

Exploring Financial Shame

Evan Legaspi

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Professor Aaron Gilbert

Abstract

Households are increasingly indebted, with the financial pressure being associated with stress and depression, worsening physical and mental health, suicide, and divorce. Compounding this is a taboo regarding talking about money, with many individuals concealing their financial problems, avoiding addressing their financial difficulties, and withdrawing and isolating themselves. With all the spiralling negative effects of financial stress and debt on an individual's well-being, it is critical that we understand financial shame.

This research aims to explore the factors that amplify and buffer financial shame. Across Aotearoa New Zealand, 704 Kiwis were asked to answer questions on psychosocial processes, lifetime factors, contextual conditions, and personal resources, identified through prior research on general shame. These factors included role-based identity proxied with household financial responsibilities, group membership based on ethnic and religious affiliations, financial literacy and self-efficacy, and the importance of social comparisons. This research probed the individual's past financial journey, including childhood socio-economic upbringing and family financial socialization, financial hardship and material deprivation in later life, and explored their current financial circumstances.

The univariate analyses showed that most of the investigated factors significantly influenced financial shame. Lack of control over household finances, low self-efficacy, collectivist orientations, and weak ethnic belonging were associated with higher shame, whilst financial literacy and confidence acted as strong buffers. Social comparison emerged as a central amplifier, with financial hardship – both in childhood and adulthood – as a consistent predictor. Subjective financial well-being protected more strongly against shame than objective measures, highlighting the psychological nature of financial distress.

Regression results confirmed that self-efficacy (negatively) and social comparison (positively) had the strongest correlations with financial shame, while current financial circumstances is likely a critical trigger towards feeling financial shame, with past hardship likely serving as a key source of shame-proneness. Cluster analysis further reinforced these dynamics, revealing six distinct financial shame personas that differed based on respondents' agency regarding financial decisions, confidence, cultural orientation, social comparisons, and

financial stability. The shame components were also used to establish unique groupings that can be used to understand how background, beliefs and resources shape the emotional experiences of money. Across all models, age consistently moderated the experience of shame – both buffering and amplifying its effects, depending on life stage – demonstrating that financial shame is multi-dimensional, context-dependent, and deeply rooted in both one’s financial trajectory and sense of identity.

The research findings reinforce that financial shame is not simply about money, but reflects a deeper judgement of the self, with the *meaning* people attach to money, such as competence, responsibility, independence, and success, as the core driver. This research presents some opportunities to build financial shame resilience, and contributes to what is currently a very limited literature on a critical issue. Opening up these discussions on financial shame enables developing effective interventions that remove these money and debt taboos, and help those who need help the most, with urgency and purpose.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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Finally, to explore financial shame, a relatively novel field in behavioral finance, I used a survey for this research, which was approved by the AUT Ethics Committee on October 30, 2024, with Ethics Application Number 24/331. Thank you for supporting this endeavour, for which I am most grateful.

I. Introduction

The Background of Financial Shame

“Everyone needs a sense of shame, but no one needs to feel ashamed.”

– Friedrich Nietzsche, German philosopher

“I can still recall my actions as if they happened yesterday... I have been avoiding phone calls from my banker. And I have disregarded his emails too. I have stopped looking at the bank account. I am hoping that if I don’t admit the financial debt that I am in, that it will all eventually go away... Having worked in financial services for most of my life, I should have known better... It has been very difficult to acknowledge that I have made some very poor financial decisions, with the consequences impacting my family... I am beginning to understand that what I was feeling was financial shame, and that I am not alone in this feeling.”¹

Financial shame is a barrier that prevents many people today from getting the financial help that they need. And it has deadly consequences.

Global wealth has reached unprecedented levels, nearly quadrupling since 2000, to over \$600 trillion at the end of 2024 (Dolan, 2025). However, at the same time, personal financial insecurity and debt are rising simultaneously. Consumer credit and debt (including student loans, credit cards, mortgages and ‘buy now, pay later’ systems) has become a normalized part of modern life (Peñaloza & Barnhart, 2011), with global private debt (household debt and non-financial corporate debt) representing 54% of global GDP (IMF, 2025). The situation is equally concerning in New Zealand where household debt is around 170% of gross household income (RBNZ, 2025). Adding to the debt burden is the recent period of high inflation, resulting in significant price increases, and slow income growth. As a result, more than one in four households in New Zealand are reporting finding it difficult to manage financially (Ipsos, 2025).

¹ Author’s personal experience and ponderings.

The increasing financial stress is taking a toll on individuals. High and hard-to-repay personal debt is associated with higher perceived stress, depression and worse general health (Sweet et al, 2013), and is linked to both increases in suicidal ideation and attempts (Rojas, 2022; Holkar, 2019) and suicides (Reeves et al, 2014). It also plays a part in marital stress and divorce (CFFC, 2020; Dew, 2011). Unfortunately, social taboos around money force people to grapple with these issues in isolation. For instance, there is evidence that even within families, people are unwilling to discuss finances (Experian, 2023; Capital Group, 2018). For the British, the “M-word” is “Britain’s greatest taboo” (Lee, 2019), while in New Zealand 50% do not talk about money and financial planning as a family (Morrall, 2012).

Not only is money a taboo topic, financial problems are seen as embarrassing (Morrall, 2012), resulting in financial shame. As a consequence of financial shame, many individuals hide their financial problems and avoid addressing their financial difficulties. This may include hiding debt from partners (Cameron, 2025; ASB Bank, 2023), lying to family and friends about indebtedness (Lee, 2019), concealing one’s financial situation, or trying to appear more prosperous (Coast Capital, 2023). Raskovic et al (2023) highlighted that a third of Kiwis were not completely truthful with their family or partners about the state of their finances, with 12% actively hiding their debt. Financial shame is a barrier that prevents people from asking for support, and instead makes them engage in financial concealment, withdrawal and avoidance.

With the rapid increases in the number of people experiencing financial stress and over-indebtedness, financial shame is on the rise. 36% of Canadians (Coast Capital, 2023) and 45% of Americans (Nudge, 2024) feel shame when it comes to their financial situation, with women feeling twice as much shame (12% versus 6%) about their financial circumstances as men (Advisor News, 2025). However, to date, there is very little research that addresses financial shame (Gladstone et al, 2021; Blea et al, 2021; Frankham et al, 2020a; Starrin et al, 2009).

The goal of this thesis is to explore the factors that influence and impact, amplify and buffer financial shame, and to contribute to the growing literature of this important topic. Primary data was collected through the use of an online survey questionnaire, developed using Qualtrics, and administered through Dynata. The questions were sourced or adapted from existing research, and cover attitudes towards financial shame, financial role and group identity, financial social comparisons, current financial situation and past financial experiences,

financial self-efficacy and literacy, alongside basic demographics information (gender, age, marital status, education level, employment status, and income level). New Zealand based respondents, aged eighteen and above, were targeted for the survey, and the study produced suitable responses from 704 respondents, to answer questions on the psychosocial processes, lifetime factors, contextual conditions, and personal resources, which relate to the identity and comparison components, and trait-state natures of shame.

Using univariate tests (one-way ANOVA and independent *t*-tests) to understand the significance of each factor in affecting financial shame levels, I found that most of the psychosocial processes, lifetime factors, contextual conditions, and personal resources, which I investigated, were significantly associated with financial shame levels. Through the regression analysis I conducted, I found that self-confidence in financial matters and social comparisons as the primary buffer and amplifier of shame. Additionally, current financial situation and past financial hardships have an important role as a trigger for, and inherent disposition towards shame. I conducted cluster analysis, which identified six distinct financial shame personas with marked differentiated features across the psychosocial processes, lifetime factors, contextual conditions, and personal resources examined in this study. I found that these six distinct shame personas differed by their balance of agency, confidence, cultural orientation, social comparisons and financial stability. The high levels of shame for Clusters 1 and 6 appear to be centred on the amplifying effects of past and current financial difficulties, alongside limited efficacy, whereas the high shame level for Cluster 5 appears to be expectations-driven, set through social comparisons and their ethnic and religious communities. The low levels of shame for Clusters 2 and 4 appear to be related to the buffering effects of both confidence in, and being in, secure financial circumstances. And the moderate level of shame for Cluster 3 appears to show the interplay between the strong protective factors of high self-efficacy and a positive current financial situation, with the effects of high levels of social comparisons, a prime contributor of shame. For both the regression and cluster analyses, I found that age, an important life course factor, as the most significant demographics factor, with both amplifying and buffering affects to financial shame.

This research aims to understand the financial shame paradigm better, by exploring individually the factors that significantly influence and impact financial shame, by understanding collectively the factors that amplify and buffer financial shame, and by developing distinct financial shame personas by combining these factors.

This novel study on financial shame aims to add to the body of work in behavioral finance research by broadening the discussions beyond rational and cognitive biases, to include the roles of emotional regulation, social evaluation and identity-protective mechanisms, into the understanding of financial decision-making and the shaping of present and future financial decisions. My hope is that this study helps evolve behavioral finance into a more psychosocial science – one that acknowledges that people do not just manage money, rather they manage what money *means* about them – and open up the discussions for other researchers to examine in depth what mediates and what moderates financial shame, and to begin to develop effective interventions to remove the taboos on talking about money matters and debt, and to help those who need help the most, with urgency and purpose, before it is too late.

II. Literature Review

The Role of Financial Shame

“Shame is the most powerful, master emotion. It’s the fear that we’re not good enough.”

– Brene Brown, American research professor and Shame expert

A. Financial Well-Being

Just as health is the overarching aim of medical care, financial well-being is being recognized as the end-goal of personal finance management and consumer economics. The idea of financial well-being, both as a component of general well-being and also as a representation of financial stability, has become an increasing focus of research in the past three decades. As yet however, there is no singular definition of financial well-being. Leveraging on the meaning for general well-being, Joo (2008) defines financial well-being as the state of being financially healthy, happy and free from worry. Ghazali et al (2020) equates financial well-being to financial wellness, financial satisfaction, financial security and financial health. More broadly, financial well-being is a comprehensive measure of financial health, which includes being in control over one’s finances (Vlaev & Elliott, 2014), having the capacity to absorb financial shocks (Bufe et al, 2021), feeling confident to meet current and future financial obligations towards one’s financial goals (Netemeyer et al, 2018), the financial freedom of making choices that bring enjoyment in life (Xiao et al, 2009), and experiencing the psychological calmness of mind over financial matters (Shobha & Chakraborty, 2017). Overall, financial well-being is less about a person’s financial resources than it is about the stability and sustainability of their financial situation (Gardarsdóttir et al, 2009).

While there is no standardized definition of financial well-being, ways to measure a person’s financial well-being have been developed. For instance, the UK’s Financial Services Authority commissioned a comprehensive study (Kempson et al, 2008) that provided a framework for understanding financial well-being based on both objective (income, savings, debt) and subjective measures (financial stress, confidence). In the US, the Consumer Financial Protection Bureau developed a standardized scale to assess financial well-being (CFPB, 2017a). The World Bank’s Global Findex Database (2021) uses financial behaviour data to better

understand the global state of financial well-being, whilst the OECD International Network on Financial Education's toolkit (2018) both measures and provides policy recommendations to improve financial well-being globally. However, despite the ability to measure financial well-being, the process of achieving financial well-being, and more importantly the barriers to financial well-being remains a developing area of the literature.

The focus on financial well-being in recent times comes from the significant consequences of having poor financial well-being. The Consumer Financial Protection Bureau reports (CFPB, 2015; CFPB, 2017b) determine that achieving financial well-being reduces stress and anxiety, improves physical health, enhances the quality of life, creates better family relationships, and leads to greater economic stability. The negative effects of financial ill-being are depression and mental health issues (Curl & Kearns, 2015), chronic health conditions (Dilmaghani, 2017), and linked to increased debt and income and social inequalities (Mohseni-Cheraghloo, 2016), which impacts both current and future generations (Sobolewski & Amato, 2005; Wagmiller & Adelman, 2009).

Additionally, financial well-being sits within a broader range of interconnected well-beings including physical, psychological, social and financial well-being (Zemtsov & Osipova, 2016). Financial well-being is therefore linked to a person's overall well-being (Brüggen et al, 2017), and is a significant indicator of an individual's life success and happiness (Shneyder et al, 2021). The repercussions of financial decisions on a person's well-being are both far-reaching and long-lasting.

B. Role of Financial Decision-making

Lusardi and Messy (2023) argue that financial decision-making is crucial for achieving financial well-being. Greenberg and Hershfield (2019) notes that consumers regularly make financial decisions on how much to save, when to take on debt and how to repay, and managing existing financial resources, all of which impact on financial well-being. Financial decision-making requires many complex choices involving resource allocation (Alam, 2023; Latané & Tuttle, 1966), risk management (Coleman, 2007), long-term planning and future orientation (Howlett et al, 2008), debt use and management (Amar et al, 2011), budgeting and cash flow

management (Chattoe-Brown & Gilbert, 1999), self-control (Galperti, 2019), and investment growth (Pasewark & Riley, 2010). Overall, financial decision-making affects all aspects of a person's financial life, from day-to-day money management to long-term planning and wealth accumulation.

Considerable research has looked at the factors that affect financial decision-making. Factors that have been identified include internal factors, like financial capability (knowledge and literacy) and life events (financial circumstances and experiences), social and cultural (family and community) influences, psychological factors and risk tolerance level, and external factors, such as economic market conditions, regulatory and policy factors. For instance, Lusardi and Mitchell (2007, 2011a, 2011b) have found a positive relationship between financial literacy and financial decision-making. In a subsequent study, Lusardi (2015) emphasized that the ignorance of basic financial concepts can lead to negative financial behaviors and decisions. Kempson et al (2017) developed a financial well-being conceptual model, highlighting the key roles of knowledge, skills, experience, and psychological factors for financial behavior and decision-making. Alesina et al (2013) investigated how social and cultural factors, family structures, social norms, cross-cultural differences and historical experiences impact economic decisions, whereas Petersen et al (2015) showed how national culture directly affects consumer financial decision-making. Levinson and Peng (2007) discussed how the cultural differences between Chinese and American participants influenced economic decision-making in financial value estimations. The Individual Personal Financial Management System developed by Lučić et al (2023) attempts to explain the diverse range of factors that influence financial decision-making.

C. Recurrence Effect of Financial Decisions

Good financial decision-making is about making well-informed, rational and goal-oriented choices, whereas good financial outcomes are the positive results that follow. While good decision-making may not always lead to good outcomes, given the inherent uncertainty about future outcomes associated with financial decision-making, it is easy to conceive of good decisions that result in good outcomes, making good financial decisions increasing the likelihood of achieving good financial outcomes. The outcome of good decisions contributes positively to a person's financial well-being, whereas the outcome of bad decisions will tend to have negative consequences for a person's financial health.

The way people make financial decisions is influenced (and potentially negatively affected) by various biases, such as the outcome bias (König-Kersting et al, 2021), framing bias (Der Mesrobian, 2023) and other behavioral biases (Bisati et al, 2021). An interesting aspect of financial decision-making is the so-called recurrence effect, where good decisions often lead to further good financial decisions, as they are linked to increased financial knowledge and confidence. Asebedo and Seay (2018) highlights how financial self-efficacy, built by previous good decisions, promotes good saving behaviors, suggesting that the confidence gained from making good financial decisions encourages further good decisions. Unfortunately, bad decisions also lead to more bad decisions. Bridges and Disney (2010) examined the link between financial debt and depression, highlighting that financial stress can lead to poor mental health, which in turn reduces cognitive ability, which can result in further poor financial decisions. Kim and Garman (2003) explored how financial stress affects a person's decision-making abilities, and is associated with a cycle of poor financial decisions and outcomes. This persistent vicious cycle of financial distress (Athreya et al, 2019) begins with an initial poor financial decision, which leads to financial strain and stress, which then impairs cognitive function and decision-making abilities. The resulting accumulation of debt and depletion of resources erodes financial confidence and self-efficacy, and is associated with further bad decisions, resulting in a negative cycle. When poor decisions lead to poverty (Sciarelli & Rinaldi, 2017), this cycle can trap families for at least three generations. Agarwal et al (2007) highlights that these financial mistakes follow a U-shaped pattern, with middle-aged adults making fewer mistakes compared to younger and older adults. A significant circuit breaker from this vicious cycle can be seeking and accepting outside advice and assistance. However, not everyone appears willing to seek help, even when they need it. One barrier is financial shame.

D. What is Shame?

Shame is a negative evaluation of oneself, as a response to a perceived failure, inadequacy or violation of standards and expectations, and can be either real or imagined (Kaufman, 2004; Tangney & Dearing, 2003; Lewis, 1995; Nathanson, 1994; Lewis, 1971). It typically arises from the comparison of one's self against either self-imposed standards or, more typically, from cultural norms (comparing what is normal and what is deviant), power structures (with discipline and social control), and social interactions (rooted in social bonds) (Foucault, 2019; Wong & Tsai, 2007; Fessler, 1999; Scheff, 1990; Goffman, 1978). Unlike emotions such as

fear, anger or joy, which are responses to environmental stimuli, shame is based on reflective judgment of ones' success based on social comparison (Tangney et al, 2007; Tracy & Robins, 2004; Tangney & Fischer, 1995).

Shame differs in focus, triggers and consequences, when compared to the other negative self-conscious emotions, such as guilt and embarrassment. Embarrassment focuses on social presentation and image ("I looked foolish"), marked by a loss of self-esteem, and is usually short-lived and easily resolved (Miller, 2013; Keltner & Buswell, 1997). Guilt, in contrast, focuses on a specific behavior ("I did something bad") that caused some harm, and is linked to corrective behaviors such as apologies or making amends (Tangney et al, 2007). Shame, however, focuses on the global self ("I am bad"), resulting in hiding, concealment, withdrawal, and avoidance, and with destructive thoughts around blame, intense anger and aggression. Shame has been strongly linked to depression, anxiety, and social withdrawal, undermining self-esteem, with the corrosive damage to one's self-esteem being both chronic and pervasive (Kaufman, 2004; Tangney & Dearing, 2003; Nathanson, 1994; Lewis, 1971). Shame, therefore, is a deep-seated emotion that makes an individual feel inferior, unworthy and flawed. It is harder to address, as it focuses on "who I am", rather than just one's image or behavior.

Shame is both a state and a trait. Initially developed by Spielberger (1966), the State-Trait Anxiety Theory argued that anxiety is both a temporal state, a transitory emotional condition that varies in intensity and fluctuates over time depending on the prevailing situation, as well as an enduring trait, a stable predisposition to experience the emotion more often and more intensely. This state-trait distinction is not unique to anxiety, but rather a general principle for all emotions. In particular, the state-trait distinction explains how individual differences in traits influence situational state reactions (Tracy & Robins, 2007; Tracy & Robins, 2004), and helps explain why two people in the same situation might respond very differently. The study of this state-trait distinction has been extended to other emotions, including shame. To address state-trait shame, Tangney et al. (1989) developed the Test of Self-Conscious Affect (TOSCA) to distinguish between momentary feelings of shame from inherent shame-proneness, and understand how the state shame triggers interact with trait shame dispositions (Tangney & Dearing, 2003). Arguably, trait shame sets the baseline sensitivity and vulnerability,

while state shame are momentary activations, with their interaction resulting in variability in emotional responses and intensities.

In understanding the state-trait distinctions that govern why people vary widely in how much shame they feel, and how intensely they respond to similar situations, research has identified a complex interplay of personality traits, early socialization and biological predispositions. Individuals with psychological maladjustments and a depressogenic attributional style tend to experience more shame (Tangney et al, 1992), whilst individuals with extraversion and openness to experiences personalities tend to experience less shame (Basu et al, 2024; Muris et al, 2018). Early childhood experiences, including parenting style and socialization, also influence how individuals experience shame. For instance, parental discipline that emphasizes the child's self rather than the child's actions results in the propensity to experience shame (Tangney & Dearing, 2003). Additionally, shame has also been associated with patterns of brain structure and function. For instance, activity in the dorsolateral prefrontal cortex, posterior cingulate cortex and sensorimotor cortex (Bastin et al, 2016), which are regions of the brain involved in memory, self-evaluation and social rejection, are associated with greater levels of shame. Higher cortisol levels as a response to stress have also been linked with a greater expression of shame (Lewis & Ramsay, 2002).

Shame has also been shown to be more prevalent in particular demographics. Women report higher levels of shame than men (Else-Quest et al, 2012). Women's greater propensity to shame is particularly prevalent for school-aged adolescence, due to greater social comparison and peer evaluation, which can lead to the development of psychological difficulties (Cunha et al, 2021). The gender difference in shame extends to the use of shame coping strategies, such as withdrawal and avoidance (Paulo et al, 2020). Shame has been linked to decreases as a person moves from adolescence into adulthood, with the lowest point around age 50 years. This finding supports the maturity principle of personality development, which suggests that as people age, they become less prone to experiencing psychologically maladaptive self-conscious emotions (Orth et al, 2010a), perhaps as older adults often develop better coping strategies, reducing their overall state shame.

E. The Consequences of Shame

Shame is associated with a range of coping behaviours oriented around hiding, withdrawal, and avoidance, such as avoiding eye contact, physically retreating, concealing one's mistakes, avoiding confrontation, and avoiding social events. These manifestations are classic defensive short-term coping mechanisms individuals use to protect themselves from social judgement, scrutiny, and further humiliation and exposure of their flawed self-image and social image (Gausel & Leach, 2011; Tangney & Dearing, 2003; Lewis, 1995; Lewis, 1971). The use of hiding and concealment to address shame can become habitual and chronic, preventing learning and social repair (Nathanson, 1994; Kaufman, 1989). When hiding, withdrawal and avoidance become chronic maladaptive behaviors, an individual's decision-making ability is undermined. As they feel fundamentally flawed, they lack confidence in their ability to use existing resources (Tangney & Dearing, 2003) or in seeking help (Lewis, 1995; Nathanson, 1994). As individuals experiencing shame fear negative social judgement, they tend to exhibit excessive risk avoidance, inhibiting proactive behavior, and is associated with general inaction and passivity (Gilbert & Andrews, 1998). Shame-prone individuals tend to internalize stigma more, and are less likely to seek professional help and psychological counselling (De Hooge et al, 2010; Vogel et al, 2010; Vogel et al, 2009; Vogel et al, 2007; Corrigan et al, 2006; Komiya et al, 2000). Shame ultimately reduces a person's willingness to seek help, trapping them in their current situation.

As shame leads to maladaptive coping behaviors and relational disconnection, shame is a barrier to well-being. Specifically, it undermines self-esteem (Tangney & Dearing, 2003) and erodes the sense of worthiness and belonging (Brown, 2006), making it a barrier to psychological well-being. Shame contributes to feelings of inferiority, blocking self-compassion and emotional regulation, and is associated with depression, anxiety and post-traumatic stress disorder (Kim et al, 2011; Lee et al, 2001), which are major barriers to mental health. Shame reduces social connectedness through concealment and withdrawal, isolates individuals from social groups, damaging relational well-being and reinforces cycles of exclusion (Leeming & Boyle, 2004). Ultimately shame can lead to depression, anxiety, low self-esteem, stigma, long-term isolation, relational conflict, violence, cruelty and atrocities (Gilbert, 2007; Tracy et al, 2007; Schmader & Lickel, 2006; Andrews et al, 2002; Gilbert and Andrews, 1998).

F. Domains of Shame

Shame expresses itself in different domains of a person's life, particularly where personal identity and social comparisons are central. A very common domain where shame manifests is body and appearance-related shame (Liang et al, 2021; Fredrickson & Roberts, 1997). Shame linked to racial, ethnic or cultural identity emerges when minorities are negatively judged by dominant groups, and are often amplified by social stigma or discrimination (Wong & Tsai, 2007). Sexual shame is shaped by social norms, trauma, and internalized beliefs, and affects sexual desire, functioning and inhibitions (Graziani & Chivers, 2024; Kilimnik & Meston, 2021). Stigmas around mental health lead those experiencing issues like anxiety, depression and other mental illnesses to feel shame, which inhibits help-seeking and affects well-being (Vogel et al, 2007). Family shame arises from the perceived failure to meet family expectations, especially with sibling and peer comparisons, and can lead to expressive suppression (Cao et al, 2025; Scheff, 2003). Workplace and performance shame comes from negative feedback at work or performance failure, and may motivate or inhibit future performance (Zada et al, 2022; Brown, 2015). While shame has been extensively researched in many of these domains, there is very little research on financial shame.

G. Financial Shame

Financial Shame refers to the feeling of embarrassment, guilt, inadequacy, and self-blame that individuals experience regarding their financial hardship situation, decisions, and behaviors (Gladstone et al, 2021; Hirdman, 2013; Jonsson, 2011). Whilst it shares core characteristics with general shame, it has distinct elements tied to money, economic status and financial behavior. To date, financial shame has been the subject of limited research. Research studies have shown the negative effects of financial shame on individuals physical and mental health (Frankham et al, 2020b; Sweet et al, 2013; Starrin et al, 2009; Rantakeisu et al, 1999), has been connected to addiction and crime (Bilevicius et al, 2018), feelings of isolation (Batsleer & Duggan, 2020), and can result in divorce and suicide (Stevenson & Wakefield, 2021; Kőlves et al, 2011). Blea et al (2021) found shame mediated the relationship between financial well-being and the negative outcomes of depression, anxiety, and spiritual well-being. While Gladstone et al (2021) and De la Cuesta- González et al (2022) suggest that financial shame exacerbates financial hardship, as it induces financial withdrawal, which then links to the increased probability of counter-productive financial decisions. Reducing feelings of financial

shame and financial stigma is linked to increased adaptive coping mechanisms for individuals in relation to their financial situation (Guijarro Parra, 2022). The costs of financial shame extend to the community through social and medical costs (Thompson et al, 2023; Gladstone et al, 2021), community disunity (Brown, 2015), and with multi-generational effects (Darin-Mattsson et al, 2018; Duh, 2016). Evidence shows that the impact of financial shame is real and not inconsequential.

