English. Appropriate warnings about the risks and ramifications of default must be included with worked examples if necessary (the annual percentage rate could be shown should there be a default and late fees charged). There could also be regulatory controls imposed on how BNPL services are advertised in the media as well as in-store.

While our study identifies that concerns over the impacts that BNPL purchases can have on the financial wellbeing of users, particularly young buyers, are indeed warranted, there are limitations in our analysis which can be addressed in future research. Firstly, our study was carried out at a time during the COVID-19 pandemic, which had unique circumstances such as increases in online shopping (69.7% of purchases by respondents were online), lockdowns and support payments being received by many employees such as 'job-keeper' in Australia. Also, BNPL is a very new product (46.4% of our sample had been using BNPL for less than a year), and financial literacy regarding the product could increase over time. Should the COVID-19 pandemic situation normalise for a sustained period of time, a longitudinal survey could be conducted to determine if changing pandemic circumstances and an increase in BNPL literacy has had an effect on the ability to meet BNPL payments. In addition, the <25 group was shown to be more likely to have missed at least one payment (48%) than the 25+ group (39%). Given those late payments can result in fees being charged and can negatively impact credit scores, this could have long-term financial implications, especially if BNPL habit forming, further supporting the need for a future longitudinal study to assess long-term impacts. Also, the literature survey showed that compulsive behaviour can be linked to self-esteem. Our study shows that compulsive behaviour has a significant impact on financial wellbeing, which indicates the need for a potential future study on the factors that cause compulsive behaviour in a BNPL context, and the extent to which this is linked to self-esteem.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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