Tangney and Dearing (2003) argue that many of the characteristics of shame are present across domains, including the negative evaluation of self, the state-trait dynamic, and similar coping mechanisms based around hiding, withdrawal and avoidance. I extend the shame principles identified in the other shame domains, and applying them to the financial domain. As a state, financial shame is most likely tied to situational triggers such as being unable to pay a bill, getting a debt collection notice, or being embarrassed in front of peers for financial shortcomings. As a trait, financial shame perhaps means that when faced with financial setbacks, some individuals are more prone to feeling a chronic, identity-based inadequacy, most probably related to past negative financial experiences, rather than feeling situational embarrassment, and view financial hardship as evidence of personal worthlessness.

The more visible manifestations of financial shame are through the effects of the coping behaviors of concealing debt and financial problems, financial secrecy and withdrawal from discussions about money, especially with the family, and avoiding opening bills and reading emails from creditors, as these are reminders of perceived failures. As these financial shame coping mechanisms become maladaptive, the individual fails to use budgeting and investment tools, despite having access or knowledge, and eventually becomes reluctant to seek financial help. Gladstone et al (2021) showed that individuals experiencing financial shame are more likely to engage in avoidance behavior, exacerbating their financial problems, resulting in a vicious cycle between shame and financial hardship. Moorhouse et al (2023) showed how the stigma of debt resulted in concealment behaviors of secrecy, social spending and help avoidance, which hinders debt reduction and negatively affects well-being. Financial shame acts as a barrier to effective financial decision-making, as individuals focus on avoidance and procrastination, heightened risk aversion, impulse-spending and emotional decision-making, undermining self-worth and engaging in self-sabotage, with difficulty in seeking help.

H. Financial Shame and New Zealand

Little research has explored the issue of financial shame in New Zealand. Raskovic et al (2023) reported that one-third of New Zealanders aren't fully open about their finances, with 12% of respondents actively hiding debts from their spouses and families, reflecting on how financial shame leads to secrecy, even within trusted relationships. New Zealand, as a former British colony, tends to view talking about money matters taboo. Raskovic et al (2023) argues that cultural taboos around discussing money in New Zealand is reinforcing isolation and inaction, as financial shame prevents many Kiwis from seeking help. With the isolation that the taboos on money bring, financial shame is a pervasive emotional barrier, with many Kiwis not getting the assistance that they need.

Exacerbating the issue of financial shame is the current financial situation in New Zealand. In March 2024, it was reported that New Zealand was in a technical recession, its second downturn in eighteen months, with the economy contracting in four of the last five quarters (RNZ, 2024). Despite the country beginning to emerge from this protracted recession (NZ Budget, 2025), with the recent extended period of high inflation, high interest rates and low growth, New Zealand households are under increasing financial pressure, that has resulted in a growing number of loan arrears, with mortgage arrears reaching an eight-year high in January 2025 (NBR, 2025; Centrix, 2025). Almost two-thirds of New Zealanders are worried about the cost of living (Ipsos, 2023), with a quarter worried about being able to put food on the table (Raskovic et al, 2023). The spillover effects of financial stress can lead to addiction (NZ Herald, 2022) and violence (Newsroom, 2022).

Given the serious negative effects of financial stress on an individual's well-being, it is evident that we need to understand financial shame better, especially given its role as a barrier in making good financial decisions and that prevents people from asking for support, especially when they have made bad ones. As a first step to better understanding financial shame, this research aims to identify factors that amplify or buffer financial shame. My hope is that this research contributes to the body of behavioral finance work to better understand financial shame, opens the dialogue on this very important topic, that allows us to recognize and help those who are more vulnerable to financial shame, and start developing interventions to address this powerful emotional barrier.

III. Hypothesis Development

The Theory of Financial Shame

“The wise shall inherit glory, but shame shall be the promotion of fools.”

– Proverbs 3:35, The Bible (King James Version)

The research to date has noted the serious negative consequences associated with financial shame. However, the literature has also noted that the degree to which a person feels shame differs between individuals, based on their trait shame. This research aims to advance the understanding of financial shame by identifying the factors that amplify or buffer it, clarifying whether shame is primarily driven by identity and comparison processes, or by current material circumstances, exploring how personal resources such as financial literacy and self-efficacy mitigate its impact, and determining the role of past hardship and life journey experiences in intensifying shame.

I have identified a range of factors based on the prevailing shame literature that I seek to test. I examined psychosocial processes, specifically role-based and group identity, and social comparison; personal resources of financial capability; lifetime factors, specifically financial upbringing; and contextual conditions, namely an individual’s current financial situation and past hardships.

A. Role-based Identity and Financial Shame

Household financial responsibility reflects not only economic context but also role identity. Role identity theory suggests that individuals define themselves through the roles they occupy (Stryker & Burke, 2000), such as provider, caregiver, or household financial manager. When financial obligations are central to one’s role identity, the stakes of financial failure are heightened, as lapses are experienced not merely as material setbacks, but as failures of self-definition. Unlike group identity, which is comparative and collective, role identity is relational and personal, tied to expectations within close networks, such as the family. As such, individuals with stronger household financial responsibility identities may be more vulnerable to experiencing financial shame when they perceive themselves as not meeting these obligations.

H1a: Those who bear greater responsibility for household financial decisions are associated with higher financial shame.

However, people who delegate routine financial tasks have been shown to report higher shame, likely due to feelings of incompetence, dependency and lack of control (Tangney & Dearing, 2003). In contrast, having primary responsibility confers agency, which buffers feelings of shame (Starrin et al, 2009).

H1b: Those who delegate responsibility for household financial decisions to others are associated with higher financial shame.

B. Group Membership and Financial Shame

Group identity shapes how individuals evaluate themselves and their actions in relation to others. Through group membership, people seek cognitive coherence by aligning their thoughts and actions with group norms, which fosters in-groups (“us”) and out-groups (“them”) comparison (Abrams & Hogg, 1988). Social identity provides a source of self-esteem (Abrams & Hogg, 1988) and satisfies a basic human need to belong (Baumeister & Leary, 2017). Identities may be rooted in ethnicity, culture, religion, nationality, profession, or consumer groups, and the status of these groups influences how individuals feel about themselves (Turner et al, 1979). A strong, positive social identity, being proud of one’s cultural heritage, or belonging to a supportive network, should act as a protective factor that enhances resilience and buffers shame. Within a financial context, group identity should therefore reduce the tendency for those feeling shame to withdraw, allowing people to seek support and advice that should help to overcome the financial situation that is generating the initial feelings of shame.

H2a: A stronger group identity is associated with reduced financial shame.

However, as noted by Tangney and Dearing (2003) and Lewis (1971), shame is driven by failing to meet a set of standards or expectations, that we believe we need to achieve. These standards and expectations are driven

by norms of the groups we identify with. In many groups, financial success functions as a central yardstick of worth and belonging. Families, cultural communities, professional networks, and even religious groups often attach prestige to financial stability, accumulation, or visible consumption, while attaching stigma to financial hardship or indebtedness. This raises the possibility that group identity could amplify feelings of shame, if we believe that we would be judged harshly by the group for failing to meet its financial standards. In this way, financial outcomes are not merely personal, but are socially evaluated markers of status within the groups that matter most to individuals.

H2b: A stronger group identity is associated with increased financial shame.

C. Financial Literacy and Self Efficacy and Financial Shame

I expect that more financially capable and confident individuals will be less prone to financial shame. Research on shame has established that self-confidence, also referred to as self-efficacy, is negatively associated with feelings of shame (Tangney & Dearing, 2003). Financial literacy, in contrast, is likely to be associated with making fewer financial mistakes, which prevents financial shame and weakens any pre-existing propensity to shame (Xiao et al, 2014). Additionally, more financially literate individuals are more likely to implement proactive strategies when experiencing financial hardship, to mitigate the difficult situation (Lusardi & Mitchell, 2014; Sherraden, 2013).

H3: Greater financial self-efficacy is associated with lower levels of financial shame.

H4: Greater financial literacy is associated with lower levels of financial shame.

D. Social Comparisons and Financial Shame

Research highlights that shame arises when individuals compare themselves to standards or expectations and fall short, seeing themselves as deficient. These comparisons can be both internal (comparisons with the ideal self) and external (comparisons with others) (Tangney & Dearing, 2003; Lewis, 1971). The social rank theory argues that shame evolved as part of the way we navigate social hierarchies and is triggered when we feel inferior in comparisons of status, attractiveness and competence (Gilbert & Irons, 2009; Gilbert, 2000; Gilbert

& Andrews, 1998). Shame is a social emotion that arises when people believe their shortcomings are visible to others. It is most likely to occur in interpersonal situations or when there is a risk of public exposure. For example, looking at those perceived as better off or more successful can intensify feelings of shame, because such comparisons draw attention to one's own perceived deficiencies and sense of inferiority (Smith et al., 2002). In modern society, financial status is a visible status marker against which we can judge our own perceived success or failure. If we feel that those we compare ourselves to are displaying greater financial resources and wealth than we can, we are more likely to feel shame.

H5: Those with a greater propensity to compare themselves to others are associated with greater financial shame.

E. Past Life Journey and Financial Shame

Research shows that the early life experiences of childhood and adolescence are critical periods for shame development (Tangney & Dearing, 2003; Lewis, 1971). Early failures and repeated social disapproval create chronic shame tendencies that can persist into adulthood. Past shameful experiences contribute to non-contextual chronic, recurrent, persistent, and enduring, propensity to experience shame (Dolezal, 2022). Gladstone et al (2021) described how life shocks, such as financial hardship, triggers spiralling financial shame, and creates a vicious cycle between financial shame and financial hardship. Chase and Walker (2013), who built their research on the work of Merton (1968) and DiPrete and Eirich (2006), argue that advantages and disadvantages, such as wealth, education and life experiences, have a *compounding effect* to widen gaps over time, and found that repeated material disadvantage of people living in poverty fostered enduring shame identities. Past experiences therefore directly influence trait shame. Turner (2014) discussed how current shameful situations, recognised as state shame, triggers intense, acute feelings of shame. Therefore, the current situation impacts how much shame is felt now, as an immediate spike, with past experiences shaping how easily someone feels shame, and how intensely they react to the shame-inducing situation. Within a financial context, early experiences of material deprivation, childhood poverty and financial inadequacy are likely to induce a person experiencing current hardship to feel more shame.

H6: People who have experienced greater past financial adversity are associated with higher financial shame.

F. Current Financial Situation and Financial Shame

Shame can be triggered, not only by past experiences, but also by the realities of one's current situation. Acute financial hardship — such as struggling to pay bills, carrying unmanageable debt, or experiencing downward financial trajectories — creates immediate threats to self-worth (Gladstone et al, 2021). Because finances are highly visible markers of competence and responsibility in modern societies, current financial strain provides a salient standard against which individuals judge themselves (Starrin et al, 2009). When people perceive that they are failing to meet basic financial obligations, or falling behind relative to peers, the likelihood of experiencing financial shame increases. This distinction between past adversity (which shapes shame-proneness) and current hardship (which drives acute shame spikes) (Tangney & Dearing, 2003) helps explain why financial shame can be both enduring and situational.

H7: People experiencing greater current financial strain are associated with greater financial shame.

This research aims to correlate financial shame with these seven hypotheses and understand how one's view of role and group identity, social comparisons and personal resources, past and current financial circumstances, both as individual factors and collectively, impacts financial shame levels.

IV. Research Design and Methodology

The Measurement of Financial Shame

“O shame, where is thy blush?”

– William Shakespeare, English playwright, poet and actor

As a relatively new area of research, we know little about financial shame. The propensity and intensity with which an individual feels shame is likely based on contextual factors that act as a trigger for feelings of financial shame, lifetime factors related to past financial experiences, personal resources connected to one’s knowledge and confidence in money matters, and psychosocial factors that act as amplifiers and buffers for financial shame. This thesis aims to provide evidence around factors that are associated with how much financial shame someone is experiencing.

This research evaluates financial shame levels in the context of New Zealand, an ideal setting for research addressing the psychosocial processes, lifetime factors and contextual conditions, and personal resources that influence a person’s level of financial shame. New Zealand represents an environment where financial shame is likely to be prevalent. Like many Anglo-Saxon countries, money remains a taboo subject (ASB Bank, 2023). New Zealand households are among the most indebted in the OECD, with household debt-to-income ratio of 170% (OECD, 2024; RBNZ, 2025), and mortgage debt accounting for over 90% of total household liabilities (Moneyhub, 2024). Additionally, the New Zealand economy has struggled with high interest rates, high inflation and stagnant wage growth in the post-Covid years. This challenging financial climate results in considerable financial stress being placed on Kiwis (Commission for Financial Capability, 2021). New Zealand therefore represents an economic environment similar to many other countries, such as the US, UK, Australia and Canada, but with higher extremes of indebtedness and financial stress, resulting in greater prevalence of financial shame. It is therefore likely that the findings from New Zealand can be generalised into other countries, while the greater potential prevalence of financial shame makes identification of relationships stronger.

To explore the factors associated with financial shame levels, I used an online survey questionnaire, developed using Qualtrics, to collect data. Questions were sourced or adapted from existing research questions, and cover attitudes towards financial shame, financial role and group identity, financial social comparisons, current financial situation and past financial experiences, financial self-efficacy and literacy, alongside basic demographics information (gender, age, marital status, education level, employment status, and income level). The survey was administered by Dynata, a consumer and business-to-business survey research company. New Zealand based respondents, aged eighteen and above, were targeted for the survey. Quotas were set around gender and ethnicity to make the findings broadly representative of the New Zealand population. The survey produced suitable responses from 704 respondents, although approximately 30 responses were eliminated during data collection due to incomplete surveys, or failing an attention check that was designed to weed out respondents who did not read the questions. My research survey was approved by the AUT Ethics Committee on October 30, 2024, with Ethics Application Number 24/331, with a copy of the approval in Appendix A, a copy of the Financial Shame Survey Participation Information Sheet in Appendix B, and a summary of the Financial Shame Questionnaire in Appendix C.

A. Financial Shame as the Dependent Variable

As noted earlier, there is a limited number of studies that have considered financial shame. There are a range of existing general shame measures such as the Internalized Shame Scale (ISS) (Cook, 1988), the Other As Shamer Scale (OAS) (Hiramatsu et al, 2020; Matos et al, 2015; Rybak & Brown, 1996; Goss et al, 1994), the Compass of Shame Scale (CSS) (Elison et al, 2006), the Experience of Shame Scale (ESS) (Vizin et al, 2016) among others (see Tracy et al, 2007 for a survey of the more commonly used shame measures). However, to date, there are limited options for pre-validated measures of financial shame. Currently, the only study to develop such a measure is Gladstone et al (2021). Their study developed and tested a measure of financial shame, based on an adaptation of four questions used in shame scales, which had been modified to focus on the respondent's current financial situation. The composite measure of these four questions was shown to have strong internal consistency (Cronbach's alpha = 0.95) and correlated well with both general shame and with a measure of financial withdrawal. The four questions were "*My financial situation makes me feel ashamed*", "*When I think about my finances, I want to hide*", "*My financial affairs sometimes make me feel small*,

worthless”, and “*My finances make me feel humiliated, disgraced*”, and were measured on a five-point Likert scale², from strongly disagree to strongly agree. Financial shame, for each respondent, was then calculated as the average score across the four items, with a higher score indicating greater feelings of shame.

B. Financial Shame Factors

To measure the psychosocial processes, lifetime factors, personal resources and contextual conditions that relate to the identity and comparison components and trait-state nature of shame, within the financial construct, I have leveraged questions and measures already used in other research. Full details of the questions used in this research can be found in Appendix C, which shows the summary of the Financial Shame Survey Questionnaire used for this study.

B1. Role-based Identity

Extending the existing research on personal identity (Oyserman, 2001; Stryker & Burke, 2000; Erikson, 1968), I included role-based financial identity and expectations. Hitczenko (2016) explores how the perceived position of an individual in making household financial decisions impacts feelings of financial shame. In most households, financial decision-making will either be shared, or one person will be delegated the responsibility for making financial decisions. In cases where all, or most, decisions sit with an individual, perceived financial headship may lead to feelings of shame, if the household experiences hardship or with the outcomes of poor financial decisions. In contrast, having financial agency (having a sense of control, autonomy, capacity and resources over financial decisions) may actually buffer against financial shame, while those delegating their agency may feel shame for not taking a more active role in ‘adult’ decisions around financial resources.

To measure household financial responsibility, I leveraged the Personal and Finances segment of the Melbourne Institute HILDA (Household Income and Labour Dynamics in Australia) Living in Australia Self Completion Questionnaire W24M (2024), which directly addresses role-based financial responsibility. HILDA uses three questions that ask respondents their role in 1) managing day-to-day spending and paying

² The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

bills, 2) making large household purchases, and 3) for savings, investments and borrowings. I created two measures, routine financial tasks responsibility based on the response to question 1), and complex financial decisions responsibility, which averaged the responses to 2) and 3).

Together, the two financial responsibility constructs capture the impact of both short-term and long-term financial roles, providing a holistic view of role-based personal identity in the financial domain.

B2. Group Membership

Baumeister and Leary (2017) show how belongingness is a core psychological need to feel accepted and included, that impacts how an individual seeks inclusion, avoids rejection, and aligns with the norm of the chosen group. This sense of belonging affects how individuals feel shame about money, debt and lack of savings (Klontz et al, 2012; Wong & Tsai, 2007), as well as impacts herding groupthink behavior in investment decisions (Shiller, 2015). Leveraging prior research on social identity (Tajfel et al. 2001; Turner et al, 1987), I included group memberships in the categories most consistently measured in research – ethnicity (Tajfel & Turner, 2004) and religion (Guiso et al, 2003). Both, ethnicity and religion are deeply tied to identity, values and behavior.

Stats NZ (2023) defines ethnicity as the ethnic group or groups that people identify with or feel they belong to, and which measures cultural affiliation rather than any specific race, ancestry, nationality or citizenship. The emphasis is on belongingness and connection to a shared set of cultural values, customs and language. Phinney (1992) explains that the strength of ethnic identity, specifically the sense of belonging, is important across all ethnic groups, and not just amongst the minority ethnic groups. Furthermore, Phinney suggest that what matters most is the level of identification, and not the specific ethnicity, and concludes that “a sense of belonging and commitment to a group, regardless of the particular ethnic background, is considered to be a component of a healthy identity”.

For this research, I used the Ethnicity census question from Stats NZ (2013), where respondents were asked which ethnic group or groups they belonged to, giving them the opportunity to choose multiple ethnic

affiliations³. I also used the Social Identity measure on Ethnicity from the Well-being survey of Stats NZ (2016) to measure the respondents' sense of belonging to each of their chosen ethnicities, based on a scale where zero is 'no sense of belonging' and ten is a 'very strong sense of belonging'.

Religion is defined as a set of beliefs and practices by which people order the conduct of their lives, both in a moral and practical sense, and usually includes acknowledgement of a divine or higher being or power (Stats NZ, 2015). Cornwall et al (1986) explains that religiosity refers to the degree to which an individual believes in, adheres to, and practices a religion, and how the intensity, consistency and centrality of religious beliefs and practices impact a person's life. Religiosity is primarily social, often embedded in collective belonging of shared practices and moral codes, with shame as a product of community judgement over perceived moral failings and struggles, which become visible to the religious group or congregation (Ellison & Lee, 2010).

I used the open-ended Religion census question from Stats NZ (2018), which was significantly modified from the 2013 Census version (with a prepared list of religions), to measure a respondent's religious affiliations. To determine how religiosity's impact extends to financial shame, I decided to include two questions in the survey focused on the importance of religiosity to a person's overall life, as well as how religious beliefs affect financial decisions. To measure religiousness and religious commitment, I leveraged Question #5 from the ten-item Religious Commitment Inventory (RCI) developed by Worthington Jr. et al., (2003). RCI Question #5 directly and concisely asks how one's religious beliefs underlie one's approach to life, and had the highest factor loading (0.81) amongst the ten items. I also leveraged the work of Niveditasri and Sanmitha (2020), to ask respondents on how religious faith adds meaning specifically to their financial decisions.

Finally, I considered how the belief in divine punishment – the conviction that a supernatural power actively monitors and punishes individuals for immoral or unethical behavior, resulting in the fear of hell, karmic retribution, divine wrath, and where wrongdoings have consequences – impacts an individual's attitudes towards promoting moral behavior, prosociality conduct and social cooperation, which result in shame when

³ My Financial Shame survey allowed respondents to choose up to 11 ethnic groups they feel they belong to – from a pre-list of eight and options to write three more. Actual results showed respondents choosing up to five ethnic group affiliations.

financial difficulties arise. Shariff and Norenzayan (2007) find that a belief in a powerful, intervening God is linked to an increased honesty and economic fairness even when a persons' actions are anonymous. This belief in divine punishment has links to conservative and cautious financial choices (Benjamin et al, 2010), encourages ethical and socially responsible investments (Hilary & Hui, 2009), and fosters self-regulation and delayed gratification, especially when external monitoring is weak (McKay et al, 2011). When divine punishment is imagined, as a judgement not just on "what you did" but on "who you are before God", it activates shame more than guilt, because the person feels their entire self has been seen, exposed and condemned by God, rather than merely having broken a rule (Scheff, 2000; Benedict, 2005). Divine punishment symbolizes loss of relationship, worth and belonging before God, not just the moral burden of a bad act.

When one's financial burdens become visible to the wider group, this triggers community judgement and state-sponsored punishment, as others who also believe in divine punishment perceive such financial difficulties are a chastisement from God (Laurin et al, 2012; Ellison & Lee, 2010). This leads to isolation from the group, amplifying the shame the individual already feels from believing their financial hardship makes them detached from God.

To evaluate the impact of divine punishment to an individual's feelings of financial shame, I utilized the most appropriate single question (Question #10) of the negative coping items, from the fourteen-item Religious Coping (RCOPE) (Pargament et al., 2011), which directly linking experiences in financial difficulty to divine discipline.

Together, these two constructs for ethnicity (ethnic affiliations and ethnic belonging) and four constructs for religion (religious belonging, religious affiliation, religiosity and divine punishment) operationalize the impact of affiliations and belongingness of group membership identity in the financial domain.

B3. Financial Literacy and Self-Efficacy

Financial literacy and self-efficacy are personal resources that capture two of the most powerful psychological drivers of financial behaviour – the knowledge and the ability to understand and use financial concepts (Lusardi & Mitchell, 2014) and the confidence and belief in one’s ability to act on that knowledge and perform financial tasks and manage money effectively (Lown, 2011). These concepts have been used in research as measurable proxies for the internalized financial self and financial self-perception (Kaiser et al, 2022; Farrell et al, 2016; Allgood & Walstad, 2016; Tang & Baker, 2016; Serido et al, 2013).

Financial literacy’s impact on financial decision making and financial behavior is one of the most studied areas in behavioral finance, with research showing how higher literacy tends to improve the quality and confidence in financial decisions. Those who understand interest rates, fees and risk make better product choices and better evaluations of costs and benefits (Lusardi & Mitchell, 2014). Greater awareness of compounding and inflation promotes stock market participation, forward planning and long-term thinking (Van Rooij et al, 2011). Financial literacy also reduces anxiety, uncertainty and fear, thereby lowering stress levels, especially in low-income households (Sherraden et al, 2011). Finally, financial literacy encourages consistent, proactive and protective financial actions, such as systemic savings habits (Hilgert et al, 2003), non-reliance on high-interest debt (Lusardi & Tufano, 2015), and linked to an increased uptake of adequate insurance coverage and greater retirement plan participation (Hastings et al, 2013). As a result, respondents with higher financial literacy should be less likely to make poor decisions that trigger financial shame, and if facing financial hardship, should be more likely to engage in proactive steps to manage the situation positively. For this research survey, I measured financial literacy based on five questions, drawn from the Melbourne Institute HILDA (Household Income and Labour Dynamics in Australia) Living in Australia Continuing Person Questionnaire (CPQ) W16M (2016), that test knowledge of investment and portfolio risk diversification, compounding interest, inflation, and the impact of cost of goods to one’s purchasing power. These five questions are widely used in many financial literacy surveys (OECD/INFE Financial Literacy Survey, World Bank Global Findex, U.S. NFCS Finra Foundation, EU and Asia-Pacific financial capabilities studies).

A separate but related concept is financial self-efficacy (Farrell et al., 2016). Financial self-efficacy represents a person’s confidence around their ability to successfully manage their finances. Financial self-efficacy has

been linked to setting and achieving financial goals (Lown, 2011), financial locus of control (Perry & Morris, 2005), making investment decisions (Forbes & Kara, 2010), and the ability to handle everyday financial tasks and make informed money decisions (Danes & Haberman, 2007). Within the shame literature, self-confidence and self-efficacy have been shown to be associated with lower levels of shame, suggesting that financial self-efficacy should have a similar protective aspect. I employed a five-item self-efficacy scale developed by Mindra et al (2017), as it operationalized the generality scale developed by Lown (2011), Amatucci and Crawley (2011) and Rowley et al (2012), modelled directly from the general self-efficacy scale by Jerusalem and Schwarzer (1989), and based on Bandura's (1977a, 1977b) original self-efficacy scale, whilst maintaining internal consistency (Cronbach's alpha = 0.70).

Together, these two constructs capture knowledge and confidence in financial matters, providing a comprehensive view of self-perception in the financial domain.

B4. Financial Social Comparisons

Shame is generated by a failure to live up to a perceived or group-based standard or norm. In modern society we often measure our overall life success based on financial success. Our success then becomes based on the outward manifestations of wealth, and based on our relative performance compared with those around us. Extending existing research on social comparisons (Gilbert, 2007; Tangney & Dearing, 2003; Gilbert & Andrews, 1998; Lewis, 1971), I proxied for social comparison using measures of social status, social networks (physical and digital) and materialism views.

Subjective social status examines how individuals perceive their position in society. Research shows that the subjective perception of one's social status, even if it differs from one's objective social status, is a strong predictor of behavior (Manstead, 2018). As subjective social status captures how individuals perceive their relative rank in the social hierarchy, a central determinant of comparative self-evaluation and shame experiences, I employed the MacArthur Scale of Subjective Social Status level, a single item measure, used in many social status research (Galvan et al, 2023; Moss et al, 2023a; Moss et al, 2023b; Cheung & Lucas, 2016; Giatti et al, 2012; Goodman et al, 2001; Adler et al, 2000), that asks people to imagine a ladder, with those with high social status at the top, and then asks which rung (out of ten) they would sit on.

Networks, both physical and digital, represent the immediate environments in which social comparisons occur. Financial signals are especially salient in close face-to-face communities (Bourdieu, 1984) and are amplified in online contexts, where curated lifestyles set exaggerated standards (Lup et al, 2015; Marwick, 2013; Chou & Edge, 2012). I would expect that for respondents who see their networks as more important, will be prone to greater social comparison. I measured the importance of networks using a question from Rigoli & Mirolli (2024) that directly and concisely asked how important physical, and separately, digital, networks were to respondents.

Materialism is a value system that reflects the extent to which individuals equate possessions and spending with success (Richins & Dawson, 1992). Materialism operates as a way of securing external validation and recognition, and by extension also expects that people will be judged based on their ability to buy and consume luxury goods. An inability to meet materialistic goals and aspirations therefore should trigger shame. I measured materialism views using the six questions in the shortened version of the Materials Values Scale (MVS) of Richins (2004). The original eighteen-item MVS (Richins & Dawson, 1992) has been used extensively to measure materialism at domain levels (Ohno et al, 2022). Richens (2004) tested and validated this reduced form of the MVS, while ensuring internal consistency (Cronbach's alpha = 0.81).

Together, these three constructs capture rank perception ("where I stand"), exposure to comparison targets ("who I see and who sees me"), and the evaluative standards of success ("what counts"), providing a multi-dimensional operationalization of social comparison in the financial domain.

B5. Past Financial Experiences

To consider the influence that past financial experiences have on financial shame, I looked at two sets of experiences – childhood financial experiences and past financial shocks.

What a person observes, hears, and practices about money in their families becomes their first financial blueprint, and these early lessons guide how an individual saves, spends, gives and feels about money, well into adulthood (Gudmunson & Danes, 2011). However, not all socializing experiences are positive and lead

to better financial outcomes (LeBaron et al, 2020). While being actively involved in financial discussions can lead to improved savings and better financial behaviors, most socializing is done by observation. Observing situations where money is a source of conflict, where financial discussions are often conducted in secrecy, or where the shame about a lack of financial resources may lead to negative associations – these circumstances prime some people to experience financial shame. In contrast, more affluent families tend to be more open about financial discussions and tend to embed more prosocial financial behaviors (Agnew, 2018). To measure financial exposure in childhood, I employed the five-item family financial socialization section from Zhao and Zhang (2020). The five items ask respondents to share their views on their childhood family discussions on financial matters, savings, credit rating, and being a smart shopper. Zhao and Zhang's (2020) family financial socialization scale had good internal consistency (Cronbach's alpha = 0.78).

Additionally, I measured the time at which respondents remember experiencing two significant financial milestones, as a range of studies have shown, that early exposure to financial discussions and receiving pocket money at a young age, have an impact on later financial behaviors and attitudes (Grohmann & Menkhoff, 2015; Webley & Nyhus, 2013; Gudmunson & Danes, 2011; Serido et al, 2010; Shim et al, 2010; Webley & Nyhus, 2006). Based on the work of Agnew (2018), I asked respondents the age when they first had a financial discussion with their family, and the age when they first received pocket money.

Early experiences of poverty and low childhood socioeconomic status (hereafter SES) have been shown to have significant impacts in later life, including health, academic achievement and emotional and behavioral issues (Bradley & Corwyn, 2002). Kraus et al (2009) argues that subjective SES – how people perceive, remembers and interprets their upbringing – impacts emotional well-being and financial decision-making, regardless of their actual material conditions. Growing up in poverty is likely to foster emotions around a person's financial situation, which leave them prone to financial shame in later life. To understand how the impact of childhood SES extends to an individual's feelings of financial shame, I utilized three questions on money management from Otto (2009), which operationalized the 2004 Dutch DNB Household Survey. The questions ask about income (ranging from having less than what was needed to having more than what was needed), savings (ranging from did not save to saved regularly) and overall financial situation (ranging from being in debt to saving a lot of money) when the respondent was young.

Aside from childhood financial experiences, the subsequent occurrence of financial hardship or material deprivation has lasting effects on an individual's attitudes towards money matters. Van Dijk et al (2022) discussed how a perceived shortage of money and lack of control negatively impacts an individual's executive abilities and cognitive processes of reasoning, problem solving and planning. Additionally, Frankham et al (2020a) identified that financial hardship erodes self-esteem, personal agency and coping ability. Given financial hardship and deprivation can reduce self-esteem, which is closely linked to feelings of shame, I expect that having experienced hardship and deprivation will result in an increased propensity towards feeling shame. To explore the impact of past financial shocks on financial shame, I used the direct and concise question "*Have you experienced financial hardship?*", which comes from the PATH through Life survey of Butterworth et al (2009). To measure material deprivation, I used the material deprivation list from Permanente's Your Current Life Situation Survey (2016), which is a concise seven-item material deprivation list. The list asks respondents if they have had trouble in the past paying for food, housing, heat and electricity, medical needs, transportation, childcare, and debts.

Together, these three constructs for childhood financial experiences (family financial socialization, age of first financial discussions, childhood SES) and two constructs for past financial shocks (financial hardship, material deprivation) examine the life journey of both childhood and adulthood past experiences in the financial domain.

B6. Current Financial Situation

While some people are more prone to feeling shame, that shame likely requires a trigger grounded in a person's current financial situation. I explored the impact of the respondents' current financial situation by looking at financial trajectory, current financial state and subjective financial well-being.

The subjective financial trajectory or financial trajectory index is a retrospective self-assessment and refers to the perceived changes (improving or declining) in an individual's financial satisfaction over time, capturing the direction and slope of financial perception, and judging the progress or decline in their financial lives. Various research have used a trajectory model to understand the impact and relationship of an improving,

stable or declining perceived financial satisfaction situation to physical (Downward et al, 2020; Piumatti, 2017) and mental (Wen et al, 2023) health over time, its adaptive effects on future expectations (Graham, 2025) and its impact on financial behavior and attitudes (Joo & Grable, 2004). For this research survey, I leveraged the work of Duckworth et al (2012) and asked the basic question, “*Compared to two years ago, how satisfied are you with your present financial situation?*”.

Subjective current financial state (how individuals perceive their present financial condition) is a stronger predictor of financial satisfaction than income alone (Vera-Toscano et al, 2006). Additionally, a person’s perspective of their current situation is intimately tied to their feelings of whether they are exceeding or falling below the expected levels. To evaluate the impact of the subjective current financial state on financial shame, I used a question from the Melbourne Institute HILDA (Household Income and Labour Dynamics in Australia) Living in Australia Self Completion Questionnaire W24M (2024) that directly asks respondents to assess their current family situation, ranging from prosperous to very poor.

Finally, I considered a person’s perception of their financial well-being. The Consumer Financial Protection Bureau (CFPB, 2015) defines financial well-being as “a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life”. Financial well-being encompasses the ability to cover financial obligations (a common social expectation of adults) towards financial success, and therefore should impact financial shame. I measured subjective financial well-being based on a five-item scale developed by the Melbourne Institute HILDA (Household Income and Labour Dynamics in Australia) Living in Australia Self Completion Questionnaire W24M (2024), for consistency⁴. The five items ask respondents about their ability to manage money, to handle major unexpected expenses, day-to-day finances, current spending levels, and money for the future.

⁴ I have used the Melbourne Institute HILDA (Household Income and Labour Dynamics in Australia) Living in Australia Self Completion Questionnaire for my Financial Shame research survey questions on role-based identity, financial literacy, subjective current financial state, and subjective financial well-being.

Together, these constructs for financial trajectory, current financial state, and subjective financial well-being, examine the current life circumstances experiences in the financial domain.

Table 1. Factors of Financial Shame

Financial Shame Factors	Survey Focus	Research Question Source	Number of Research Questions
Financial Identity	Role-based Identity		
	Household Financial Responsibilities for Routine Financial Tasks	Melbourne Institute HILDA Questionnaire (2024)	1
	Household Financial Responsibilities for Complex Financial Decisions	Melbourne Institute HILDA Questionnaire (2024)	2 ($\alpha = 0.83$)
	Group Membership		
	Ethnicity Affiliations	Stats NZ (2013)	1
	Ethnic Belonging	Stats NZ (2016)	1
	Religious Belonging	Stats NZ (2018)	1
	Religious Affiliation	Stats NZ (2018)	1
	Religiosity	Worthington Jr et al (2003); Niveditasri & Sanmitha (2020)	2 ($\alpha = 0.75$)
	Divine Punishment	Pargament et al (2011)	1
	Personal Resources		
	Financial Literacy	Melbourne Institute HILDA Questionnaire (2016)	5
	Self-Efficacy	Mindra et al (2017)	5 ($\alpha = 0.85$)
	Financial Social Comparisons	Social Status Level	Adler et al (2000); Cheung & Lucas (2016)
Social Networks		Rigoli & Mirolli (2024)	1
Materialism Views		Richins (2004)	6 ($\alpha = 0.83$)
Past Financial Experiences	Childhood Financial Experiences		
	Family Financial Socialization	Zhao & Zhang (2020)	5 ($\alpha = 0.84$)
	Age of First Financial Discussions	Agnew (2018)	1
	Childhood Socio-economic Status	Otto (2009)	3 ($\alpha = 0.81$)
	Past Financial Shocks		
	Financial Hardship	Butterworth et al (2009)	1
	Material Deprivation	Permanente (2016)	1
Current Financial Situation	Financial Trajectory	Duckworth et al (2012)	1
	Current Financial State	Melbourne Institute HILDA Questionnaire (2024)	1
	Subjective Financial Well-Being	Melbourne Institute HILDA Questionnaire (2024)	5 ($\alpha = 0.92$)

Note. Table presents the survey focus areas, question sources, number of items, and internal consistency (Cronbach's α) in parenthesis, for each factor comprising the Financial Shame construct. Cronbach's α values represent internal reliability estimates calculated from the present study's data. Items were drawn from validated scales and adapted from established surveys, as cited in the source column.

Table 1 provides a summary of the financial shame factors examined in the research survey, the focus area for the survey questions, the source of the research questions, and the number of questions for each focus area (with the internal consistency measures from the survey results).

C. Empirical Analysis Methods

To evaluate the factors that amplify or buffer financial shame, the analysis proceeded in four stages. First, univariate tests (ANOVA and *t*-tests) are conducted to examine whether individual factors are significantly associated with financial shame levels. This establishes the baseline associations between the predictors (financial identity, financial social comparisons, past financial experiences, current financial situation) and the outcome (financial shame). I then conducted Principal Component Analysis (PCA) to reduce dimensionality and address potential multicollinearity within related variables, generating orthogonal components that represent each factor set. By reducing the number of interrelated variables, where necessary, into a smaller set of components, while retaining as much variance as possible, PCA simplifies the data structure and addresses any issues of multicollinearity. The suitability of the data for PCA is assessed using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, where values above 0.5 are generally considered acceptable, and Bartlett's Test of Sphericity, where a significant result ($p < .05$) confirms that the correlation matrix is not an identity matrix, and factor analysis is appropriate. The number of components to retain was determined using eigenvalues greater than 1 (Kaiser's criterion) and the interpretability of the resulting component loadings.

I then employed stepwise regression, incorporating both PCA-derived components and individual variables, to build a parsimonious model that identifies the strongest predictors, both amplifiers and buffers, of financial shame. Stepwise regression is employed as the most appropriate approach for this study because the primary objective is exploratory – to identify which factors, among a broad set of psychosocial, lifetime, contextual, and resource-based predictors, are most strongly associated with financial shame. Unlike theory-driven confirmatory models that pre-specify relationships, the present research requires a method that can sift through overlapping predictors, minimize multicollinearity, and yield a parsimonious set of variables that explain the greatest variance. Stepwise regression offers a systematic, replicable procedure for doing this by iteratively retaining predictors with the strongest statistical contributions, while excluding redundant variables. This

approach is particularly suited to contexts, such as financial shame, where theory suggests multiple candidate mechanisms but does not yet establish their relative weight. The use of PCA in combination with stepwise regression further strengthens the analysis by ensuring that the retained predictors are not artifacts of multicollinearity. To test the stepwise regression results for robustness, hierarchical regression is used. Hierarchical regression is best used when independent variables are added to the regression model in a specific, pre-determined order, based on theoretical importance. However, as the order of theoretical significance of the predictors for financial shame has not been established, hierarchical regression will instead be used to test the robustness of the stepwise regression results, with the variables added into the hierarchical regression model based on general shame mechanism theory.

Finally, cluster analysis is applied to segment respondents into distinct financial shame “personas,” providing a descriptive typology of how different constellations of factors align with varying levels of financial shame. Cluster analysis is employed to capture the heterogeneity of financial shame experiences across individuals. While regression identifies the independent contribution of predictors, it does not reveal whether distinct profiles or constellations of factors co-occur in meaningful ways. Cluster analysis addresses this by grouping individuals based on similarities across psychosocial, lifetime, contextual, and resource-based variables, producing empirically derived financial shame “personas”. Logistic regression is then used on the cluster analysis results to predict demographics-related categorical outcomes for each persona. This approach aligns with the study’s aim of not only identifying predictors of financial shame, but also understanding how they combine in practice to create qualitatively different experiences. By identifying clusters with distinct levels and drivers of shame, the analysis provides insights into subgroups of individuals who may require different forms of intervention or policy support.

This sequential approach ensures that both the statistical robustness of the predictors and the practical interpretability of group differences are captured.

V. Results and Findings

The Story of Financial Shame

“Beauty shames the ugly. Strength shames the weak. Death shames the living. And the Ideal shames us all.”

– Jordan B. Peterson, Canadian psychologist

A. Financial Shame Summary Statistics

To begin my investigation of the factors associated with financial shame, I start by exploring the validity of the financial shame scale for my sample. While I employed a pre-validated measure from Gladstone et al (2021), that study was conducted within the context of British respondents. To ensure that the measure works within the New Zealand context, I followed the method of Gladstone et al (2021) and, in addition to measuring financial shame, as discussed in IV.A in the Research Design and Methodology Section, I also measured general shame, financial withdrawal, and general withdrawal.

General shame was measured using the ten-item Personal Feelings Questionnaire 2 (Harder & Zalma, 1990) used by Gladstone et al (2021), which asked respondents, on a five-point Likert scale⁵, how often they experienced feelings associated with shame⁶. General shame, for each respondent, was then calculated as the average score across the ten items with a higher score indicating greater feelings of shame.

Financial withdrawal was measured using the five-item scale from Gladstone et al. (2021), which asked the frequency with which respondents engaged in actions associated with financial withdrawal⁷. Again, each question was measured based on a five-point Likert scale⁸ and all five items were averaged, to compute the

⁵ The five-point Likert scale range used includes – never experienced the feeling = 1, experienced the feeling rarely = 2, experienced the feeling some of the time = 3, experienced the feeling frequently, but not continuously = 4, experienced the feeling continuously or almost continuously = 5.

⁶ Respondents were asked how often they experience embarrassment, feeling ridiculous, self-consciousness, feeling humiliated, feeling stupid, feeling childish, feeling helpless or paralyzed, feelings of blushing, feeling laughable, and feeling disgusting to others.

⁷ Respondents were asked about avoiding opening bills, answering phone calls from the bank, ignoring emails about finances, not talking about finances, and hiding money worries from friends and family.

⁸ The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

level of financial withdrawal for each respondent, with a higher score indicating greater withdrawal behaviors, attitudes and actions associated with financial matters.

General withdrawal was measured using five questions, which were adapted from the Adult Self-Report scale (ASR) (Achenbach et al, 2003) used by Gladstone et al (2021), that asked about actions pertaining to withdrawal⁹ on a five-point Likert scale¹⁰. Again, responses across the five questions were averaged, for each respondent, with higher score indicating greater general withdrawal behaviors, attitudes and actions.

Table 2. Descriptive Statistics of Shame and Withdrawal Constructs
(with comparisons to the Gladstone et al (2021) research results)

Descriptives	General Shame	General Withdrawal	Financial Shame	Financial Withdrawal
Panel A: My Research				
N Responses	703	703	704	704
Mean Score	2.36	3.20	2.49	2.36
Median Score	2.20	3.20	2.25	2.20
Standard Deviation	0.93	0.82	1.24	0.98
Cronbach's Alpha	0.94	0.80	0.95	0.86
Panel B: Gladstone et al (2021) Research				
N Responses	589	589	589	589
Mean Score	2.63	4.29	3.15	2.83
Standard Deviation	0.74	1.12	1.75	1.34
Cronbach's Alpha	0.89	0.76	0.95	0.86

Note. Table presents descriptive statistics for General and Financial Shame and Withdrawal constructs from the present research (Panel A) and from Gladstone et al (2021) (Panel B). N = number of respondents. Reported values include mean, median, standard deviation, and Cronbach's alpha coefficients.

Table 2 presents the summary statistics for general and financial shame, and for general and financial withdrawal, including the results from the Gladstone et al (2021) research for comparisons. Compared to the levels reported in Gladstone et al (2021), I observed lower scores across all four measures. Similar to the results of Gladstone et al (2021), the highest average score, and the only value where respondents on average were more likely to agree with the statements, was general withdrawal. Prior research (Hofmann, 2007; Bracha, 2004; Barlow, 2004; Tangney & Dearing, 2003; Joiner & Coyne, 1999; Gross, 1998; Nathanson, 1994) has shown that withdrawal is a common coping mechanism for shame, as it reduces immediate pain and

⁹ Respondents were asked about how often they engaged in isolation, secrecy, concealment, withdrawal, and avoidance,

¹⁰ The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

provides immediate relief from threat, judgement or negative evaluations. Additionally, I also see that the Cronbach's Alpha for the financial shame value is strong at around 0.95, in line with the Gladstone et al (2021) results, signifying internal consistency of the question measures used.

Table 3 presents the Bivariate Pearson's Correlation for the four variables. As expected, I observed a moderate significant correlation (0.39) between general shame and general withdrawal, in line with classic shame theory (Tangney & Dearing, 2003; Lewis, 1971), which argues withdrawal is a primary coping strategy. There is a strong positive significant correlation (0.66) between general shame and financial shame, suggesting individuals who experience shame are very likely to also feel financial shame. This finding makes sense, as financial shame is a domain closely related to general shame. Finally, there is a strong positive significant correlation (0.70) between financial shame and financial withdrawal, which indicates that people who report higher financial shame levels are much more likely to withdraw in relation to their finances. Compared with the correlations reported in Gladstone et al. (2021), in this research there are stronger correlations between general shame and financial shame (0.50 in the Gladstone research vs 0.66 in this research), and financial shame and financial withdrawal (0.59 in the Gladstone research vs 0.70 in this research).

Table 3. Correlations between Shame and Withdrawal Constructs
(with comparisons to the Gladstone et al (2021) research results)

Panel A: My Research	Shame	Withdrawal	Financial Shame	Financial Withdrawal
Shame				
Withdrawal	0.39 ***			
Financial Shame	0.66 ***	0.39 ***		
Financial Withdrawal	0.58 ***	0.44 ***	0.70 ***	
Panel B: Gladstone et al (2021)	Shame	Withdrawal	Financial Shame	Financial Withdrawal
Shame				
Withdrawal	0.37 ***			
Financial Shame	0.50 ***	0.29 ***		
Financial Withdrawal	0.42 ***	0.34 ***	0.59 ***	

Note. Table presents bivariate Pearson's *r* correlations among General and Financial Shame and Withdrawal constructs from the present research (Panel A) and from Gladstone et al (2021) (Panel B). Panel A includes correlations based on the current study's measures: Shame ($M = 2.36$, $SD = 0.93$, $\alpha = .94$), Withdrawal ($M = 3.20$, $SD = 0.82$, $\alpha = .80$), Financial Shame ($M = 2.49$, $SD = 1.24$, $\alpha = .95$), and Financial Withdrawal ($M = 2.36$, $SD = 0.98$, $\alpha = .86$). Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$.

The results overall support the use of the Gladstone et al's (2021) financial shame measure within a New Zealand context, based on the similar mean levels, strong correlations that meet prior expectations, and the strong Cronbach's alpha.

B. Demographics Variances and Financial Shame

I next examined how financial shame is associated with the respondents' demographics, especially gender¹¹, age, marital status¹², education level¹³, employment status¹⁴, and income level¹⁵. Although demographics don't inherently cause shame-proneness, they shape the contexts, expectations and social comparisons, in which shame is experienced. Demographics influence which shame domains are more salient and vulnerable (Tracy & Robins, 2004), shape the level of exposure to stigma and comparison (Gilbert, 1997), and make situational shame more frequent or intense (Chase & Walker, 2013). Shame proneness is not evenly distributed and does vary across demographic groups, with complex and context-dependent patterns. Table 4 presents the average shame level of each demographics group, along with either one-way ANOVA or independent *t*-tests of the significance of any differences in financial shame levels between groups.

Research on shame (Tangney & Dearing, 2003) shows that women often score higher on shame proneness scales than men, partly due to socialization, as women are encouraged to be attuned to relationships and others' evaluations. However, some studies have found men are more prone to shame in domains related to debt, employment and financial performance, potentially making men more prone to financial shame when they experience financial hardship (Stepien, 2014; Scheff, 2000). Table 4 shows that men have significantly lower financial shame than women, 2.27 vs 2.70.

¹¹ Five respondents selected third gender/non-binary, and as the sample size is small, this has been excluded in the analysis of gender differences. One respondent selected preferred not to say, while two respondents did not answer the gender question.

¹² One respondent did not answer the marital status question.

¹³ Three respondents did not answer the education level question.

¹⁴ Four respondents did not answer the employment status question.

¹⁵ Five respondents did not answer the income level question.

Table 4. Average Financial Shame by Demographics Category

Demographics Category		N (% Total)	Financial Shame	One-way ANOVA <i>F</i> -value & Independent <i>t</i> -tests for Differences
Gender	Male	350 (50%)	2.27	-0.435 ***
	Female	346 (50%)	2.70	
Age	Gen Z (born 1997-2007, aged 18-28)	111 (16%)	3.01	23.375 ***
	Millennials (born 1981-1996, aged 29-44)	236 (34%)	2.79	
	Gen X (born 1965-1980, aged 45-60)	191 (27%)	2.37	
	Baby Boomers (born 1946-1964, aged 61-79)	142 (20%)	1.93	
	Silent Generation (born 1928-1945, aged 80-97)	24 (3%)	1.41	
Marital Status	Single	192 (27%)	2.84	10.774 ***
	Relationship	451 (64%)	2.36	
	Single, Post-Relationship	60 (9%)	2.38	
Education Level	No Certificate	274 (39%)	2.52	2.536 *
	Certificate	161 (23%)	2.62	
	Bachelor	192 (27%)	2.47	
	Post-Graduate	74 (11%)	2.15	
Employment Status	Studying	41 (6%)	3.28	20.574 ***
	Unemployed (Involuntary)	56 (8%)	3.18	
	Unemployed (Voluntary)	107 (15%)	2.34	
	Employed	437 (62%)	2.50	
	Retired	59 (8%)	1.49	
Income Level	Very Low Income Individual (\$0-\$4,999)	61 (9%)	3.00	7.793 ***
	Low Income Individual (\$5,000-\$29,999)	160 (23%)	2.61	
	Middle Income Individual (\$30,000-\$69,999)	220 (31%)	2.58	
	High Income Individual (\$70,000-\$149,999)	220 (31%)	2.32	
	Affluent Income Individual (\$150,000+)	38 (5%)	1.76	

Note. Table presents group mean Financial Shame scores by demographic category. *N* = number of respondents; percentages indicate proportion of total sample. Age groupings are segregated by generational bands. Income level groupings is based on annual income in New Zealand dollars. Between-group differences were tested using one-way ANOVA *F*-values for the age, marital status, education level, employment status and income level categories, and independent *t*-tests for pairwise comparisons for the gender category. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

Research on shame (Twenge & Campbell, 2018; Thomaes et al, 2011; Arnett, 2000) show that adolescents and emerging adults report higher shame proneness. Young adults are vulnerable due to identity formation, peer comparison and sensitivity to social evaluation, especially online. In contrast, older adults have greater

emotional regulation and perspective, and increased self-compassion, self-acceptance and resilience (Orth et al, 2010a; Orth et al, 2010b). The results in Table 4 do show that Gen Z¹⁶, the youngest generation in this research, have the highest financial shame scores (3.01), and that the scores significantly decrease in every generation, with the Silent Generation having the lowest scores (1.41). The research results align with prior studies that show young adults are more prone to general shame (Vogel et al, 2014; Norvilitis & Mao, 2013). The pattern is clear and linear, with younger generations reporting higher financial shame than older generations, as age and generational context shape financial shame.

Research on shame show that singlehood, divorce and marital conflict may trigger family and relational shame, especially in cultures where marriage is valued as a marker of social worth, and where divorce is linked with social shame due to perceived failure, stigma, and loss of status (Riemann, 2024; Kim et al, 2023; Krumrei et al, 2009; Leeming & Boyle, 2004). Furthermore, marriage reduces stress overload (Amirkhan & Vanderbelt, 2023) and supplies the necessary social and relational resources – instrumental help, shared burden, and social belonging – that reinforces positive support behaviour (Sullivan et al, 2010), especially in errors of judgment associated with difficulties, as marital connection and empathy reduce the experiences of shame and its isolating effects (Brown, 2006). Shame arises when others can judge or when imagined observers (partner, family, community) set standards. Marriage changes the salient audience (a partner’s judgment is often more consequential than an anonymous neighbour’s), while divorce and singleness alter both audience and comparative reference groups (peers, ex-partner, family). While the results in Table 4 do show that single respondents have the highest average shame (2.84), there was no difference in the shame levels between those in relationships and those who are no longer in a relationship, either through divorce, separation, or death, of the significant other.

In terms of education, low education levels and low income levels in adulthood were correlated with higher degrees of internalized inferiority, social inadequacy and shame (Bosma et al, 2015). Higher education achievement, in contrast, is associated with increased confidence, access to resources and perceived competence, which reduces shame-proneness (Bandura, 1997a; Bourdieu, 1986). Additionally, given

¹⁶ Gen Z is generally defined as being born between 1997 and 2012. As the minimum age for our survey is 18 years old, Gen Z for this study is defined as being born between 1997 and 2007.

education and income are positively correlated, better educated respondents are likely to have better financial resources, to avoid financial shame triggering financial hardship¹⁷. The results in Table 4 show similar average shame for respondents with either no tertiary qualification, a certificate, or a bachelor's degree. Respondents with a post-graduate qualification did have a significantly lower level of shame (2.15), compared with other respondents.

Employment status has also been associated with shame levels, with unemployed individuals reporting higher shame, resulting in social exclusion and social withdrawal (Brand, 2015). Additionally, those who are under-employed, working below their skill level, or working part-time involuntarily, may see their jobs as inferior, carrying social shame (Sayer, 2005). The average level of shame shown in Table 4 indicates that the group with the highest current shame are students (3.28), potentially a result of experiencing greater financial hardship at present, and also being younger respondents. Those involuntarily unemployed also have high levels of shame (3.18), while those who are retired have the least shame (1.49). The ANOVA results indicate a statistically significant difference in the financial shame mean scores of the different employment status groups.

Research on shame show that income level directly influences both material security and social comparisons, with individuals in poverty and with low income exhibiting higher shame proneness (Chase & Bantebya-Kyomuhendo, 2014; Chase & Walker, 2013). Crosby's (1976) *relative deprivation theory* emphasizes that shame is often driven by the perceived gaps between one's income and others, and not just one's absolute income level, which explains why people with adequate income may still feel financial shame, if peers or societal norms signal higher achievements. Respondents were grouped into five categories – Very Low, Low, Middle, High, and Affluent Income – leveraging the New Zealand disposable income quintile groupings (Figure NZ, 2024). The results in Table 4 show significant differences in shame levels between the groups, with those on the lowest income displaying the highest shame (3.00), and those with the highest income displaying the least shame (1.76). One result of note is the fact that low- and middle-income respondents had

¹⁷ New Zealand has one of the most borrower friendly student loan regimes marked by near universal interest free student loans, and income contingent repayments. As a result, university education costs place very little financial strain on households compared to loans in countries like the US and Canada.

similar levels of shame. This finding suggests a threshold effect, with financial shame most sensitive at the lower end of the income spectrum.

The findings show that financial shame is not evenly distributed across the demographics parameters. In particular, women, young adults, those who are not/have not been in a committed relationship, have less than a post-graduate education, are currently studying or unemployed involuntarily, and on low incomes, all display higher shame. As noted above, these demographics factors are not reasons why people experience more shame, but rather represent contexts through which other factors impact a person's propensity and level of shame. I next moved on to investigate the psychosocial, personal resources, lifetime and contextual current financial factors that should drive financial shame.

C. Univariate Analysis of the Association between Factors and Financial Shame

I began by undertaking univariate analysis of the level of financial shame for respondents against the various psychosocial, personal resources, lifetime and contextual current financial factors that I hypothesized, which either influence trait shame dispositions or act as a trigger of situational state shame events.

C1. Role-based Identity

Those who define themselves in particular roles are prone to greater shame when they fail in those roles. For those who define themselves as breadwinners or the primary financial decision-maker, financial failure and hardship may feel even more personal, while those who share those responsibilities may be buffered by the involvement of a second person. However, those who delegate financial decision-making to someone else may also feel shame, with feelings of incompetence, dependency and lack of control. I start by testing *Hypotheses #1a* and *#1b*, that those who bear greater financial responsibility or who delegate responsibility will report higher levels of shame, by comparing the average shame reported by respondents, based on their responses to two questions, that asked who was responsible for a) routine financial tasks and b) complex financial decisions.

Household routine financial tasks are day-to-day money management tasks such as paying bills, monitoring bank balances, handling grocery budgets, making regular utility and rent payments, keeping records of income and expenses, and managing short-term cash flow. Household complex financial decisions typically involve strategic, long-term and high-stakes financial matters, which include investments, retirement planning, mortgage or refinancing, tax strategy, large purchases (e.g. cars, appliances, property), insurance and financial risk management, with the individual who takes on this role shaping the household’s financial trajectory. Respondents’ answers were grouped into three options – they either made these household decisions themselves, jointly, or they were made by someone else.

Table 5. Statistical Significance of Household Financial Responsibility

Household Financial Responsibility	Routine Financial Tasks		Complex Financial Decisions	
	N (% Total)	Financial Shame	N (% Total)	Financial Shame
“Others are Responsible”	92 (13%)	2.80	48 (7%)	2.98
“Shared Responsibility”	274 (39%)	2.33	313 (44%)	2.42
“I am Responsible”	338 (48%)	2.53	343 (49%)	2.48
One-way ANOVA <i>F</i>-value		5.225 ***		4.319 **
Independent <i>t</i>-tests for Differences				
“Others are Responsible” & “Shared Responsibility”		0.46 ***		0.56 ***
“Shared Responsibility” & “I am Responsible”		-0.19 *		-0.06
“Others are Responsible” & “I am Responsible”		0.27 *		0.51 ***

Note. Table presents mean Financial Shame scores by Household Financial Responsibility category. *N* = number of respondents; percentages indicate proportion of the total sample. Between-group differences were tested using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

The research results in Table 5 show that financial shame is highest when others are responsible for routine financial tasks (2.80) and lowest when responsibility is shared (2.33), which partly correlates with my hypothesis on control-backed shame reductions – confirming *Hypothesis #1b*, where delegating financial responsibility fully to others, is linked to significant increases in financial shame levels. People who delegate routine financial tasks report higher shame, likely due to feelings of incompetence, dependency and lack of control (Tangney & Dearing, 2003), whereas sole managers confer agency, which buffers against the higher shame seen in those who defer completely (Starrin et al, 2009). The results continue to show that delegated

responsibility is linked to increased financial shame, even for complex financial tasks (2.98), and reaffirms the study of Vogler et al (2008) on the dissatisfaction that ensues when individuals independently and unilaterally make financial decisions in a household, rather than making joint decisions. The results also show that the outsourcing to others of complex financial tasks is linked to increased financial shame moreso than the outsourcing of routine financial tasks (2.98 vs 2.80). Handing responsibility to others can produce dependent autonomy (Lair, 2019), a form of dependency that reduces one’s internal capabilities and control, with this lack of agency further undermining identity and autonomy in higher-stakes financial decisions. Shared and sole responsibility yield similar lower financial shame levels, which suggest that for both routine and complex financial matters, both sharing and sole responsibilities still confer a sense of control and competence, negating *Hypothesis #1a*. The research suggests that the main driver for financial shame with household financial role responsibilities is loss of agency, with this relationship being task-dependent, shaped by both gender norms, and the perceived stakes of the financial decision.

Principal Component Analysis (PCA) was performed on the two role-based identity factors – household financial responsibility for routine financial tasks and for complex financial decisions. Diagnostic tests confirmed the PCA was marginally appropriate in this context, with KMO of 0.500, and acceptable for Bartlett test score of 482.671 ($p < .001$). PCA produced one component with an eigenvalue above 1, that explained 85.3% of the variance, in Table 6. As a result, I retained this component, *Role Responsibility*, which has strong positive loadings on both routine financial tasks and complex financial decisions. This component measures the role identity individuals have in financial decision making, that is a significant driver of shame.

Table 6. PCA Factor Loading for Role-based Identity

	“Role Responsibility” Component 1
Routine Financial Tasks	0.923
Complex Financial Decisions	0.867
Eigenvalue	1.705
Variance	85.3%

Note. Principal component analysis (PCA) identified one component labelled *Role Responsibility*. Loadings ≥ 0.40 are displayed. The component explains 85.3% of the total variance (eigenvalue = 1.705).

C2. Group Membership as Perceived Financial Identity

As noted in the hypothesis section, group membership may prove to be either a buffer against shame (*Hypothesis #2a*), if the group provides support and prevents the isolation and withdrawal associated with shame, or an amplifier (*Hypothesis #2b*), where the group has strong norms and standards and people feel that they will be judged for failing to meet these standards. Group identity can be derived from various sources such as one's ethnicity, religion, family or even profession. In this study, as discussed earlier in the research design section, I operationalize group identity through ethnicity and religious affiliations.

In relation to financial decision-making, ethnicity or ethnic identity is tied to cultural expectations and social norms that influence one's financial behavior with regards to saving and spending, debt aversion and tolerance, risk-taking and risk-avoidance, and financial obligations for one's family and community. Triandis (2001) and Gelfand (2019) both expound on how cultural orientation shapes values (such as independence, conformity, responsibility), which influence money decisions, whereas Hofstede (2001) provided a set of frameworks to understand cultural variations, which has been used extensively to evaluate differences in financial decision-making (Cruz et al, 2025; Chan et al, 2022; Breitmayer et al, 2019; Wang et al, 2016; Li et al, 2013). Additionally, diverse ethnicities approach financial planning (Quilgars et al, 2008) and the willingness to take financial risks (Kim et al, 2021) differently. As a result, one's upbringing within an ethnic context often carries embedded cultural messages on wealth and morality, resulting in the intergenerational transmission of financial attitudes (Rosa et al, 2018), which research shows result in wealth disparities (Toney, 2016). For this research, I tested whether different ethnic affiliations are significantly associated with different financial shame levels, making this factor an important component of one's group membership identity.

Respondents identified with 51 distinct ethnicities, and indicated affiliation with up to five ethnicities, resulting in a total of 801 ethnicities selected in total. Where respondents identified with more than one ethnicity, the ethnicity with the highest belonging level was chosen as their primary ethnicity. As a result, respondents identified with 44 unique primary ethnicities. The top five ethnicities are reported in Table 7 and represent around 83% of all respondents. There are significant differences between the financial shame levels of the five largest primary ethnicities. Māori, Indian and Samoan respondents have higher levels of reported shame, while Chinese and New Zealand European respondents have lower levels of shame.

Table 7. Descriptive Statistics of the Top Five Ethnicity Affiliations

Ethnicity Affiliation	As the Primary Ethnicity		As an Ethnicity	
	N (% Total)	Financial Shame	N (% Total)	Financial Shame
New Zealand European	441 (63%)	2.42	485 (61%)	2.45
Māori	63 (9%)	3.05	109 (15%)	2.83
Indian	32 (5%)	2.78	34 (4%)	2.68
Samoan	26 (4%)	2.69	32 (4%)	2.68
Chinese	23 (3%)	2.37	26 (3%)	2.36
Total Responses	704		801	
One-way ANOVA <i>F</i>-value		4.223 ***		

Note. Table represent mean Financial Shame scores by Ethnic Affiliation, shown both as respondents' primary ethnicity and as one of multiple identified ethnicities. *N* = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame. The full list of Primary and Chosen Ethnicities for the Financial Shame Research Survey are in Appendix D.

To deal with the large number of ethnicities reported by respondents, I categorized ethnicities by their views towards money. Studies have argued that different ethnic groups can be characterized into a number of different financial worldviews or financial personas (Ge et al, 2023; Houkamau et al, 2019; Atkinson & Messy, 2012; Lusardi & Mitchell, 2011a; Guiso et al, 2006; Triandis, 2001; Hofstede, 2001). For this study, I focused on three financial worldview groupings: collectivist, individualist, and Confucian.

Collectivist ethnicities have a community-obligation-oriented financial worldview, and have a strong emphasis on supporting family and the community. As a result, collectivist ethnicities emphasize shared financial obligations (Triandis, 2001; Hofstede, 2001). Financial behaviors associated with “Family First” ethnicities are remittances (sending money back home to support the family and extended family) and community fundraising during life-interrupting events (e.g. fa'alavelave, funerals, weddings). There is a strong sense of failure when members cannot meet their communal obligations (Bedford & Hwang, 2003), triggering shame. These collectivist ethnicities include people groups from the Pacific Islands, South and Southeast Asia, and African regions.

Triandis (2001) and Hofstede (2001) also postulate that individualist ethnicities, with a consumer-autonomy-oriented financial worldview, accentuate independence, personal responsibility and wealth accumulation.

Individualistic ethnicities are often associated with conspicuous consumption, and have a greater openness to credit and investment. These “Me First” ethnicities have a stronger separation between personal and communal financial rules, and highlight the importance of self-reliance. Individualists may either feel more shame, financial success being an important measure of overall success, or less shame, as there are fewer financial obligations placed on individuals by family and the wider community. Individualist ethnicities include people groups from the Anglo-European regions.

Finally, Chen et al (2019) and Ge et al (2023) discussed how Confucian ethnicities, with a frugal-education-oriented financial worldview, focus on financial prudence and savings, have a low reliance on credit or debt, and view asset accumulation as a family responsibility. These “Save First” ethnicities believe in intergenerational stability, have a low risk tolerance and a high savings rate, and associate financial underachievement with failure. Confucian ethnicities include people groups from China, Korea, and Japan.

Table 8. Key Research for the Ethnicity Financial Worldviews

Ethnicity Financial Worldview	Main Research Source	Survey Responses included in each Category
Collectivist	Hofstede, 2001; Triandis, 2011	Māori, Samoan, Cook Island Māori, Tongan, Fijian, Fiji Indian, Tokelauan, Tuvaluan, Other Pacific Islanders, Indian, Sub-continent Indian, Asian, Filipino, Malaysian, Vietnamese, Thai, Sri Lankan, Southeast Asian, Lebanese, Persian, Pakistani, Middle Eastern, African
Individualist	Hofstede, 2001; Triandis, 2011	New Zealand European, New Zealand Pākehā, Australian, British, Scottish, Irish, Welsh, German, French, Dutch, Ashkenazi (European Jew), Western European, South African European, South African, North American, Caucasian, Russian, Eastern European
Confucian	Ge et al, 2023; Chen et al, 2019	Chinese, Korean, Japanese

Note. Table summarises the key research sources used to define each Ethnic Financial Worldview category and the corresponding survey responses classified under each worldview. Groupings were based on prior theoretical and empirical work linking ethnic affiliation to financial attitudes and behaviours.

The 44 primary ethnicities were classified into these three financial worldview groupings, shown in Table 8. In doing so, this study identified 25 respondents who provided equally high ethnic belonging levels for two ethnicities that belong to two different financial worldview groupings (e.g. primary ethnicity for the same respondent was both Māori and New Zealand European), which was excluded from the analysis.

Table 9. Statistical Significance of Ethnicity Financial Worldview Groupings and Ethnic Belonging Levels

	N (% Total)	Financial Shame
Panel A: Ethnicity Financial Worldview Grouping		
Collectivist	162 (24%)	2.79
Individualist	486 (72%)	2.39
Confucian	31 (5%)	2.38
One-way ANOVA <i>F</i>-value		6.684 ***
Independent <i>t</i>-tests for Differences		
Collectivist & Individualist		0.40 ***
Collectivist & Confucian		0.42 *
Individualist & Confucian		0.01
Panel B: Ethnic Belonging Level		
Weak	49 (7%)	2.81
Moderate	123 (18%)	2.63
Strong	531 (76%)	2.43
One-way ANOVA <i>F</i>-value		3.095 **
Independent <i>t</i>-tests for Differences		
Weak & Moderate		0.18
Moderate & Strong		0.20 *
Weak & Strong		0.38 *

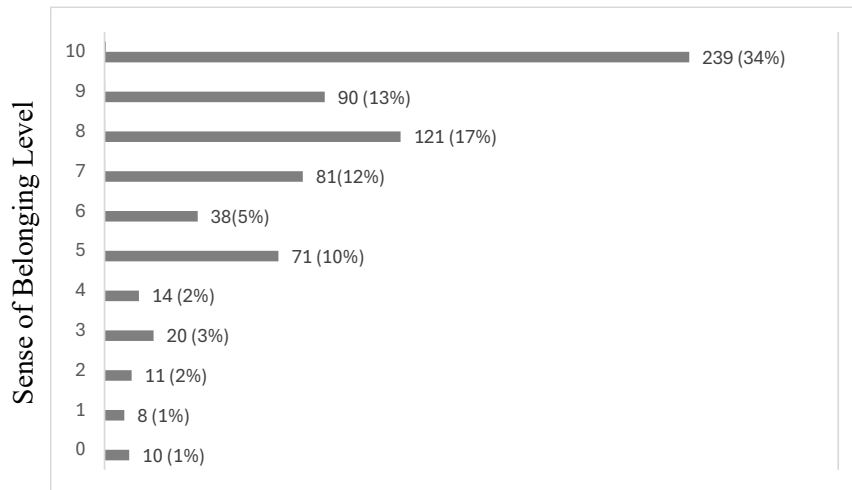
Note. Table presents mean Financial Shame scores by (Panel A) Ethnicity Financial Worldview grouping and (Panel B) Ethnic Belonging level. *N* = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

The results presented in Panel A of Table 9 support significant differences in the level of shame associated with the different ethnic financial worldviews. Collectivistic respondents had on average financial shame scores (2.79) that were 0.4 higher than other respondents. However, there was no real difference between individualistic (2.39) and Confucian (2.38) respondents. The elevated financial shame score results for collectivist ethnicities corroborates the work of Bedford & Hwang (2003) on the strong impact of the financial commitments that collectivistic groups place on themselves, to support their family and community. Additionally, collectivist communities place greater emphasis on social evaluation, making the impact of failure stronger. These findings correlate with *Hypothesis #2b*, linking the stronger group identity of collectivist ethnicities with financial shame.

As part of the analysis of ethnicity as a group identity, I next considered the respondents' sense of belonging to their ethnic group. A stronger sense of belonging may reduce isolation and buffer shame, but it also implies stronger alignment with group norms, making individuals more sensitive to judgment, and thus more conscious

of their financial standing within the group. I examined the impact of ethnic belongingness on financial shame scores, regardless of the ethnicity chosen, on the basis that a strong sense of belonging drives overall inclusion and acceptance, reducing shame, even when this relates to financial matters. Respondents were asked how strong their sense of belonging was on a scale of zero to ten. I analyzed the highest level of belonging reported by respondents, when they identified with multiple ethnicities.

Chart 1. Descriptive Statistics for Ethnic Belonging



Number of Responses per Belonging Level (N (% of Total))

Note. Figure displays descriptive statistics for levels of Ethnic Belonging among participants. *N* values represent the number of participants for each sense of belonging level; percentages indicate proportion of the total sample.

Chart 1 presents the distribution of ethnic belonging scores¹⁸ for the respondents. 76% of the respondents have a strong (scored seven to ten) sense of belonging to their primary ethnicity, 17% had a moderate sense of belonging, with only 7% not well aligned with their ethnicity. Panel B of Table 9 presents the average financial shame score for each level of belonging. The results show a negative association between ethnic belonging and financial shame, with weak ethnic belonging respondents experiencing the highest financial shame (2.81), whilst strong ethnic belonging respondents experiencing the lowest financial shame (2.43). The ANOVA results support significant differences between the groups, and aligns with Phinney’s (1992) theory on the importance of having a connection and commitment to an ethnic group, without regard to the actual ethnic group. This research suggests that a strong sense of ethnic belonging serves as a protective buffer against

¹⁸ One respondent did not answer the ethnic belonging question.

financial shame, likely because belonging provides identity validation, social support and resilience, which counteracts feelings of personal inadequacy around money (Haslam et al, 2009; Yip et al, 2008; Phinney et al, 2001). These results supports *Hypothesis #2a*, that stronger group identity through ethnic belongingness reduces financial shame.

In further analyzing the impact of group membership, I next investigated the association of religion and financial shame. Some religions may influence financial behavior through core norms and values of frugality and modesty, with a focus on saving more and consuming less impulsively (Guiso et al, 2003). Certain religions espouse greater risk aversion in investing (Renneboog & Spaenjers, 2012a; Renneboog & Spaenjers, 2012b), whilst other religions promote philanthropy, pro-social spending and within-group giving (e.g. tithing, zakat) (Roberts & David, 2019). I began by examining whether identifying with a religion is associated with financial shame. 682 respondents either listed down their religion or chose no religion. A further 22 respondents preferred not to respond, and were excluded from the analysis, given the small sample size.

Panel A of Table 10 presents the average shame score for those who associated with any religion versus those who do not. 40% of the sample associated with a religion, and on average, had significantly lower financial shame (2.39) than those not belonging to a religion (2.56), at the 10% level. The results suggest that religious belonging may provide a modest buffer against financial shame, validating *Hypothesis #2a*. Panel B presents the average shame scores for the top five religions identified by respondents. These covered 73% of respondents who identified a religion. The results show some differences in the average shame scores of the respondents, although not significant, with Presbyterians having much lower shame levels (1.61), while Hindus had the highest (2.49), followed by Catholics (2.43). However, 2.49 remains a relatively low financial shame score, and below the midpoint. The results support that religion provides social networks, communal support and shared values, which protects well-being. Further, religious beliefs may reframe struggles as part of spiritual growth, reducing the sense of personal defectiveness that fuels shame (Pargament, 2002; Ellison & Levin, 1998).

Table 10. Statistical Significance of Religious Belonging, Religious Affiliation and Religious Financial Worldview

	N (% Total)	Financial Shame
Panel A: Religious Belonging		
Yes	273 (40%)	2.39
No	409 (60%)	2.56
Independent <i>t</i>-Test for Differences		-0.176 *
Panel B: Top Five Religious Affiliation (N=273)		
Evangelical Christianity	91 (33%)	2.35
Roman Catholic	47 (17%)	2.43
Anglican	27 (10%)	2.21
Hinduism	20 (7%)	2.49
Presbyterian	14 (5%)	1.61
One-way ANOVA <i>F</i>-value	199 (73%)	1.425
Panel C: Religious Financial Worldview		
Stewardship	120 (18%)	2.23
Prosperity	101 (15%)	2.47
Abrahamic	10 (2%)	2.53
Karmic	24 (4%)	2.44
Spirituality	8 (1%)	3.03
Secular Humanism	419 (61%)	2.57
One-way ANOVA <i>F</i>-value		1.773

Note. Table presents mean Financial Shame scores by (Panel A) Religious Belonging, (Panel B) top five Religious Affiliations, and (Panel C) Religious Financial Worldview groupings. *N* = number of respondents; percentages indicate proportion of the total sample. Independent *t*-tests were used for binary comparisons (Panel A), and one-way ANOVAs *F*-values were used for comparisons among three or more groups (Panels B and C). $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

Using a similar approach to the categorization I employed for ethnicity, I grouped the religions based on their financial worldviews. The empirical studies of Hallin et al (2024), Pasek et al (2023), Li (2017), Renneboog and Spaenjers (2012a, 2012b), Guiso et al (2003) and Iannaccone (1998) provide frameworks to categorize religions based on a religion's values towards thrift, risk tolerance, financial responsibility, materialism and prosociality. For this study, I focused on six distinct religious financial worldview groupings, as taken from the existing research: Stewardship, Prosperity, Abrahamic, Karmic, Spirituality, and Secular Humanist¹⁹.

Stewardship religious groups describe money management as a ministry of stewardship (Callahan, 1997), where an individual manages all that God has entrusted to him or her (including time, talents, money and relationships) for divine purposes and goals, and promotes financial stewardship in their congregations and

¹⁹ 22 respondents preferred not to respond to the question of religious affiliation, and were excluded from the analysis, given the small sample size.

churches (Cnaan, 2002). The focus in stewardship religions is on modest consumption and lower impulse spending (Kurt et al, 2018), debt caution and avoiding ostentatious wealth (Stillman et al, 2012). Prudence and generous within-group giving (e.g. tithing) (Hallin et al, 2024) are virtues. The stewardship religious group include traditional and mainline Christianity churches (e.g. Protestant, Catholic, Orthodox).

In contrast, prosperity religious groups view financial success as a divine reward (Hobson et al, 2021), where faith and giving is rewarded by material wealth and success (Mohn, 2025). Prosperity religions have a higher tolerance for entrepreneurial risk (Dougherty et al, 2019) as a pathway to achieve financial independence. Generosity is perceived as seed-sowing and an investment, where the more you give, the more God rewards (Bowler, 2018). The Prosperity religious groups include Pentecostals and Charismatics, while Evangelicals represent a soft prosperity narrative.

Abrahamic finance encompassed the shared legal and ethical financial principles found in the Abrahamic religions of Judaism, Islam and Christianity (Khaleel & Avdukić, 2020; Lewis & Kaleem, 2019). These frameworks include prohibition of usury (Paldi, 2015), duty-based charity (Sherzer et al, 2024) and ethical investment policies and practices (Obaidullah, 2005).

Perera (2023) explains that Karmic law, a central theme in both Buddhism and Hinduism, teaches that every action (including financial actions such as earning, spending, investing) carries non-financial moral and future life consequences, which encourages intentionality in financial conduct. The main tenets of these Karmic religions include wealth alignment to Dharmic righteous duty (Agarwal & Bhattacharjee, 2025), generosity to accumulate karmic merit, which influences financial destiny (Ashram, 2024), and spiritual detachment from wealth to avoid negative karma (Bosco, 2016).

Spirituality (McCuddy & Pirie, 2007), grounded on nature and science (Steinhart, 2018), focuses on ecological ethics, and prioritizes land and resource stewardship over cash wealth (Enete & McDowell, 2024). This financial worldview is identified with New Age, Pantheist, Māori and Indigenous religious systems. These religions view riches as a means to serve, to experience life, and to sustain oneself and one's community (Twist & Barker, 2003; Schumacher, 1973).

Finally, Secular Humanism, which includes naturalist, agnostics, atheists, and those who do not associate with any formal religion (no religion), sees wealth as a tool for self-determination and pleasure, with financial decisions guided by personal ethics, personal utility and evidence-based choice (Enete & McDowell, 2024; Singer, 2015).

Respondents identified 31 distinct religious groups (including ‘No Religion’), which were then classified into these six religious financial worldview groupings, shown in Table 11.

Table 11. Key Research for the Religious Financial Worldviews

Religious Financial Worldview	Main Research Source	Survey Responses included in each Category
Stewardship	Callahan, 1997	Roman Catholic, Anglican, Presbyterian, Baptist, Church of England, Methodist, Protestant, Jehovah’s Witness, Orthodox Christianity, Seventh Day Adventist, Plymouth Brethren, Lord’s Recovery
Prosperity	Hobson et al, 2021	Christianity Non-denominational, Evangelical, Messianic, Pentecostal, Mormons
Abrahamic	Lewis & Kaleem, 2019	Judaism, Islam
Karmic	Perera, 2023	Buddhism, Hinduism, Sikhism
Spirituality	McCuddy & Pirie, 2007	Māori, Ratana, Ringatu, Pantheism, Spiritualism, Very Religious/Spiritual
Secular Humanist	Enete & McDowell, 2024	Agnostic, Humanist, Naturalist, Atheist, No (Formal) Religion

Note. Table summarises the key research sources used to define each Religious Financial Worldview category and the corresponding survey responses classified under each worldview. Groupings were based on prior theoretical and empirical work linking religious affiliation to financial attitudes and behaviours.

The results presented in Panel C of Table 10 suggest that at best, religion has a very limited impact on financial shame. Four of the categories have average scores around 2.50, with Stewardship respondents having the lowest score (2.23), and Spirituality respondents with the highest score (3.03). The ANOVA results indicate no statistically significant difference in the financial shame mean scores of the different religious financial worldview groupings. However, the lack of statistical significance maybe driven by the relatively small number of respondents in half of the categories.

In analyzing religion as a group membership identity that potentially impacts financial shame, I next considered religiosity. Cornwall et al (1986) explains that religiosity refers to the degree to which an individual

believes in, adheres to, and practices a religion, and how the intensity, consistency and centrality of religious beliefs and practices impact a person’s life. Shame, therefore, is a product of actual or perceived community judgement over moral failings and struggles (Ellison & Lee, 2010). I therefore expected that deeply religious individuals value the feedback and approval of the congregation, and as such, failure to adhere to religious teachings related to their finances, such as being unable to gift to the church due to financial hardship, results in greater financial shame. Religiosity was measured as the average of responses to two questions, “*My religious beliefs lie behind my whole approach to life*” and “*My religious beliefs add meaning to my financial decisions*”, both measured on a five-point Likert Scale²⁰. Respondents were then grouped into four levels: No (those who chose ‘No Religion’), Weak (average score below 2.5), Moderate (average score between 2.5 and 3.5), and a Strong (average score above 3.5) level of religiosity.

Table 12. Statistical Significance of Religiosity

Level of Religiosity	N (% Total)	Financial Shame
None	409 (60%)	2.56
Weak	64 (9%)	2.21
Moderate	56 (8%)	2.65
Strong	153 (22%)	2.37
One-way ANOVA <i>F</i>-value		2.416 *
Independent <i>t</i>-tests for Differences		
Weak & Moderate		-0.44 *
Moderate & Strong		0.29
Weak & Strong		-0.16

Note. Table presents mean Financial Shame scores by level of Religiosity. N = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-value and independent *t*-tests for pairwise comparisons. $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

The results in Table 12 do not provide a clear picture of the association between religiosity and financial shame. Moderate religiosity had the highest level of financial shame (2.65), while weak religiosity had the least (2.21). The ANOVA results indicate a statistically significant difference in the financial shame mean scores of the different levels of religiosity. Furthermore, the independent *t*-tests on the financial shame mean scores show

²⁰ The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

a significant difference only when comparing the weak and moderate level of religiosity groupings. The lack of a clear understanding of the role of religiosity makes drawing inferences difficult in this case.

Finally, I considered the concept of divine punishment. Divine punishment is the belief that a supernatural power actively monitors and punishes individuals for immoral or unethical behavior, and where the belief in karmic retribution or divine wrath can promote moral behavior (White & Norenzayan, 2019; Purzycki et al, 2016; Shariff & Norenzayan, 2007; Johnson & Krüger, 2004). Failures in a person's life can often be considered a divine punishment, that is also judged by the religious community (Laurin et al, 2012; Ellison & Lee, 2010) best described through the "Job effect". Carney (2014) and Garner (2024) both discuss the story of Job in the Bible, which illustrates a man who suffers immense losses to family, wealth, and health, despite being righteous, resulting in personal shame. Friends assume Job's suffering must be punishment for wrongdoing, chastising him and demanding he acknowledges his failures, practicing community judgement. This "Job effect" shows how suffering (including financial hardship and unemployment) is often moralised as punishment and divine retribution by the religious group, with the community judgement isolating the individual and intensifying the shame felt. Belief in divine punishment was measured by whether the respondents associated with the statement "*When I experience financial difficulty, I wonder what I did for God to discipline me.*" using a five-point Likert scale²¹. There were 677 responses, with five additional respondents (who responded to the other questions on religion) opting not to respond to this question. The responses were grouped into four levels: No (chose 'No Religion'), Weak (score of 1 or 2), Moderate (score of 3), and a Strong (score of 4 or 5) belief in divine punishment.

Table 13 presents, as expected, that those with a stronger belief in divine punishment experienced higher levels of shame (2.97). Even a moderate belief in divine punishment is associated with an increased level of financial shame (2.72), over 0.6 of a point (when compared to a weak belief in divine punishment). The ANOVA results indicate a statistically significant difference in the financial shame mean scores of the different levels of belief in divine punishment. Furthermore, the independent *t*-tests on the financial shame mean scores show significant differences when comparing the weak belief in divine punishment with either the moderate or strong

²¹ The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

belief in divine punishment. This suggests a threshold for how believing in divine punishment affects financial shame levels, rather than a gradual increase, with only a weak belief in divine punishment buffering shame.

Table 13. Statistical Significance of Divine Punishment

Belief in Divine Punishment	N (% Total)	Financial Shame
None	409 (60%)	2.56
Weak	171 (25%)	2.11
Moderate	40 (6%)	2.72
Strong	57 (8%)	2.97
One-way ANOVA <i>F</i>-value		9.445 ***
Independent <i>t</i>-tests for Differences		
Weak & Moderate		-0.61 ***
Moderate & Strong		0.25
Weak & Strong		-0.86 ***

Note. Table presents mean Financial Shame scores by Belief in Divine Punishment. N = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-value and independent *t*-tests for pairwise comparisons. $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

Overall, the results suggest that group membership identity has both a positive and negative association with financial shame levels. Those associated with more collectivistic ethnicities have higher shame levels, validating *Hypothesis #2b*, whilst those with a strong sense of ethnic belonging have lower shame levels, validating *Hypothesis #2a*. The effect of religion is less clear cut, as those who describe themselves as belonging to a religion are marginally associated with lower shame levels, confirming *Hypothesis #2a*. However, the religious views around financial success or failure do not influence shame levels meaningfully, although believing in divine punishment does, supporting *Hypothesis #2b*. The results support the idea that group membership can be protective against shame, when the focus is on being connected and belonging to a group (as evidenced with the results to ethnic and religious belonging), and an amplifier of shame, when the focus is on conforming to the norms of the group (as evidenced with the results to ethnic affiliations and religious divine punishment).

C3. Financial Literacy and Self-Efficacy

Financial literacy, the ability to understand financial concepts, make informed judgments and take effective decisions regarding the use of and management of money, has been shown to influence the quality and

confidence of financial decisions made by individuals. Financial literacy is also associated with proactive and protective financial actions, such as systemic savings habits (Hilgert et al, 2003), non-reliance on high-interest debt (Lusardi and Tufano, 2015), and is linked to an increased uptake of adequate insurance coverage and greater retirement plan participation (Hastings et al, 2013). Financial self-efficacy, also referred to as financial confidence, has been shown to be linked to an increase in the willingness to act on financial decisions (Perry and Morris, 2005), seek additional information to compare products and negotiate solutions (Farrell et al, 2016), and reduce procrastination and avoidance of important financial tasks (Lown, 2011). As a result, individuals who are more financially knowledgeable and/or self-confident should be less prone to making financial mistakes or experiencing financial hardship, and when they do experience these situations, are more capable of managing the situation. Therefore, financially knowledgeable and confident individuals should be less prone to financial shame.

Financial literacy was measured using five questions employed in the HILDA (Household Income and Labour Dynamics in Australia) Living in Australia Continuing Person Questionnaire (CPQ) W16M (2016). Financial literacy was measured as the sum of correct answers to the five questions, with respondents grouped into three levels: Low (sum of score is 2 and below), Medium (sum of score is 3), and High (sum of score is 4 or above) financial knowledge. Financial confidence was measured using the financial self-efficacy questions developed by Mindra et al (2017). This measure employs five questions that respondents were asked, to measure their level of agreement, with on a five-point Likert scale²². Responses were averaged across the five questions and respondents were grouped into three groups: Low (average score below 2.5), Medium (average score between 2.5 and 3.5), and High (average score above 3.5) confidence groups.

The results in Table 14 show that while 13% of respondents rate their financial self-efficacy as low, 23% had low financial knowledge, suggesting that some respondents over-estimate their ability. In contrast, 6% fewer respondents had high financial self-efficacy than had high financial literacy. Both financial literacy and self-efficacy demonstrate a negative association with financial shame, with those in the weak/low groups having the highest shame (3.00 and 3.71), validating *Hypothesis #3* and *#4*. However, there appears to be a stronger

²² The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

effect from self-efficacy than financial literacy. The low and high self-efficacy groups have higher and lower financial shame, respectively, than the equivalent financial shame scores for the same groups, when split based on financial literacy. In particular, the low financial self-efficacy group has 0.71 point higher financial shame than the low financial literacy group. Additionally, while there are significant differences between each group for self-efficacy, for financial literacy the differences between low and medium is insignificant, suggesting only high levels of financial literacy buffer against financial shame.

Table 14. Statistical Significance of Financial Literacy and Self-Efficacy

Level	Financial Literacy		Self-Efficacy	
	N (% Total)	Financial Shame	N (% Total)	Financial Shame
Weak/Low	163 (23%)	3.00	93 (13%)	3.71
Moderate/Medium	116 (17%)	2.77	234 (33%)	2.84
Strong/High	425 (60%)	2.22	377 (54%)	1.97
One-way ANOVA <i>F</i>-value		29.198 ***		114.875 ***
Independent <i>t</i>-tests for Differences				
Weak/Low & Moderate/Medium		0.22		0.87 ***
Moderate/Medium & Strong/High		0.56 ***		0.86 ***
Weak/Low & Strong/High		0.78 ***		1.73 ***

Note. Table presents mean Financial Shame scores by Financial Literacy and Self-Efficacy levels. N = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

Financial literacy and financial efficacy are complementary, but distinct. People make better quality decisions when they have the knowledge on what to do and the confidence to do it (Perry & Morris, 2005), and cope better in a financial crisis by evaluating options (Farrell et al, 2016) without being paralyzed by uncertainty. Given the complementary and distinct impacts of financial literacy and financial efficacy on financial behaviour, further analysis focused on segregating the responses to financial literacy alongside the responses to financial efficacy. The aim of the analysis is to understand if the effects of “knowledge” (financial literacy), as reflected in the financial shame scores, differs significantly from the effects of “confidence” (self-efficacy).

Table 15. Statistical Significance of “Knowledge” segregated by “Confidence”

	Segregation by Self- Efficacy		Independent <i>t</i> -tests for Differences	
	Low Confidence	High Confidence		
Financial Literacy	Weak Knowledge	Financial Shame = 3.68 N = 30	Financial Shame = 2.65 N = 55	1.03 ***
	Strong Knowledge	Financial Shame = 3.60 N = 41	Financial Shame = 1.78 N = 274	1.82 ***
Independent <i>t</i>-tests for Differences		0.00	0.87 ***	

Note. Table presents mean Financial Shame scores for Financial Literacy (Knowledge) levels (weak vs strong) segregated by Self-Efficacy (Confidence) levels (low vs high). N = number of respondents in the combined segment. Independent *t*-tests were conducted to compare Financial Shame: (a) between Low Confidence and High Confidence within each Financial Literacy level, and (b) between Weak and Strong Knowledge within each Self-Efficacy level. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

The research results in Table 15 show that financial confidence, regardless of the level of financial knowledge, significantly reduces financial shame levels, whereas financial knowledge significantly reduces financial shame when confidence is high, but not when confidence is low. This suggests that an individual’s perception of their ability (financial confidence) weighs and impacts their financial shame level more than their actual ability (financial knowledge). This also indicates that literacy maybe ineffective without efficacy with regards to financial shame, as knowledge alone does not protect against shame, if people lack the confidence to use their knowledge. Instead, efficacy appears to be the primary buffer and shield against financial shame, with literacy amplifying the protective effects when confidence is high. The results align with prior research that shows how financial efficacy predicts and mediates the effects of financial literacy on financial outcomes (Farrell et al, 2016; Allgood & Walstad, 2016), and specifically how the lack of confidence leads to poor implementation and follow through on applying appropriate financial practices and action, even amongst the financial knowledgeable (Parker et al, 2012; Lown, 2011). People may know the right financial steps, but if they lack the confidence to act, they risk “analysis paralysis” and financial inaction, leading to financial shame.

C4. Financial Social Comparisons

Shame is driven by feeling inadequate or a failure to live up to expected standards. A stronger tendency, therefore, to compare ourselves to those around us leaves us more prone to experiencing shame. Financial comparisons, especially based on consumption, are relatively easy to measure, despite not necessarily accurate.

Based on existing research on social comparisons (Gilbert, 2007; Tangney & Dearing, 2003; Gilbert & Andrews, 1998; Lewis, 1971), my research instead relies on social status, the importance of social networks (physical and digital) and views on materialism to more accurately proxy for social comparison tendencies. As a result, I expect those people who are more inclined to these social comparison categorisations to be prone to higher levels of financial shame.

Subjective social status examines how individuals perceive their rank in social hierarchies and is seen as a strong predictor of behavior (Manstead, 2018) and health (Macleod et al, 2005). Subjective social status research argues that people do not act on what they have, but rather they act on what they believe they have or deserve. These actions, based on perceived social status, influences financial decisions, behaviors and attitudes towards risk-taking and consumption. I examined whether subjective social status is associated with feelings of financial shame. In particular, that individuals who view themselves as being of a lower social status rank have higher financial shame. I used the MacArthur Scale of Subjective Social Status (hereafter SSS), which asks people to visualize their position on a ladder with ten rungs, where the top rung represents the highest social status. The SSS responses²³ were grouped into three levels: Low (rank score of 3 or below), Medium (rank score between 4 and 6), and High (rank score of 7 and above) status level of SSS.

As shown in Table 16, around half of the sample saw themselves as in the middle of the ladder, while 16% saw themselves on the bottom of the ladder. The results show that SSS is strongly associated with financial shame, as people who perceive themselves as “Low Status” have the most financial shame (3.17), which supports *Hypothesis #5*. Because shame is inherently relational and comparative (Tangney & Dearing, 2003), those feeling they are beneath others, experience an amplified sense of inadequacy. Those in the highest social status ranks have the lowest financial shame (2.06), possibly reflecting material security, autonomy and validation (Kraus et al, 2013). The ANOVA results indicate a statistically significant difference in the financial shame mean scores of the different SSS levels. Furthermore, the independent *t*-tests on the financial shame mean scores show significant differences across all levels – when comparing the low, medium and high status levels of SSS.

²³ One respondent did not answer the subjective social status question.

Table 16. Statistical Significance of Financial Social Comparisons

	N (% Total)	Financial Shame
Panel A: Social Status Level		
Low	112 (16%)	3.17
Medium	346 (49%)	2.58
High	245 (35%)	2.06
One-way ANOVA <i>F</i>-value		35.028 ***
Independent <i>t</i>-tests for Differences		
Low & Medium		0.59 ***
Medium & High		0.51 ***
Low & High		1.10 ***
Panel B: Importance Level of Physical Social Networks		
Low	336 (48%)	2.32
Medium	184 (26%)	2.50
High	184 (26%)	2.78
One-way ANOVA <i>F</i>-value		8.543 ***
Independent <i>t</i>-tests for Differences		
Low & Medium		-0.18 *
Medium & High		-0.28 **
Low & High		-0.46 ***
Panel C: Importance Level of Digital Social Networks		
Low	419 (60%)	2.33
Medium	145 (21%)	2.58
High	140 (20%)	2.86
One-way ANOVA <i>F</i>-value		10.024 ***
Independent <i>t</i>-tests for Differences		
Low & Medium		-0.25 **
Medium & High		-0.27 *
Low & High		-0.52 ***
Panel D: Level of Materialism Views		
Low	209 (30%)	1.92
Medium	276 (39%)	2.47
High	219 (31%)	3.05
One-way ANOVA <i>F</i>-value		51.106 ***
Independent <i>t</i>-tests for Differences		
Low & Medium		-0.55 ***
Medium & High		-0.58 ***
Low & High		-1.13 ***

Note. Table presents mean Financial Shame scores across different levels of four dimensions of Financial Social Comparisons: (Panel A) Social Status, (Panel B) Physical Social Networks importance, (Panel C) Digital Social Networks importance, and (Panel D) Materialism Views. N = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. Statistical significance levels: $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

Physical social networks are in-person face to face relationships that individuals have with family, friends, co-workers, neighbours and community groups. Festinger's (1954) social comparison theory discussed how

people evaluate their social status by comparing themselves with those around them, and how upward comparisons (with someone better off) can lead to envy, dissatisfaction, shame and low self-esteem. Digital social networks are online platforms where people interact, post updates, and observe others (e.g. Instagram, Facebook, LinkedIn, TikTok, Reddit). Chou and Edge (2012) argues that deeper involvement with social media results in greater social comparison, and that the impacts are amplified, as the comparison is made with the continuous, curated access to others' lifestyles, accomplishments and possessions. Both physical and digital social networks are deeply intertwined with how people construct and perceive their social status, and shape how they think about their financial success. As a result, individuals who place greater importance on their social networks demonstrate a greater degree of social comparison, including their financial situation, which leads to an increased level of shame.

Respondents were asked to evaluate, on a five-point Likert scale²⁴, the following two questions; “*I care a lot about my social status in my Social Networks (e.g. real world groups, clubs, organizations, teams, boards)*” and “*I care a lot about my social status in my Digital Social Networks (e.g. Facebook, Instagram, WhatsApp, TikTok, Snapchat, X/Twitter, LinkedIn)*”. Responses were grouped into three levels: Low (score of 1 or 2), Medium (score of 3), and High (score of 4 or 5) level of importance of their social network status. The results in Panels B and C of Table 16 show that, perhaps somewhat surprisingly, half (60%) of respondents place little importance on their social status within their physical (digital) networks. The importance of digital networks was lower than physical networks with around 20% reporting high levels of importance for digital networks, compared with 26% for physical networks. The results also show that people who highly value their social status within their networks, both physical and digital, reported higher financial shame levels (2.78 and 2.86, respectively). This supports *Hypothesis #5*, that social comparison is associated with increases in financial shame. The ANOVA results indicate a statistically significant difference in the financial shame mean scores of the different levels of both the physical and digital social networks. Prior research (Vogel et al, 2014; Chou & Edge, 2012) argue that digital social networks intensifies upward comparisons beyond close ties, while presenting misleading perceptions of others' lives due to curated content. However, the results indicate similar financial shame levels at all level of social network importance, for both the physical and digital networks.

²⁴ The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

Extending the discussion on how subjective social status and social networks impact financial shame, this research also analysed the interplay between these two factors, using the average response to physical and digital social networks and mapping this against the subjective social status response. The results in Table 17 indicate that financial shame intensifies, as social networks become more important for the individual, even for those who already perceive their social status as high.

Table 17. Statistical Significance of Social Status segmented by Social Networks

	Importance Level of Social Networks		Independent <i>t</i> -tests for Differences
	Low	High	
Level of Social Status	Low	Financial Shame = 3.05 N = 76	Financial Shame = 3.65 N = 17 Sample Size is too small
	High	Financial Shame = 1.76 N = 128	Financial Shame = 2.66 N = 69 -0.91 ***
Independent <i>t</i> -tests for Differences		1.30 ***	Sample Size is too small

Note. Table presents mean Financial Shame scores by the level of Social Status (low vs high) segmented by the importance level of Social Networks (low vs high). N = number of respondents. Independent *t*-tests were conducted to compare: (a) Financial Shame between Low and High Social Network importance within each Social Status group, and (b) Financial Shame between Low and High Social Status within each level of Social Network importance. Cells indicating “sample size is too small” reflect insufficient cases for reliable statistical testing. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

Richins and Dawson (1992) discussed how materialism is a value system where people place importance on acquiring and owning material goods, as a path to happiness, success and status. When possessions define success and happiness, upward comparisons (to better-off peers) and aspiration–achievement gaps become chronic. As a result, financial setbacks become more significant indicators of public status shortfalls, inviting shame. Therefore, higher materialistic views should intensify financial shame. To evaluate the impact of materialism, this research leveraged the six-question shortened version of the Materials Values Scale (MVS) developed by Richins (2004), using a five-point Likert scale²⁵. Materialism was scored as the average of the responses to the six questions and grouped into three levels: Low (average score below 2.5), Medium (average score between 2.5 and 3.5), and High (average score above 3.5) level of materialism.

²⁵ The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

As shown in Panel D of Table 16, materialism views was relatively evenly spread with about 30% in the low and high categories, and with 40% in the medium group. The results show a clear, linear association between materialism and financial shame. As materialism increases, average financial shame increases substantially, which correlates with our prior expectation on materialism-backed shame. The results, supporting *Hypothesis #5* that social comparison is linked to increases in financial shame, suggests that as materialism increases, individuals begin tying identity and status to their ability to demonstrate their capability to purchase possessions and display wealth. As a result, financial hardship or mistakes becomes deeply threatening to their identity, making financial inadequacy more shame-inducing. The ANOVA results indicate a statistically significant difference in the financial shame mean scores of the different levels of materialism.

I extended the analysis of materialism by investigating the interplay between subjective social status and materialism. The results in Table 18 highlight a compounding impact, with financial shame further increasing for those who are highly materialistic and perceive themselves as low status (3.71). Of note, materialism and subjective status exert opposing main effects on financial shame: higher status lowers shame, while higher materialism raises it. Among respondents high in both status and materialism, these forces offset, yielding shame levels comparable to those low in both (2.73 vs 2.71). Notably, the materialism effect is larger at high status ($\Delta = 1.34$) than at low status ($\Delta = 0.99$), indicating that materialism's comparison-based self-worth remains potent even for those who see themselves as high status.

Table 18. Statistical Significance of Social Status segmented by Materialism Views

		Level of Materialism Views		Independent <i>t</i> -tests for Differences
		Low	High	
Level of Social Status	Low	Financial Shame = 2.71 N = 36	Financial Shame = 3.71 N = 31	-0.99 ***
	High	Financial Shame = 1.39 N = 65	Financial Shame = 2.73 N = 79	-1.34 ***
Independent <i>t</i> -tests for Differences		1.32 ***	0.97 ***	

Note. Table presents mean Financial Shame scores by level of Social Status (low vs high) segmented by the level of Materialism Views (low vs high). N = number of respondents. Independent *t*-tests were conducted to compare: (a) Financial Shame between Low and High Materialism Views within each Social Status group, and (b) Financial Shame between Low and High Social Status within each level of Materialism Views. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

Overall, the results present compelling evidence that social comparison is strongly associated with the level of financial shame, validating *Hypothesis #5*. Those who see themselves as lower on the social ladder, those who place more importance on their social status within both physical and digital networks, and those who are more materialistic, exhibit higher financial shame levels.

Table 19. PCA Factor Loadings for Social Comparisons

	“Financial Social Comparisons” Component 1	“Social Status” Component 2
Social Status	0.269	0.951
Physical Networks	0.845	0.009
Digital Networks	0.836	-0.096
Materialism	0.722	-0.254
Eigenvalue	2.007	0.978
Variance	50.2%	24.5%

Note. Principal component analysis (PCA) identified two components: *Financial Social Comparisons* (Component 1) and *Social Status* (Component 2). Loadings ≥ 0.40 are displayed. Together, the two components explain 74.7% of the total variance (Component 1 eigenvalue = 2.007, 50.2% variance; Component 2 eigenvalue = 0.978, 24.5% variance).

PCA was then conducted on the four social comparison variables – subjective social status, the importance of status on physical and digital networks, and materialism. Diagnostic tests showed that PCA was valid and justified in this context (KMO = 0.665; Bartlett = 509.154, $p < .001$). The PCA results in Table 19 indicated two components, that combined, accounted for around 75% of the variance. The first component, *Financial Social Comparisons*, has strong positive loadings on physical and digital social networks and materialism, with a low loading on social status. Component 2, *Social Status*, has a very strong positive loading on social status, with weak or negative loadings on the other three variables. Although the second component has an eigenvalue just below the threshold of 1, the resulting factor has high interpretability, and therefore is retained. Combined, these two components measure the aspiration-achievement gap that is a significant driver of shame. Component 1 reflects exposure to and importance of comparison networks that drive our aspirations, while Component 2 reflects where we see ourselves in comparison to other people, or our level of achievement. This reduced the number of variables to be used for regression and cluster analyses, from four to two.

C5. Past Financial Experiences

The next factor I investigated is the effect of past financial experiences. Past experiences are formative in establishing trait shame, with past negative financial experiences can result in vicious cycles where mistakes are compounded and shame is embedded. I explored childhood financial experiences (family financial socialization, age of first financial experience, childhood socio-economic status) and past financial shocks (financial hardship and material deprivation), to probe the impact of past financial experience in one's life journey on financial shame.

Family financial socialization is the process by which individuals acquire financial knowledge, attitudes, values, norms and behaviors, through the direct and indirect interaction with family members – especially parents and caregivers (Gudmunson & Danes, 2011). Behavior, modelled by parents, teaches people financial values around savings, debt, risk and generosity. Positive financial socialization results in regular budgeting, using credit responsibly, and avoiding impulsive spending (Shim et al, 2010), and improves young adults' financial efficacy and confidence in managing finances (Jorgensen & Savla, 2010). As a result, individuals who are exposed to money matters early in life, through family financial socialization, become more confident with their financial decisions as adults, which reduces feelings of financial shame.

Family financial socialization (hereafter FFS) was measured using five questions from Zhao and Zhang's (2020) research, with a five-point Likert scale²⁶. The average score of the responses to the five questions on FFS was grouped into three levels: Weak (average score below 2.5), Moderate (average score between 2.5 and 3.5), and Strong (average score above 3.5) level of FFS.

The results in Table 20 show that 40% of respondents received high levels of FFS, with 35% getting a moderate level, and 25% getting little socialization on financial matters. The results show that stronger family financial socialization is associated with slightly lower financial shame levels (2.43). However, the differences are small and not statistically significant, suggesting, surprisingly, that family financial socialization is not a primary determinant of financial shame. It maybe that any association operates indirectly, through mediators, such as

²⁶ The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

financial literacy and financial efficacy (Gudmunson & Danes, 2011; Shim et al, 2010). However, in this case, we do not observe a significant association.

Table 20. Statistical Significance of Family Financial Socialization

Level of Family Financial Socialization	N (% Total)	Financial Shame
Weak	175 (25%)	2.63
Moderate	248 (35%)	2.46
Strong	281 (40%)	2.43
One-way ANOVA <i>F</i>-value		1.525

Note. Table presents mean Financial Shame scores by the level of Family Financial Socialization. N = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-value. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

We explored family financial socialization further by investigating several age-related financial milestones, such as when children first discuss money with their parents, and when they first receive pocket money. To evaluate these alternate measures of FFS, I asked two questions, “*Do you recall if and when you had your first financial discussion with your family?*” and “*Do you recall if and when you had received your first pocket money from your family?*” taken from Agnew (2018). The respondents then had a choice of three answers – a) to indicate either they do remember the age and specify the age, or b) they do remember having a discussion or receiving pocket money but do not remember the age, or c) they did not have or recall having such a first financial experience. Answers were grouped into five categories: no first financial experience or do not remember, having a first financial experience but not remembering the age, having a first financial experience in the pre-teen years (response was 12 or below), having a first financial experience in the teen years (response was 13 to 18), and having a first financial experience in the post-teen years (response was 19 or above). The results in Table 21 show that nearly half of respondents don’t recall having a financial discussion with their parents, while 28% never received pocket money. A sizeable percentage also were unable to recall the age that they either had their first financial discussion or received pocket money. When I considered the financial shame levels, there does appear to be an association between higher shame and later age first financial experiences (3.05 for first discussion and 3.63 for first pocket money). This may indicate that delayed exposure to financial discussions and pocket money left individuals feeling less prepared. However, the ANOVA results do not show a significant difference, as the small number in the categories where respondents remembered the age of their first financial experience works against finding a significant difference. Although the age of first

financial socialization has been shown by family financial socialization research to impact financial behavior and attitudes in adulthood (Drever et al, 2015; Webley & Nyhus, 2013; Serido et al, 2010; Shim et al, 2010; Webley & Nyhus, 2006; Furnham, 1999), in this research, such early, direct, intentional and active childhood discussions on money matters does not appear to be an event that impacts a person’s feelings of financial shame.

Table 21. Statistical Significance of the First Financial Experiences

Age of 1 st Financial Experience	Age of First Financial Discussions		Age of First Pocket Money	
	N (% Total)	Financial Shame	N (% Total)	Financial Shame
None	328 (47%)	2.44	199 (28%)	2.44
Yes, but I do not remember the age	256 (36%)	2.53	284 (40%)	2.49
Yes, during the Pre-Teen years	47 (7%)	2.44	186 (26%)	2.48
Yes, during the Teen years	52 (7%)	2.44	30 (4%)	2.69
Yes, during the Post-teen years	21 (3%)	3.05	4 (1%)	3.63
One-way ANOVA <i>F</i>-value		1.317		1.132

Note. Table presents mean Financial Shame scores by timing of the First Financial Experience, measured separately for (a) First Financial Discussions and (b) First Pocket Money. N = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-values. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

Having established that FFS doesn’t appear to be directly associated with financial shame, I next examined the effect of childhood socioeconomic status (hereafter SES). Bradley and Corwyn (2002) discussed how low SES impacts every aspect of child development, including poor health and academic achievement, lower cognitive performance and emotional and behavioral issues, with the effects beginning prior to birth, and continuing into adulthood. Within a financial context, individuals with lower childhood SES are associated with overborrowing, impulsive consumption, and financial stress and anxiety (Shah et al, 2012), while those from high SES childhoods were more likely to delay gratification, avoid risky gambles, value the future and plan financially for the long term (Griskevicius et al, 2011a; Griskevicius et al, 2011b). I examined people’s perceptions of their SES, which Kraus et al (2009) explains is more impactful than objective SES, as it is how people remember and interpret their upbringing, which in turn impacts emotional well-being and financial decision-making.

To understand how the impact of childhood SES associates with an individual's feelings of financial shame, I used three questions drawn from Otto (2009), that asks respondents about their memory of their family's overall income, savings ability, and overall financial situation. Respondents' answers across the three questions were averaged and grouped into three levels: Low (average score below 2.5), Medium (average score between 2.5 and 3.5), and High (average score above 3.5) level of childhood SES.

Table 22. Statistical Significance of Childhood Socioeconomic Status

Childhood Socioeconomic Status Level	N (% Total)	Financial Shame
Low	171 (25%)	2.69
Medium	210 (30%)	2.46
High	311 (45%)	2.41
One-way ANOVA <i>F</i>-value		3.000 **
Independent <i>t</i>-tests for Differences		
Low & Medium		0.23 *
Medium & High		0.06
Low & High		0.28 **

Note. Table presents mean Financial Shame scores by the level of Childhood Socioeconomic Status. N = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-value and independent *t*-tests for pairwise comparisons. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

45% of respondents, as shown in Table 22, reported growing up in a high SES household, while 30% reported growing up in a medium SES household, and one-quarter of respondents grew up in low SES households. Those with a perceived low level of childhood SES have a significantly higher level of financial shame scores (2.69), as compared to either those with a medium or high level of childhood SES. This supports *Hypothesis #6* and confirms prior research that argues early scarcity experiences can foster feelings of financial inadequacy and shame in adulthood (Lott & Bullock, 2007). The lack of significant difference between medium and high SES financial shame levels suggest that once basic financial security and opportunities are met, childhood experiences have less impact on adulthood feelings like shame.

I next examined whether respondents had experienced financial hardship and material deprivation. Financial hardship, distinct from poverty, is a situation, which can be short-term, where people struggle to meet financial obligations, and is often triggered by life events such as job loss, illness and debt. Financial hardship has strong links to stress, mental health deficits and negative health outcomes (Heflin, 2017; Lim et al, 2014;

Butterworth et al, 2009). Frankham et al (2020a) argues that financial hardship erodes self-esteem, personal agency and coping ability. Experiencing financial hardship is likely to increase a person’s propensity to experience financial shame, due to the reduction in self-esteem. Respondents were asked if they had experienced financial hardship in the past.

Table 23. Statistical Significance of Financial Hardship

Experience of Financial Hardship	N (% Total)	Financial Shame
No	202 (29%)	1.79
Maybe/Don’t Know	128 (18%)	2.60
Yes	374 (53%)	2.83
One-way ANOVA <i>F</i>-value		53.811 ***
Independent <i>t</i>-tests for Differences		
No & Maybe/Don’t Know		-0.81 ***
Maybe/Don’t Know & Yes		-0.23 *
No & Yes		-1.04 ***

Note. Table presents mean Financial Shame scores by the experience of Financial Hardship. N = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-value and independent *t*-tests for pairwise comparisons. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

In Table 23, over half the respondents answered “Yes” to having experienced financial hardship at some point, with 18% unsure and 29% who had not experienced it. The results show that financial shame rises steadily as hardship becomes more salient, which validates my prior belief regarding hardship-backed shame, and supports *Hypothesis #6*. Experiencing financial hardship is strongly tied to shame because it signals failure to meet societal and personal expectations of financial adequacy and independence (Valenzuela-Garcia et al, 2023; Chase & Walker, 2013). The data reveals a large jump between those who report no hardship and those with uncertainty or hardship, which seems to indicate that financial shame is particularly sensitive to crossing the line from perceived stability to instability. This research highlights that ambiguity about one’s financial state is nearly as damaging as confirmed hardship, suggesting that financial insecurity itself is shame-inducing, not just poverty alone. The ANOVA results indicate a statistically significant difference in the financial shame mean scores of the different levels of subjective financial hardship.

Table 24 demonstrates the strength of the effect of financial hardship. When respondents were segregated, based on their current income, into above and below the poverty threshold of New Zealand (approximately

NZ\$23,741 for the financial year 2023/2024, as defined by New Zealand’s Child Poverty Action Group (2025)), I see that poverty has almost no impact on shame, over and above financial hardship. The data reveals that when people perceive that they have not experienced hardship, income alone does not predict shame, as even those below the poverty line report very low shame levels (1.70). In essence, low income has less effect than periodic instances of lacking the necessary resources to make ends meet. This suggests that the subjective perception of stability shields people from shame, even in objectively poor households. My research also shows that the large and significant difference in shame levels for those experiencing hardship, above and below the poverty line, suggests that objective poverty amplifies subjective hardship, and when hardship is both real and felt, shame intensifies sharply (3.11). This highlights the layered burden effect when financial hardship occurs on top of poverty, with a multiplicative effect as hardship deepens the struggles of poverty (Heflin & Iceland, 2009).

Table 24. Statistical Significance of Financial Hardship segregated by Poverty Threshold

		Segregation by Poverty Threshold		Independent <i>t</i> -tests for Differences
		Below NZ\$30,000 (N = 221)	Above NZ\$30,000 (N = 478)	
Financial Hardship	No	Financial Shame = 1.70 N = 46 (21%)	Financial Shame = 1.82 N = 153 (32%)	-0.12
	Maybe or Don’t Know	Financial Shame = 2.57 N = 41 (19%)	Financial Shame = 2.61 N = 87 (18%)	-0.05
	Yes	Financial Shame = 3.11 N = 134 (61%)	Financial Shame = 2.68 N = 238 (50%)	0.43 ***
One-way ANOVA <i>F</i>-value		25.063 ***	28.376 ***	

Note. Table presents mean Financial Shame scores by the experience of Financial Hardship, segregated by Poverty Threshold (below and above NZ\$30,000). N = number of respondents; percentages indicate proportion of the total sample. Between-group differences were assessed using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

Above and beyond financial hardship, material deprivation (Iceland & Bauman, 2007) measures an individual’s difficulty covering basic needs such as food, housing, utilities and medicine. I used Permanente’s (2016) Your Current Life Situation Survey and asked the question, “*In the past, have you had times when you had trouble paying for any of the following? Food, Housing, Heat and Electricity, Medical Needs, Transportation, Childcare, Debts, Other*”. Respondents were scored based on the number of items they

selected yes to, with respondents grouped into four levels: No (none of the items were chosen), Mild (1 to 3 items chosen), Moderate (4 to 6 items chosen), and Severe (7 to 8 items chosen) material deprivation.

Table 25. Statistical Significance of Material Deprivation

Level of Material Deprivation	N (% Total)	Financial Shame
No	223 (32%)	1.74
Mild	289 (41%)	2.60
Moderate	156 (22%)	3.14
Severe	36 (5%)	3.42
One-way ANOVA <i>F</i>-value		61.763 ***
Independent <i>t</i>-tests for Differences		
No & Mild		-0.86 ***
Mild & Moderate		-0.54 ***
Moderate & Severe		-0.28

Note. Table presents mean Financial Shame scores by the level of Material Deprivation. *N* = number of respondents; percentages indicate proportion of the total sample. Between-group differences were tested using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

The results in Table 25 indicate that around 7 out of 10 respondents had experienced an instance of material deprivation, at least once, in their past. While 41% fell into mild deprivation (with 1 to 3 items selected yes to), 5% had experienced severe deprivation (saying yes to 7 to 8 items). The results show that the financial shame scores are lowest when there is no material deprivation experienced (1.74), and that financial shame scores are highest when severe material deprivation has occurred (3.42). There appears to be a linear association between material deprivation and financial shame, which provides further evidence to support *Hypothesis #6*, that past financial difficult experiences influence the current level of financial shame. This research shows that when people can meet material needs, they avoid shame, since their financial identity is intact, reflecting on financial security and adequacy, whereas even mild deprivation raises shame substantially. However, shame plateaus at high levels, with no significant differences between moderate and severe material deprivation, suggesting that shame hits a ceiling.

Validating the assertion of Guio et al, (2012) that there is no hierarchy in material deprivation, and that any type of material deprivation is equally as harmful to an individual as any other, Table 26 shows that there is no significant difference in shame scores between the eight different deprivation categories. The result shows that financial shame is not about what one lacks, but about being deprived at all.

Table 26. Statistical Significance of Material Deprivation Category

Material Deprivation Category	N (% Total)	Financial Shame
Food	278 (18%)	3.11
Housing	245 (16%)	3.01
Heat and Electricity	205 (14%)	3.06
Medical Needs	210 (14%)	3.07
Transportation	194 (13%)	3.26
Childcare	61 (4%)	3.13
Debts	279 (19%)	2.93
Others	36 (2%)	2.97
One-way ANOVA <i>F</i>-value		1.556

Note. Table presents mean Financial Shame scores by Material Deprivation category. *N* = number of respondents; percentages indicate proportion of the total sample. Between-group differences were tested using one-way ANOVA *F*-values. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

Extending the discussions on material deprivation and subjective financial hardship, this research analyzed the interaction of these two factors. The results, in Table 27, show that material deprivation has a very strong impact on financial shame, irrespective of financial hardship. Having experienced any material deprivation results in between a 0.76 and 0.94 increase in financial shame scores. Additionally, someone who has experienced material deprivation, but not financial hardship has a higher shame score on average, than someone who has only experienced financial hardship (2.38 vs 1.97). In contrast, the effect of financial hardship, irrespective of the presence of material deprivation, is more muted.

Table 27. Statistical Significance of Material Deprivation segregated by Financial Hardship

		Segregation by Financial Hardship		Independent <i>t</i>-tests for Differences
		No	Yes	
Presence of Material Deprivation	No	Financial Shame = 1.63 N = 159	Financial Shame = 1.97 N = 29	-0.34 *
	Yes	Financial Shame = 2.38 N = 43	Financial Shame = 2.90 N = 345	-0.52 ***
Independent <i>t</i>-tests for Differences		-0.76 ***	-0.94 ***	

Note. Table presents mean Financial Shame scores by the presence of Material Deprivation (no vs yes) segmented by Financial Hardship (no vs yes). *N* = number of respondents. Independent *t*-tests were conducted to compare: (a) Financial Shame between the presence of Material Deprivation within each Financial Hardship experience, and (b) Financial Shame between the experience of Financial Hardship within the presence or absence of Material Deprivation. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

Overall, I find strong support for *Hypothesis #6*, which argued that past negative financial experiences are linked to increased financial shame levels. While family financial socialisation does not appear associated with shame, coming from a lower socioeconomic environment and having experienced financial and material hardship is associated with markedly higher levels of financial shame currently.

I next used the four factors to compute the PCA – family financial socialization, childhood socioeconomic status, financial hardship, and material deprivation. Although family financial socialization was not individually significant in univariate tests, I retained it in the PCA on theoretical grounds, given its strong impact on financial well-being in research (Zhao & Zhang, 2020), and because indicator quality was adequate (communality = .695; loadings $|\lambda| \geq .50$), showing it contributes meaningfully to the latent past-experience structure. Diagnostic tests of the suitability for PCA show a marginally acceptable KMO of 0.563, and an acceptable Bartlett test score of 448.461 ($p < 0.001$).

Table 28. PCA Factor Loadings for Past Financial Experiences

	“Past Financial Shocks with Negative Childhood Financial Experience” Component 1	“Positive Childhood Financial Experience with Financial Hardship later in life” Component 2
Family Socialization	-0.509	0.660
Childhood Socioeconomic Status	-0.577	0.569
Financial Hardship	0.777	0.450
Material Deprivation	0.805	0.391
Eigenvalue	1.845	1.115
Variance	46.1%	27.9%

Note. Principal component analysis (PCA) identified two components: *Past Financial Shocks with Negative Childhood Financial Experience* (Component 1) and *Positive Childhood Financial Experience with Financial Hardship later in life* (Component 2). Loadings ≥ 0.40 are displayed. Component 1 explains 46.1% of the variance (eigenvalue = 1.845) and Component 2 explains 27.9% of the variance (eigenvalue = 1.115), and together explain 74.0% of the variance.

In Table 28, two components had eigenvalues above 1, both of which make theoretical sense and are therefore retained. They combine to account for 74% of the variance. Component 1, *Past Financial Shocks with Negative Childhood Financial Experience*, has financial hardship and material deprivation loaded strongly positive, with family financial socialization and childhood socioeconomic status loaded negatively. This component is therefore picking up those who have had negative financial experiences as a child and later in

life, and who did not receive financial lessons and experiences from their parents. Component 2, *Positive Childhood Financial Experience with Financial Hardship later in life*, loads positively on all four variables, indicating more positive childhood experiences, including childhoods in wealthier families and with some socialization on money matters, and have, in later life, experienced deprivation and financial hardship.

As a result of PCA, the original Past Financial Dispositional Experiences framework was updated, with variables to be used for regression and cluster analyses, reduced from six to two.

C6. Current Financial Situation

As noted earlier, shame typically requires a trigger that activates latent trait shame. As a result, individuals will respond differently to the same event or set of circumstances (Gladstone et al, 2021; DiPrete & Eirich, 2006; Tracy & Robins, 2004; Merton, 1968). To investigate the role of a person's current financial situations as a triggering event, I examined the respondents' perceived financial trajectory, current financial state and financial well-being.

Subjective financial trajectory is a retrospective self-assessment that judges whether a person's satisfaction with their financial situation has improved or declined. Studies have shown that financial trajectory is associated with physical (Downward et al, 2020; Piumatti, 2017) and mental (Wen et al, 2023) health over time, future expectations (Graham, 2025) and impacts financial behavior and attitudes (Joo & Grable, 2004). Subjective financial trajectory (hereafter SFT), whether one feels financially improving or declining, functions as a comparison-laden status signal. A perceived decline widens the gap between where one is and where one "should" be (self-discrepancy), and heightens upward social comparisons to better-off peers. Because these comparisons are implicitly public, declines are interpreted as status shortfalls, eliciting financial shame, rather than mere regret over specific choices. We therefore expect lower (more negative) SFT to be associated with higher financial shame. Leveraging the work of Duckworth et al (2012), respondents were asked "*Compared to two years ago, how satisfied are you with your present financial situation?*", using a five-point Likert scale²⁷.

²⁷ The five-point Likert scale range used includes – much less satisfied = 1, a little less satisfied = 2, somewhat satisfied = 3, a little more satisfied = 4, much more satisfied = 5.

Respondents were grouped into three groups: “Better Life” (scored 4 or 5), “Same Life” (scored 3), and “Worse Life” (scored 1 or 2).

Table 29. Statistical Significance of Financial Trajectory

Financial Trajectory Experience	N (% Total)	Financial Shame
“Worse Life”	277 (39%)	3.03
“Same Life”	198 (28%)	2.17
“Better Life”	229 (33%)	2.11
One-way ANOVA <i>F</i>-value		48.692 ***
Independent <i>t</i>-tests for Differences		
“Worse Life” & “Same Life”		0.85 ***
“Same Life” & “Better Life”		0.06
“Worse Life” & “Better Life”		0.91 ***

Note. Table presents mean Financial Shame scores by the Financial Trajectory experience. *N* = number of respondents; percentages indicate proportion of the total sample. Between-group differences were tested using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

Unsurprisingly, given New Zealand has recently experienced a period of high inflation and increasing unemployment, Table 29 shows that 39% of respondents felt that they were worse off than two years ago. Only 33% felt they were improving. The results show that individuals who perceive their financial situation as deteriorating, “Worse Life”, report the highest levels of financial shame (3.03). This supports the argument that a downward trajectory threatens self-identity, social comparisons and perceived competence. There is no significant difference in the financial shame scores of “Same Life” and “Better Life”, suggesting that maintaining one’s financial position is enough to avoid the negative comparisons with others or with our own aspirations, and as such, does not result in triggering shame. This research highlights that financial trajectories, particularly downward trends, are strongly associated with financial shame, supporting *Hypothesis #7*.

I then examined the relationship of one’s current financial trajectory (“my life is improving/worsening now”) and one’s past financial hardship (“my life was good/difficult in the past”), to understand the interplay of how the past experience and current life course affects one’s feelings of financial shame. Research shows that people evaluate outcomes relative to a reference point rather than absolute levels (Kahneman & Tversky, 2013), and that people in a current positive state without growth can feel stuck, with satisfaction diminishing or plateauing (Clark et al, 2008), which makes evaluating an individual’s financial trajectory more compelling

that their current financial situation, when looking at shame markers. The results in Table 30 show, as expected, that those that have had financial hardship in the past and a worsening current financial trajectory (a negative-negative financial life journey) have, on average, the highest financial shame (3.27), whilst those who did not experience financial difficulty in the past and sees an improving financial situation (a positive-positive financial life journey) have, on average, the lowest financial shame (1.67). Notably, the financial shame of those who have experienced a negative-positive life journey (financial hardship and improving trajectory) and a positive-negative life journey (no hardship but with a declining trajectory) show a small 0.14-point difference (2.31 vs 2.17).

Table 30. Statistical Significance of Financial Trajectory segregated by Financial Hardship

		Segregation by Financial Hardship		Independent <i>t</i> -tests for Differences
		No	Yes	
Financial Trajectory	“Worse Life”	Financial Shame = 2.17 N = 46	Financial Shame = 3.27 N = 182	-1.09 ***
	“Better Life”	Financial Shame = 1.67 N = 69	Financial Shame = 2.31 N = 128	-0.64 ***
Independent <i>t</i> -tests for Differences		0.50 ***	0.96 ***	

Note. Table presents mean Financial Shame scores by Financial Trajectory experience (worse life vs better life) segmented by the presence of financial hardship (no vs yes). N = number of respondents. Independent *t*-tests were conducted to compare: (a) Financial Shame between worse life and better life of Financial Trajectory within the presence or absence of Financial Hardship, and (b) Financial Shame between no and yes responses to Financial Hardship within each Financial Trajectory experience. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

Graham’s (2025) financial resilient trajectory theory and Chen and Miller’s (2012) ‘shift-and-persist’ model, which prioritizes shifting oneself (accepting stress for what it is and adapting oneself through reappraisals) in combination with persisting (enduring life with strength by holding on to meaning and optimism), explain that those who are experiencing an upwards trajectory have greater cognitive function improvements, less anxiety, are less present-biased, and become better at planning (Ong et al, 2019), enabling them to overcome past financial hardship (Nishtala et al, 2022). As such, an improving financial situation could buffer past financial hardships, and if such positive trajectory continues, then subsequent financial shame levels should drop, as confidence and well-being improve. The point-in-time data in my research does not currently show this effect, but prior research may give us some insights into what to expect in the future.

I next explored the impact of subjective current financial state, and how individuals perceive their present financial condition. Subjective perceptions are stronger predictors of financial satisfaction than income alone (Vera-Toscano et al, 2006), which shapes financial attitudes and behaviors, especially with regards to budgeting, savings and compulsive buying (Gutter & Copur, 2011). As with financial trajectory, pessimistic views on current financial state are likely to trigger feelings of inadequacy and a significant aspiration-acquisition gap, which will trigger financial shame. To evaluate the impact of subjective current financial state, respondents were asked to answer the question “*Given your current needs and financial responsibilities, would you say that you and your family are...*” with choices of “*Very Poor = 1, Poor = 2, Just getting along = 3, Reasonably Comfortable = 4, Very Comfortable = 5, Prosperous = 6*”. Responses²⁸ were grouped into three groups: Weak (very poor or poor was chosen), Moderate (just getting along was chosen), and Strong (reasonably comfortable, very comfortable or prosperous was chosen) financial state.

Despite the high percentage of respondents who felt that they were going backwards financially (39% in the financial trajectory question), in Table 31 only 12% of respondents rated themselves as being in a weak financial state. In contrast, 50% saw themselves as having a strong financial state. The results show that those who are currently in a weak financial state report the highest financial shame (3.59), and in fact, report one of the highest average financial shame scores of any of the factors examined. The strong association with financial shame is likely driven by identity-threat, scarcity pressure and social comparison anxiety. Those who are currently in a strong financial state experience the lowest financial shame (1.92), with scores nearly half those of the weak group. This correlates with existing research that show that those who feel financially comfortable tend to take more calculated financial investment risks because they perceive they have a cushion (Vera-Toscano et al., 2006). There are large and significant gaps between all three categories, with nearly a full point of difference between strong and moderate and 0.7 between moderate and weak. The results suggest that even small improvements in one’s current financial condition, a state shame situational trigger, substantially reduces shame, and moving from financial insecurity (Moderate State) to financial security (Strong State) is a very powerful step in reducing shame. This research highlights that shame tracks financial

²⁸ Three respondents did not answer the current financial state question.

position closely and appears as a mirror of one’s subjective financial state, rising in conditions of weakness and falling with strength, which supports *Hypothesis #7*.

Table 31. Statistical Significance of the Current Financial State

Level of Current Financial State	N (% Total)	Financial Shame
Weak	83 (12%)	3.59
Moderate	268 (38%)	2.89
Strong	350 (50%)	1.92
One-way ANOVA <i>F</i>-value		110.487 ***
Independent <i>t</i>-tests for Differences		
Weak & Moderate		0.70 ***
Moderate & Strong		0.97 ***
Weak & Strong		1.674 ***

Note. Table presents mean Financial Shame scores by the level of Current Financial State. *N* = number of respondents; percentages indicate proportion of the total sample. Between-group differences were tested using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

In a similar vein to the current financial situation is the subjective financial well-being measure. The Consumer Financial Protection Bureau (CFPB, 2015) defines financial well-being as “a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life”. Brüggem et al (2017) extended this definition of financial well-being to measure an individual’s perspective of their ability to sustain their current and anticipated desired living standards and financial freedom, with an emphasis on subjective security, rather than just income and assets. Other research have discussed how financial well-being is an outcome of how well individuals manage their financial resources to meet current and future needs (Shim et al, 2009), that feeds back into how individuals make further financial choices, shapes their financial attitudes and sustains their financial behaviors, which includes a willingness to engage in complex financial tasks as investment choices (Netemeyer et al, 2018). I tested whether subjective financial well-being reinforces the aspiration-achievement gap, impacting peoples financial behaviors and decisions, thereby their feelings of financial shame.

To evaluate the impact of subjective financial well-being, this research asked respondents five questions drawn from the Personal and Household Finance segment of the Melbourne Institute HILDA (Household Income and Labour Dynamics in Australia) Living in Australia Self Completion Questionnaire W24M (2024), using a five-

point Likert scale²⁹. Responses were averaged over the five questions and respondents grouped into three categories: Low (average score below 2.5), Medium (average score between 2.5 and 3.5), and High (average score above 3.5) subjective financial well-being.

Table 32. Statistical Significance of Subjective Financial Well-being

Level of Subjective Financial Well-being	N (% Total)	Financial Shame
Low	189 (27%)	3.49
Medium	185 (26%)	2.66
High	330 (47%)	1.82
One-way ANOVA <i>F</i>-value		161.499 ***
Independent <i>t</i>-tests for Differences		
Low & Medium		0.83 ***
Medium & High		0.83 ***
Low & High		1.67 ***

Note. Table presents mean Financial Shame scores by the level of Subjective Financial Well-being. *N* = number of respondents; percentages indicate proportion of the total sample. Between-group differences were tested using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

The results of the subjective financial well-being measure show more respondents in the low well-being category than the current financial state measure (27% vs 12%). However, a similar percentage of respondents are classified as having high subjective well-being (47% vs 50%). The results in Table 32 show an inverse association, which supports *Hypothesis #7*, and that those with low well-being have very high financial shame (3.49), while those with high well-being have the lowest average financial shame (1.82). The differences between the three groups are also large, at 0.83 for both gaps (low vs medium and medium vs high), and statistically significant. These financial shame results also supports and collaborates the earlier findings of the current financial state measure.

Unlike subjective well-being, which is based on an individual's perception of their financial situation, objective financial well-being is the measurable, quantifiable and tangible financial resources that an individual has, including income, wealth and assets (savings, investments, property ownership), debt levels (credit card debt, loans, mortgage), consumption capacity (ability to meet material needs) and financial security indicators

²⁹ The five-point Likert scale range used includes – strongly disagree = 1, somewhat disagree = 2, neither agree nor disagree = 3, somewhat agree = 4, strongly agree = 5.

(insurance coverage, retirement savings) (Owusu, 2023; Sehwat et al, 2021; Western & Tomaszewski, 2016). Research have shown that shame is emotionally constructed rather than resource-based, and arises from how a person feels about their financial adequacy rather than their objective financial situation (Garðarsdóttir & Dittmar, 2012; Tangney & Dearing, 2002). However, most people would view financial independence as a significant and important benchmark of adulthood, and an inability to meet this standard, as indicated by poor financial well-being, will trigger feelings of inadequacy and failure, and ultimately shame. Although the focus of my research are on the subjective factors that have been identified to impact financial shame, I investigated objective financial well-being to better understand the interplay of perceived well-being and actual resources on how shame is felt. I employed a five-item measure of objective financial well-being from the Federal Reserve Bank of St Louis (2014); money saved, payments missed, credit card debt, liquid assets and debt-to-income ratio. The FRB has defined the responses for each of these five questions, which confirms positive financial well-being. Responses were compared to this positive financial well-being list, and were added up, with a maximum score of five. Respondents were again grouped into three categories: Weak (2 and below positive well-being responses), Moderate (3 positive well-being responses), and Strong (4 or above positive well-being responses) objective financial well-being.

The results in Table 33 show that 41% of respondents fell into the weak objective financial well-being category, with 36% in the strong category. The results show an inverse relationship between objective financial well-being and financial shame, validating *Hypothesis #7* that those with a strong objective financial well-being status, which is associated with having made provisions for sufficient financial resources for the present and near future, resulting in financial independence, feel less financial shame. In contrast, those with low objective financial well-being feel, with more financial constraints, experience more financial shame. The ANOVA results indicate a statistically significant difference in the financial shame mean scores of the different levels of objective financial well-being. Furthermore, the independent *t*-tests on the financial shame mean scores show significant differences across all groups, when comparing weak, moderate and strong groups.

Table 33. Statistical Significance of Objective Financial Well-being

Level of Objective Financial Well-being	N (% Total)	Financial Shame
Weak	286 (41%)	3.22
Moderate	165 (23%)	2.39
Strong	253 (36%)	1.73
One-way ANOVA <i>F</i>-value		134.989 ***
Independent <i>t</i>-tests for Differences		
Weak & Moderate		0.83 ***
Moderate & Strong		0.66 ***
Weak & Strong		1.49 ***

Note. Table presents mean Financial Shame scores by the level of Objective Financial Well-being. *N* = number of respondents; percentages indicate proportion of the total sample. Between-group differences were tested using one-way ANOVA *F*-values and independent *t*-tests for pairwise comparisons. $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

Various research discussed the interplay of objective and subjective financial well-being indicators, with discrepancies between the objective and subjective levels associated with social comparisons, financial expectations and adaptations, and with objective indicators explaining less the variance in financial satisfaction than subjective perceptions (Brüggen et al, 2017; Joo & Grable, 2004). Notably, for this research, I observed marked differences between the perceived and actual well-being of the respondents at both the low/weak level (27% vs 41%) and the high/strong level (47% vs 36%). To investigate how subjective and objective financial well-being interact jointly with financial shame, I measured the average level of shame based jointly on subjective and objective measures. The aim of the analysis is to understand if the effects of the “Tangible State” (objective financial well-being), as reflected in the financial shame scores, differs from the effects of the “Perceived State” (subjective financial well-being). The results in Table 34 show that most respondents are aligned between their perceived and actual financial well-being, as 47% of 704 respondents categorised themselves as either low/weak ($N=135$) or high/strong ($N=193$). However, and being cognisant of the fact that Table 34 doesn’t include the medium level respondents, the 73 respondents in Table 34 who do not sit in the low/weak or high/strong groups have extremely divergent views on their objective and subjective well-being. Interestingly, there are more than twice as many people who had high subjective and weak objective well-being ($N=51$) than those who had low subjective and strong objective well-being ($N=22$). The results show that those who are low/weak in both actual and perceived have the highest shame (3.62), while those with high/strong well-being across both measures have the lowest shame (1.43). Of note though, is that both

measures matter, as respondents showing high subjective/weak objective well-being (3.06) see an increase of around 1.6 points to their level of shame, as compared to the high subjective/strong objective (1.43) financial well-being group.

Table 34. Statistical Significance of the “Tangible State” segregated by the “Perceived State”

	Segregation by Subjective Financial Well-being		Independent <i>t</i> -tests for Differences	
	Low	High		
Objective Financial Well-being	Weak	Financial Shame = 3.62 N = 135	Financial Shame = 3.06 N = 51	0.56 ***
	Strong	Financial Shame = 3.09 N = 22	Financial Shame = 1.43 N = 193	Sample Size is too small
Independent <i>t</i>-tests for Differences		Sample Size is too small		1.63 ***

Note. Table presents mean Financial Shame scores by Objective Financial Well-being “Tangible State” level (weak vs strong) segmented by Subjective Financial Well-being “Perceived State” level (low vs high). N = number of respondents. Independent *t*-tests were conducted to compare: (a) Financial Shame between weak and strong levels of Objective Financial Well-being within each Subjective Financial Well-being level, and (b) Financial Shame between low and high levels of Subjective Financial Well-being within each Objective Financial Well-being level. Cells indicating “sample size is too small” reflect insufficient cases for reliable statistical testing. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$. Dependent variable: Financial Shame.

The results provide strong confirmation for *Hypothesis #7*, which stated that a person’s current financial situation would be negatively associated with financial shame. Respondents who felt that their current situation, their financial trajectory, subjective and objective well-being were poor had significantly higher average shame levels than those who were better placed.

I next conducted PCA on the three current financial situation variables – financial trajectory, current financial state and subjective financial well-being. The objective financial well-being factor was excluded as an output component, whereas the subjective financial well-being factor was retained, based on the dynamic feedback effect identified in research (Netemeyer et al, 2018). Diagnostic tests confirmed the PCA was appropriate in this context (KMO=0.647, Bartlett = 575.181, $p < .001$). The PCA, in Table 35, produced one component with an eigenvalue above 1 that explained 67% of the variance. As a result, I retained this component, which has strong positive loadings on all three variables, essentially representing a *Positive Current Financial State* measure. This reduced the current financial state factors from three to one, for use in both regression and cluster analyses.

Table 35. PCA Factor Loadings for Current Financial Situation

	“Positive Current Financial State” Component 1
Financial Trajectory	0.722
Current Financial State	0.863
Subjective Well-being	0.867
Eigenvalue	2.017
Variance	67.2%

Note. Principal component analysis (PCA) identified one component labelled *Positive Current Financial State*. Loadings ≥ 0.40 are displayed. The component explains 67.2% of the total variance (eigenvalue = 2.017).

Overall, the univariate analysis shows that the level of financial shame is significant across most of the psychosocial, lifetime, and current factors used in this research. The significant factors that have the highest average financial shame levels in this research include self-efficacy (3.71), subjective current financial state (3.59), subjective financial well-being (3.49) and material deprivation (3.42), which reflect on the impact of one’s financial confidence, current financial situation, and past financial difficulties on feelings of financial shame. These same factors also show the largest gap between the high and low levels of financial shame within their construct – self-efficacy ($\Delta 1.73$), subjective current financial state ($\Delta 1.67$), subjective financial well-being ($\Delta 1.67$), material deprivation ($\Delta 1.68$) – which reflect on the depth of their impact on financial shame.

D. Stepwise Regression Analysis and Financial Shame Predictors

Having evaluated each financial shame factor and identified suitable components, I moved to building a regression model that identifies the key predictors that have a significant association with financial shame. As a result of using PCA to reduce some of the dimensions, and leveraging the significant factors identified in the univariate analysis, I considered the following regression inputs to explain financial shame levels:

$$\begin{aligned}
 \text{Financial Shame} = & \text{Role Responsibility (PCA)} + \text{Ethnic Affiliations (Dummy Variables)} + \text{Ethnic Belonging} \\
 & + \text{Religious Belonging} + \text{Religiosity} + \text{Divine Punishment} + \text{Financial Literacy} + \text{Self-Efficacy} \\
 & + \text{Financial Social Comparisons (PCA)} + \text{Social Status (PCA)} \\
 & + \text{Past Financial Shocks with Negative Childhood Financial Experience (PCA)} \\
 & + \text{Positive Childhood Financial Experience with Financial Hardship later in Life (PCA)} \\
 & + \text{Positive Current Financial State (PCA)} + \text{Demographics}
 \end{aligned}$$

Stepwise regression is used as the most appropriate approach for this study because the main objective is exploratory. In this research, the aim is to identify the factors most strongly associated with financial shame, either as an amplifier or buffer, among the broad set of psychosocial, personal resource, lifetime and contextual predictors. Whereas theory-driven confirmatory models use already identified relationships, the current research requires a method that can filter the overlapping factors, minimize multicollinearity, and produce a parsimonious set of variables that explain the greatest variance. In this regard, stepwise regression offers a systematic, replicable process of iteratively retaining factors with the strongest statistical contributions, and excluding redundant variables. This approach is particularly suited for financial shame, where current theory suggest multiple candidate predictors, but does not yet establish their relative weight. The use of PCA alongside stepwise regression further strengthens the analysis, by making sure that the retained predictors are not artifacts of multicollinearity.

Table 36. Key Financial Shame Predictors in Regression Analysis Results

Financial Shame Key Predictors	Panel A: Stepwise Regression	Panel B: Hierarchical Regression
Self-Efficacy	-0.455 *** (0.062)	-0.381 *** (0.064)
Positive Current Financial State (PCA)	-0.351 *** (0.047)	-0.403 *** (0.047)
Age	-0.261 *** (0.033)	-0.264 *** (0.039)
Past Financial Shocks with Negative Childhood Financial Experience (PCA)	0.196 *** (0.040)	0.172 *** (0.039)
Financial Social Comparisons (PCA)	0.311 *** (0.035)	0.265 *** (0.037)
Social Status (PCA)		-0.115 *** (0.042)
Positive Childhood Financial Experience with Financial Hardship later in life (PCA)		0.119 *** (0.035)
Divine Punishment		0.145 ** (0.070)
Ethnic Affiliation (Individualistic)		-0.155 * (0.089)
Gender		0.133 * (0.077)

Note. Table presents standardized regression coefficients (*B*) and standard deviations (SD) in parenthesis from stepwise (Panel A) and hierarchical (Panel B) multiple regression analyses predicting Financial Shame. Panel A identifies the most parsimonious model of key predictors, while Panel B introduces additional demographic and contextual variables that provide incremental explanatory power. Statistical significance levels: $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

The stepwise regression analysis retained five significant predictors, which explains 50% of the variance in financial shame ($R^2 = .508$, Adjusted $R^2 = .504$, $F(5, 647) = 133.437$, $p < .001$). There are no multicollinearity issues identified. The details of each factor in the financial shame regression model is presented in Table 36.

In Panel A of Table 36, there is a moderately strong negative association between a *positive current financial state*, age and self-efficacy, with financial shame. The negative associations suggest that these three factors act as buffers to feelings of shame, with financial self-efficacy displaying the largest coefficient. There is also a moderately strong positive association between *financial social comparisons* and *past financial shocks with negative childhood financial experiences* with financial shame. The results therefore suggest that these two factors amplify financial shame, with social comparisons as the predictor that amplifies shame the most.

Based on these results, it can be suggested that mature people with self-confidence in their financial abilities, having experienced a relatively financially stable childhood with no considerable financial hardship in the past, who spend less time comparing themselves to others through social networks and are satisfied with their current financial situation, would exhibit lower levels of financial shame. Conversely, younger adults who are not confident with their financial acumen, and have experienced childhood poverty or financial hardship in the past, who actively spend time on social networks and open themselves up to comparisons, and with a deteriorating or poor financial environment, would show higher levels of financial shame.

Interestingly, four of the five key predictors identified through stepwise regression include one each of the psychosocial (social comparisons), personal resources (self-efficacy), lifetime (past experiences) and contextual (current situation) factors, which highlights the multi-dimensionality of financial shame. Even demographics, with age, play an important role in shaping the context by which shame is experienced. Notably, the results show that the buffering impact of confidence in one's financial abilities (-0.455) is almost sufficient to counter the amplifying effects of social comparisons (0.311) and past financial hardships and childhood poverty (0.196) combined. This highlights the important role of self-efficacy to reducing financial shame. The other buffering factors, namely being in a positive financial situation (experiencing upward trajectory or being well to do) and being older, provide additional protection against financial shame.

Table 37. Stepwise Regression Rank of Key Financial Shame Predictors

Impact Rank	R ²	ΔR ²	Std Error	F Change	Variable
1	0.296	0.296	1.037	274.316 ***	Positive Current Financial State (PCA)
2	0.391	0.095	0.965	101.371 ***	Financial Social Comparisons (PCA)
3	0.441	0.050	0.925	57.717 ***	Age
4	0.489	0.048	0.885	61.126 ***	Self-Efficacy
5	0.508	0.018	0.870	24.208 ***	Past Financial Shocks with Negative Childhood Financial Experience (PCA)

Note. Table presents the stepwise regression rank of key predictors of Financial Shame. Variables were entered sequentially based on their contribution to explained variance (R^2 and ΔR^2), with associated standard errors and F change values reported for each step. Higher ranks indicate greater explanatory impact on Financial Shame. Statistical significance levels: $p < .05 = *$, $p < .01 = **$, $p < .001 = ***$. Dependent variable: Financial Shame.

The sequence by which the stepwise regression adds predictors into the model provide additional insight into the layered nature of financial shame. The results in Table 37 show that *positive current financial state* was entered first into the stepwise regression model, and explains 29.6% of the variance in financial shame on its own, the most relevant and strongest of the predictors. This aligns with research on the triggering effect of state shame factors, suggesting that people’s immediate sense of financial security or insecurity is the single strongest determinant of financial shame (Richardson et al., 2013; Tangney & Dearing, 2003). *Financial social comparisons* as a factor was added next, explaining 9.5% more variance, making it the next strongest contributor. This supports the belief that external comparisons and social expectations, especially when unmet, fuel shame (Tangney & Dearing, 2003; Festinger, 1954). Age, entered into the model next, improving the variance of financial shame by 5%, even after accounting for financial and social factors. This potentially reflects on the reduced social comparison pressures and greater self-acceptance that comes with age. Self-efficacy added another 4.8% into explaining the variance of financial shame. Despite being the fourth factor, self-efficacy had the highest coefficient (-0.455) indicating that empowered individuals feel more in control and less judged (Xiao & O’Neill, 2016). *Past financial shocks with negative childhood financial experience* added a much smaller 1.8% more to the financial shame variance.

To validate the robustness of the results of the stepwise regression analysis, I used hierarchical regression. Although hierarchical regression is also used to determine if adding a new set of predictor variables to the

regression model significantly improves the model's ability to explain the variance in an outcome variable, the order by which the factors are added to the model are predetermined and based on theory. As the study of financial shame is nascent, with the weighing of its various factors not yet defined, I have instead leveraged the theoretical layering of shame mechanisms. Shame is considered to fundamentally begin at the level of self-concept, and anchors all later experiences of shame (Tangney & Dearing, 2003). I began by adding in the identity and personal resources factors (self-efficacy, financial literacy, role-based responsibility, group memberships in ethnicity and religion) as the foundational core of shame. Once identity is established, shame is activated when that identity is evaluated against others (Gilbert, 1998), so I then added in these proximal social comparison factors (social networks, materialism and social status) as relational evaluations of shame. Past experiences, especially financial hardship or failure, shape shame proneness and the dispositional vulnerability to feeling shame (Tangney & Dearing, 2003), so I subsequently added in the lifetime past experience factors (financial hardship and material deprivation, family financial socialization and childhood socioeconomic status) as the conditioning history of shame. Lastly, as state shame are contextual triggers that bring latent shame into awareness (Tracy & Robins, 2004; Harder & Zalma, 1990), I included the current financial circumstances factors (current financial trajectory, current financial situation, subjective financial well-being) as situational activations of shame. Demographics factors were then entered last into the hierarchical regression model.

The significant financial shame predictors identified in the hierarchical regression model, as seen in Panel B of Table 36, confirms the robustness of the stepwise regression results, as the five key predictors from the stepwise model – one's current financial situation, self-efficacy, age, past financial shocks, social comparisons – remain the most significant and most impactful. Notably, a *positive current financial state* is more impactful than self-efficacy in buffering shame in the hierarchical model, with a higher negative beta coefficient (-0.403 vs -0.381), which probably signifies the important effect of state shame triggers to one's overall financial shame level. The hierarchical model identified additional factors that are associated with financial shame, with *social status* level and a *positive childhood financial experience with financial hardship later in life* included, alongside the five factors identified with stepwise. As people perceive their social status to be higher up the social hierarchy, this self-belief reduces shame. Interestingly, even when people do not experience childhood poverty, some form of financial hardship later in life is positively associated with shame, suggesting the power

of negative past financial experiences to one's current shame feelings. These two additional factors reinforce the impact of social comparisons and past financial experiences on financial shame. The hierarchical results have also identified divine punishment, ethnic affiliations with an individualistic view and gender as impactful factors, but with less significance, which highlights the effect of group membership identity (with an individualistic ethnic viewpoint that is associated with a reduction in shame and a divine punishment religious mindset that is associated with increases in shame) and the established gap in shame attitudes between the sexes (Else-Quest et al, 2012; Brown, 2006; Tangney & Dearing, 2003).

Overall, the regression models highlight the factors that have a significant association. Specifically, the strongest associations come from self-confidence (negative) and social comparisons (positive). Additionally, a persons' current financial situation is likely a critical trigger towards feeling financial shame, while past financial hardships prime an individual to feel shame. Age was the only significant demographics factor. Social status and group memberships linked to an ethnic individualistic mindset and religious divine punishment attitudes were also relevant when I applied hierarchical regression.

E. Cluster Analysis and Financial Shame Personas

The multi-dimensionality of financial shame means understanding it goes beyond single factor analysis or identifying the primary predictors. Leveraging cluster analysis allows me to explore natural groups and hidden patterns in the data, enabling a better understanding of the complex interactions between factors, and identify personas with distinct financial shame characteristics. I used K-means clustering to uncover hidden heterogeneity patterns of financial attitudes and behaviours beyond demographics, with the similarities in financial shame mean score levels within each cluster measured, to reveal who is most prone to financial shame and would benefit from targeted interventions.

I ran multiple K-means cluster solutions (from three to eight clusters) and identified a six-cluster³⁰ solution, from 665 relevant respondents, provided the most interpretable grouping and meaningful distinctions between

³⁰ In the five-cluster solution I evaluated, the minimum distance between cluster centres was 2.431. In the seven-cluster solution I evaluated, the minimum distance between cluster centres was 2.007. This makes the six-cluster solution cleaner, more parsimonious and conceptually well-balanced – ideal for the data in this research.

clusters. Convergence was achieved after nine iterations. The minimum distance between cluster centres was 2.484, which is at par with the ideal 2.5 distance, suggesting the overall six-cluster solution maintains reasonable separation. ANOVA F-values confirmed significant between-cluster differences on all fifteen³¹ variables included in the analysis ($p < .001$ was achieved for fourteen variables and $p < 0.05$ was achieved for one variable).

Table 38. Cluster Centres of Financial Shame Personas

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
Financial Shame	3.52	1.47	2.84	1.44	3.32	3.33
Role Responsibility (PCA)	-0.33	-0.18	0.60	-0.06	0.75	-0.27
Ethnicity Affiliation (Confucian)	0.02	0.05	0.09	0.02	0.08	0.03
Ethnicity Affiliation (Individualistic)	0.81	0.83	0.65	0.70	0.29	0.51
Ethnicity Affiliation (Collectivistic)	0.14	0.08	0.24	0.25	0.63	0.40
Ethnic Belonging	2.51	2.64	2.68	2.83	2.79	2.78
Religious Belonging	0.01	0.13	0.04	1.00	1.00	1.00
Religiosity (Impact to Life & Finances)	0.01	0.13	0.04	2.49	2.77	2.26
Belief in Divine Punishment	0.01	0.13	0.04	1.34	2.56	1.49
Financial Literacy	2.15	2.68	2.24	2.81	1.69	2.38
Self Efficacy	1.67	2.77	2.60	2.85	2.52	1.96
Financial Social Comparisons (PCA)	-0.13	-0.63	0.92	-0.28	1.32	-0.10
Social Status (PCA)	-0.86	0.46	0.19	0.45	0.24	-0.62
Past Fin. Shocks w/ Neg. Childhood SES (PCA)	0.74	-0.60	-0.19	-0.47	0.08	0.78
Pos. Childhood SES w/ Fin. Hardship later in life (PCA)	-0.37	-0.31	0.45	0.38	0.41	-0.14
Positive Current Financial State (PCA)	-1.17	0.69	0.31	0.66	0.27	-1.00

Note. Table presents six clusters identified via K-means cluster analysis as distinct Financial Shame personas. Values are mean Financial Shame scores and cluster centres (representing the mean or standardized score for each variable within the cluster). Higher or lower cluster centre values indicate relative positioning of each cluster on the respective variable.

³¹ In the five-cluster solution, only fourteen variables had significant ANOVA F-values. In the seven-cluster solution, all fifteen variables had significant ANOVA F-values.

I examined and developed the financial shame personas for each cluster, interpreting the cluster centres in Table 38 by leveraging the core dimensions of shame of identity, comparisons, financial life journey, and current financial experiences, that form part of the state-trait shame construct.

Cluster 1 are the “Financially Strained Self-Blamers” with a highest financial shame score (3.52) among the clusters. Individuals in Cluster 1 tend to come from individualistic ethnicities (0.81), but have limited personal financial responsibility at home (-0.33), potentially leaving them feeling a lack of agency. They have relatively low financial knowledge (2.15) and the lowest self-efficacy (1.67), making them prone to feeling financial shame. For members of this cluster, social comparison (-0.13) is not particularly important, but they feel that they are currently very low on the social ladder (-0.86), suggesting they feel that they are underperforming based on upwards comparison. They have experienced childhood poverty (-0.37) and financial hardship (0.74) in the past, and their current financial situation is poor (-1.17). This configuration mirrors the stepwise model where self-efficacy and current financial state are key buffers, while status/comparison dynamics and negative life-journey experiences amplify shame.

Cluster 2 are the “Quietly Competent Pragmatists” with the second lowest financial shame score (1.47). Their low shame appears to stem from a very secure financial situation. They have the highest positive current financial state (0.69), have negative associations with the past financial hardship variable (-0.60) and have the highest social status score (0.46). Additionally, they have strong financial knowledge (2.68) and self-efficacy (2.77). As a result, these individuals demonstrate the two strongest protective factors for shame; high self-efficacy and a positive current financial situation. The only counterpoint would be the negative score on financial role responsibility (-0.18) suggesting either joint decision-making or some delegated responsibility to someone else. Their combination of low social-comparison orientation (-0.63) and high self-efficacy suggests that they are psychologically insulated against financial shame, even if their circumstances were to worsen.

Cluster 3 are the “Ambitious Comparers” with a moderate level of financial shame (2.84). They exhibit a mixture of protective and amplifying factors. On one hand, they are moderately positive about their current financial situation (0.31) and have reasonably high self-efficacy (2.60), the two strongest protective factors.

However, they have experienced financial difficulties (0.45) at some point in later life. There also appears to be an aspiration-achievement gap, a prime contributor to shame, as they are heavily impacted by social comparison (0.92), while not seeing their current social status (0.19) as particularly high. Additionally, they are actively involved or lead financial decision-making at home (0.60).

Cluster 4 are the “Faith-Guided Achievers” with the lowest financial shame score (1.44) amongst the clusters. Cluster 4 has a strong religious identity with every member being religious (1.00), and having a high score for religiosity (2.49). Although belief in divine punishment (1.34) is present, the moderate score suggests their faith serves mainly as a source of guidance and resilience, rather than fear. These characteristics suggest that these individuals’ religious identity buffers rather than amplifies shame. Cluster 4 also displays a low probability of experiencing future shame based on the presence of low comparison orientation (-0.28), and strong financial knowledge (2.81) and self-efficacy (2.85). They are also in a solid financial position with relatively good social status (0.45) and current financial situation (0.66). They have experienced financial difficulties later in life (0.38) but have recovered which, combined with their current financial position, may indicate that past financial hardships may build resilience.

Cluster 5, the “Moral Perfectionists”, have a relatively high financial shame score (3.32). The cluster represents an interesting combination of traits. Their current financial state is a low positive score (0.27), suggesting they are doing okay, and they have moderate financial self-efficacy (2.52). Based on the earlier regression results, this should provide some protection against financial shame. However, the cluster demonstrates an achievement-aspiration gap, the highest social comparison score (1.32), but weaker social status (0.24), and their financial literacy (1.69) is the worst of the clusters. Combined with the moderate self-efficacy, this cluster may be overconfident in their financial capabilities. They are also strongly religious with all members of the cluster reporting they are religious (1.00), have the highest religiosity (2.77), but also have the highest belief in divine punishment (2.56). This belief in divine punishment may amplify their self-scrutiny, making less than financial success feel like a moral failing, and is associated with higher financial shame. They also appear to be almost largely responsible for financial decision-making at home (0.75), which combined with their low literacy may be a source of stress and shame. Finally, this cluster is largely made up of people with collectivistic ethnicities (0.63), placing additional burdens on them. Collectivistic cultures are

associated with higher role expectations and community obligation, and as reported earlier, are associated with higher financial shame. This cluster therefore appears to have very high internal and external expectations around their financial situation, expectations that they appear to be failing to meet despite being comfortable.

Cluster 6 are the “Resigned Survivors”, with an equally high financial shame score (3.33) to the Cluster 5 perfectionists. In most respects, Cluster 6 is very similar to Cluster 1. Both clusters see their current financial situation as poor (-1.17 vs -1.00) and that they have low social status (-0.86 vs -0.62), have experienced financial hardship in childhood (-0.37 vs -0.14) and later life (0.74 vs 0.78), have low financial literacy (2.15 vs 2.38) and even lower self-efficacy (1.67 vs 1.96), have lower agency in terms of financial decision-making at home (-0.33 vs -0.27), however, neither cluster is comparison orientated (-0.13 vs -0.10). The key differences appear to be in the ethnic make-up of the groups; Cluster 1 is predominantly individualistic ethnicities (0.81), while Cluster 6 is equal parts collectivistic (0.40) and individualistic (0.51), and Cluster 6 is much more religious (2.26). Both clusters high shame appears centred on their past and current financial situations combined with limited self-efficacy.

Having identified six distinct persona's, I next employed logistic regression to predict cluster membership based on demographics – gender, marital status, educational level, employment status, income level, age. Essentially, I looked at what each cluster looks like. I used Cluster 3 as the reference cluster. The multinomial logistic regression results showed that demographics variables significantly predicted financial shame cluster membership ($\chi^2 = 229.65$, $df = 60$, $p < .001$), with the model explaining 31% of the variance (Nagelkerke $R^2 = .306$). The likelihood ratio tests showed that age ($\chi^2 = 23.06$, $df = 5$, $p < .001$) and employment status ($\chi^2 = 61.80$, $df = 20$, $p < .001$) are very strong predictors of financial shame cluster membership. Education level ($\chi^2 = 27.85$, $df = 15$, $p = .023$) and income level ($\chi^2 = 13.53$, $df = 5$, $p = .019$) significantly differentiates the clusters, with marital status ($\chi^2 = 16.88$, $df = 10$, $p = .077$) marginally significant. Gender ($\chi^2 = 9.02$, $df = 5$, $p = .108$) is not statistically significant for cluster groupings, but may still contribute contextually.

Table 39 shows that when comparing Cluster 1 self-blamers to the moderate shame Cluster 3 group, age and gender are the primary demographics variables that predict cluster membership. Cluster 1 self-blamers are 1.6 times more likely to be older ($\text{Exp}(B) = 1.605$) and 1.8 times more likely to be women ($\text{Exp}(B) = 1.816$).

Table 39. Key Demographics Variables in Financial Shame Clusters

Demographics Variable	Cluster 1	Cluster 2	Cluster 4	Cluster 5	Cluster 6
Income	-0.148 (0.156) [0.863]	0.258 * (0.157) [1.294]	-0.019 (0.168) [0.981]	-0.353 * (0.196) [0.702]	-0.149 (0.180) [0.862]
Age	0.473 *** (0.170) [1.605]	0.530 *** (0.165) [1.700]	0.793 *** (0.179) [2.211]	0.246 (0.223) [1.279]	0.540 *** (0.191) [1.716]
Gender (Female)	0.597 ** (0.303) [1.816]	-0.204 (0.285) [0.815]	0.033 (0.312) [1.034]	-0.127 (0.383) [0.881]	0.172 (0.339) [1.188]
Marital Status (Single)	-0.216 (0.742) [0.806]	-0.325 (0.732) [0.722]	-1.141 (0.742) [0.310]	0.166 (0.994) 1.181	-1.452 * (0.755) [0.234]
Marital Status (Relationship)	-0.779 (0.707) [0.459]	-0.383 (0.687) [0.682]	-0.929 (0.680) [0.395]	-0.493 (0.959) [0.611]	-1.416 ** (0.698) [0.243]
Education (No Certificate)	0.870 (0.572) [2.387]	-0.031 (0.449) [0.970]	-0.231 (0.492) [0.794]	-0.880 (0.637) [0.415]	0.182 (0.567) [1.199]
Education (Certificate)	0.977 (0.595) [2.655]	-0.432 (0.490) [0.649]	-0.332 (0.525) [0.717]	-0.115 (0.635) [0.891]	-0.276 (0.618) [0.759]
Education (Graduate)	-0.164 (0.593) [0.849]	-0.396 (0.439) [0.673]	-0.366 (0.481) [0.693]	-0.462 (0.599) [0.630]	-0.250 (0.571) [0.779]
Employment (Studying)	-0.457 (1.035) [0.633]	-18.233 (1753.079) [1.21x10 ⁻⁸]	0.050 (1.030) [1.051]	16.423 *** (0.646) [1.36x10 ⁷]	0.500 (1.113) [1.649]
Employment (Unemployed Voluntary)	0.111 (0.935) [1.118]	-0.900 (0.856) [0.406]	-0.232 (0.896) [0.793]	15.922 *** (0.680) [8.22x10 ⁶]	0.506 (0.993) [1.658]
Employment (Unemployed Involuntary)	0.815 (0.986) [2.259]	-1.952 * (1.019) [0.142]	-2.214 (1.359) [0.109]	15.606 *** (0.888) [5.99x10 ⁶]	0.615 (1.070) [1.850]
Employment (Employed)	-0.379 (0.902) [0.685]	-1.458 * (0.816) [0.233]	-0.366 (0.852) [0.693]	16.492 (0.000) [1.45x10 ⁷]	-0.093 (0.964) [0.911]

Note. Table presents logistic regression coefficients (*B*), standard errors (SE) in parenthesis, and odds ratios (Exp(*B*)) in brackets, for key demographic variables predicting membership in five clusters of Financial Shame personas, using Cluster 3 (moderate Financial Shame) as the reference cluster. Reference groups for categorical variables are: men (gender), single post-relationship (marital status), post-graduate (education level), and retired (employment status). Higher or lower *B* values indicate the direction and magnitude of association between each demographic variable and cluster membership. Exp(*B*) (odds ratios) indicate the change in odds of membership in the cluster relative to the reference cluster (Cluster 3) for a one-unit increase in the predictor. Values greater than one indicate higher odds, values less than one indicate lower odds. Statistical significance levels: $p < .10 = *$, $p < .05 = **$, $p < .01 = ***$.

Cluster 2 pragmatists are 1.7 times more likely to be older ($\text{Exp}(B) = 1.700$) than moderate shame Cluster 3 group. They are also 1.3 times more likely to have a higher income level ($\text{Exp}(B) = 1.294$) and are less likely to be employed or have voluntarily chosen to be unemployed.

Cluster 4 achievers are 2.2 times more likely to be older ($\text{Exp}(B) = 2.211$), when compared to the moderate shame Cluster 3 group. Cluster 5 perfectionists are more likely to be unemployed (studying, involuntarily or voluntarily), when compared to the moderate shame Cluster 3 group. They are also more likely to be in a lower income group.

For Cluster 6 survivors, when compared to the moderate shame Cluster 3 group, age and marital status are significant. These cluster members are 1.7 times more likely to be older ($\text{Exp}(B) = 1.716$) and single, post a relationship (separated, divorced, widowed), with being married or single less likely to be in this group.

The logistic regression analysis identified *age* as the most consistent and powerful demographics predictor across the six financial shame clusters. Older respondents showed a higher probability of being in both the high (Clusters 1 and 6) and low (Clusters 2 and 4) shame clusters, compared with the moderate group (Cluster 3), suggesting that financial shame may become more polarised with age. Some older adults may internalise financial struggles both past and current (and is associated with high shame), while others feel more secure financially, and therefore less prone to hardships that trigger shame (and is associated with low shame). Gender mattered only for Cluster 1, where women were nearly twice as likely as men to belong to this financially strained, low decision-making responsibility, high shame group. Unemployment status differentiated high shame Cluster 5 strongly, possibly reflecting on individuals who feel they have failed, relative to their peers and ethnic, religious and social communities. Marital status reduced the likelihood of membership to the high shame Cluster 6. Income was marginally significant, and differentiated the low and high shame extremes, with low income linked to high shame Cluster 5, supporting the earlier findings that achievement-aspiration gap is heightened when high social comparison is paired with low income, and are associated with worse financial shame, with high income linked to the low shame Clusters 2.

Overall, the financial shame personas that have been identified through cluster analysis highlight the strong distinctions that the shame components of identity (role-based and group memberships) and comparisons (through social networks and social hierarchy standing), alongside financial literacy and self-efficacy, as well as the state-trait natures of shame in one's past and current financial life journey, have in establishing unique groups with similar shame levels. The logistic regression analyses for demographics significance show how one's age significantly shapes financial shame personas, alongside the effects of gender, employment and marital status on some of the groups. As a result, the financial shame personas developed in this research can be used to understand how background, beliefs and resources shape the emotional experiences of money.

VI. Discussions, Conclusions and Implications

The Matter of Financial Shame

“If we can share our story with someone who responds with empathy and understanding,
shame cannot survive.”

– Brene Brown

Financial shame is a barrier that prevents many people today from getting the financial help that they need. It can be measured. It can be understood. And, hopefully, it has a remedy.

Financial shame is a growing epidemic. Households are increasingly indebted, and is associated with stress and depression, worsening physical and mental health, and with such evidenced dire consequences as suicide and divorce. Additionally, the past five years has been marked by high inflation and low job growth, increasing the financial pressure on households. Compounding these issues, there is a taboo regarding talking about money. As a result, a growing number of people are feeling under pressure and isolated. Rather than discuss their money issues, many individuals conceal their financial problems, avoid addressing their financial difficulties, and withdraw and isolate themselves. With all the spiralling negative effects of financial stress and debt on an individual’s well-being, it is critical that we understand financial shame.

To date there has been limited research conducted on financial shame. This research adds to the sparsity of literature on financial shame by exploring three issues; 1) to examine individually the factors that are associated with financial shame, 2) to understand how these factors work together to amplify and/or buffer financial shame, 3) to develop distinct financial shame personas, by combining these factors. I leveraged primary data collected through an online survey I developed. 704 respondents from New Zealand, where asked to answer questions on psychosocial processes, lifetime factors, contextual conditions, and personal resources, that, based on prior research on shame in general, should impact financial shame. The psychosocial and personal resource factors I investigated include role-based identity, proxied with household financial responsibilities in routine tasks and complex decisions, group membership, based on ethnic and religious affiliations, financial literacy and self-efficacy, and the importance of social comparisons. The lifetime factors I probed related to

the individual's past financial journey including childhood socio-economic upbringing, family financial socialization, and financial hardship and material deprivation in later life. The contextual conditions I explored relate to the individual's current financial circumstances. I evolved my Financial Shame Survey questionnaire by using scales and questions from psychology and finance studies, and existing national surveys.

I analysed the data using univariate tests (one-way ANOVA and independent *t*-tests) to understand the significance of each factor in affecting financial shame levels, and establish the baseline associations between the predictors. I then used Principal Component Analysis to reduce dimensionality and address potential multicollinearity with related variables across the role-based identity, social comparison, past financial experiences and current financial situation factors, reducing the number of variables from 13 factors to six components. I then employed stepwise regression, incorporating both PCA-derived components and individual variables, to develop a robust parsimonious financial shame model, which identifies the strongest predictors that amplifies and buffers financial shame. I tested the robustness of the stepwise regression results by using hierarchical regression based on general shame mechanism theory. Finally, I utilized cluster analysis to develop distinct financial shame personas, coupled with logistic regression to predict demographics-related categorical outcomes for each persona. By identifying clusters with distinct levels and drivers of financial shame, the analysis provided insights into subgroups of individuals who maybe more prone to financial shame. This sequential approach of empirical analysis ensured that both the statistical robustness of the predictors and the practical interpretability of group differences are captured.

The univariate analyses showed that most psychosocial, contextual, and personal factors significantly influenced financial shame. Lack of control over household finances, low self-efficacy, collectivist orientations, and weak ethnic belonging were associated with higher shame, while financial literacy and confidence acted as strong buffers. Social comparison emerged as a central amplifier, particularly for those who viewed themselves as lower in the social hierarchy or placed high importance on materialism and social visibility. Financial hardship – both in childhood and adulthood – was another consistent predictor, with material deprivation proving more damaging than short-term financial strain. Subjective financial well-being protected more strongly against shame than objective measures, highlighting the psychological nature of financial distress.

Regression results confirmed that self-efficacy and social comparison were the strongest predictors of financial shame, while current financial circumstances and past hardship served as key triggers. Cluster analysis further reinforced these dynamics, revealing six distinct financial shame personas that differed by their balance of agency, confidence, cultural orientation, and financial stability. Across all models, age consistently moderated the experience of shame—both buffering and amplifying its effects, depending on life stage—demonstrating that financial shame is multi-dimensional, context-dependent, and deeply rooted in both one’s financial trajectory and sense of identity.

The findings of this research reinforce that financial shame is not simply about money, but reflects a deeper judgement of the self. Financial shame arises through a complex interplay of factors that either buffer or amplify vulnerability to shame, yet the core driver is the *meaning* attached to money. The social comparison results illustrate this clearly: money acts as a proxy for competence, responsibility, independence, and success. When individuals perceive themselves as having less than they should – relative to their peers, their past selves, or the standards of their community – this gap calls their capability and worth into question. Financial shame therefore flourishes not in the absence of money itself, but in the perceived failure to meet expected standards, making it fundamentally an identity-based emotion rather than a pure financial one.

Second, the financial present matters the most. This research has shown that the current financial situation of a person is the primary predictor of financial shame. This factor was identified as the most importance factor in stepwise regressions, while shame persona’s with low shame perceived their financial situation as being strong and vice versa. It is likely therefore that when times are good, the other potential shame-inducing factors matter considerably less. But in financially difficult situations, the level of shame one experiences depends on the lifetime and psychosocial factors, like social comparison. Good days do not necessarily buffer shame. But bad days amplify shame, and exposes the depth of one’s shame proneness.

Third, the financial past shapes vulnerability to financial shame, particularly when it involves childhood poverty or repeated material deprivation. The univariate results showed that individuals who experienced financial hardship earlier in life reported significantly higher levels of current financial shame, indicating that these experiences leave a lasting emotional imprint. However, the regression and cluster analysis reveal that

the influence of the past is not deterministic: individuals with strong financial self-efficacy and stable present circumstances (e.g., Cluster 2) did not exhibit high shame despite past hardship. This suggests that past experiences create a baseline susceptibility, but whether shame is expressed depends on current financial conditions and psychological resources. The past sets the stage; the present determines whether the script is activated.

There is also evidence that it may be possible to mitigate financial shame, particularly by building financial self-efficacy. The difference in shame between those with high and low self-efficacy was one of the widest observed in the univariate testing (1.73 points), and the regression analysis showed that self-efficacy had the largest buffering effect against shame. It is likely that self-efficacy changes the meaning of financial setbacks, seeing these as situational challenges rather than as personal failures. Research (Bandura, 1997) explained that self-efficacy is the belief in one's capacity to influence events and outcomes, with efficacious people experiencing agency, even in difficult circumstances, which counteracts the loss of control, exposure and worth that shame brings. I suggest that financial self-efficacy, by fostering perceived control, reframes failure as manageable, promotes adaptive financial behaviors, and stabilizes decision-making under emotional threat. The challenge then is *how do we improve* financial self-efficacy.

In addition to building self-efficacy, we also need to retrain social comparison. Social comparison is core to the way humans evaluate themselves (Festinger, 1954) as we compare ourselves to our ideal self, to others, and to our past self. Comparison is the cognitive engine for shame. The regression analysis supports this by demonstrating financial comparisons as a strong amplifier of financial shame. Additionally, the cluster analysis, particularly Clusters 3 and 5, show that high social comparison orientation is associated with high shame, even when a person's present financial situation is okay. In these cases, there is a gap between achievement and aspiration, either internally or externally motivated, that has generated financial shame even in the absence of a strong current trigger. This would appear to be avoidable financial shame. While it is impossible to avoid social comparison, it can be *retrained*: expectations can be recalibrated, reference groups adjusted, and comparisons redirected away from status benchmarking, and toward personal progress.

Finally, the demographics profiles of the personas reinforce the central role of financial position in shaping financial shame. Higher incomes clearly buffer against shame, as financial security provides both practical protection and psychological distance from perceived failure. The effect of age is more nuanced, operating as both a buffer and amplifier. A plausible interpretation is that age reflects the cumulative impact of financial outcomes across the life course. For those who have built and maintained stability, age brings resilience, perspective, and a sense of financial identity that can withstand setbacks. In contrast, for those who reach later adulthood still experiencing financial strain, age can intensify shame: the sense of “running out of time,” being behind one’s peers, or having failed to attain expected milestones deepens the emotional burden. In this way, age itself does not produce shame – accumulated financial outcomes do – while age simply makes those outcomes harder to escape, reinterpret, or repair.

This research therefore presents some opportunities to begin to build financial shame resilience. Brown (2006, 2015) argues that we cannot erase shame, but we can learn to move through it in healthy ways that connect us to ourselves and others, rather than isolating us. Building resilience may begin to address the maladaptive behaviors of shame; concealment, withdrawal and avoidance, which unfortunately are arguably more damaging within a financial context. Avoiding addressing debt arrears, concealing debt from loved ones, withdrawing socially and financially, are all likely to prolong the experience of financial shame, and due to the way problem debts and arrears function, deepen the hole a person finds themselves in considerably. So what are the implications from my findings for financial shame mitigation?

Current financial hardships and a poor financial trajectory are strongly associated with financial shame. At present, a lot of assistance sits as an ambulance at the bottom of the cliff, awaiting people to request help, often once the problem has become overwhelming. I suggest that the goal of present-focused interventions should be to help reduce the immediate experience of financial shame. This involves identifying those entering or who have just entered a financially difficult situation, those most vulnerable to financial shame and financial withdrawal. Present-focused supports should prioritize reducing cognitive load (e.g., simplified repayment planning, automated budgeting systems) and emphasizing small, observable steps, as progress-framing reduces shame and restores a sense of agency.

With regards to past financial experiences, another factor strongly associated with financial shame, helping people to reframe their past experiences as learning experiences may help to build resilience rather than identity-based shame. Cluster 4 offers a suggestion of this pathway. We find a group in a strong current financial position with strong self-efficacy despite having had experiences of material deprivation and financial hardship. This may indicate that difficult past experiences may build resilience in some, the question becomes *why* and *how*.

As noted above, the two perhaps easiest factors to address, although not easy by any stretch, is self-efficacy and social comparison. The goal of confidence-focused interventions should be to build mastery and competence through incremental experiences, the strongest known source of efficacy (Bandura, 1997). A note of caution exists in Cluster 5. We need to first examine the consequences of confidence without knowledge, and what the repercussions are when our lack of knowledge results in consequences that force us to question our competence. I suggest that the goal of comparison-focused interventions should be to reduce the harmful social comparisons that trigger shame. This involves social norm interventions by sharing data showing many people struggle with similar financial situations, as normalizing hardship reduces social comparison shame. As shame comes from not meeting self or externally set goals, re-evaluating and resetting our expectations may effectively reduce comparison-related shame.

This research contributes to what is currently a very limited literature on a critical issue. However, there are limitations that should be acknowledged. First, I had to rely on self-reported levels of shame. Despite using an established financial shame construct from Gladstone et al (2021), respondents may under-report shame, because admitting financial failure, even in an anonymized online survey, threatens their social image and personal identity. Another challenge is that shame is a journey. Using a cross-sectional snapshot-in-time survey makes it difficult to fully map the effects of the financial journey and trajectory on financial shame. A longitudinal study that explores financial shame and its factors over time might give greater insights into the full effects of one's financial past. A third limitation is that as this study is exploratory, there is a strong possibility that I have missed some important factors. For instance, in hindsight, measuring directly a person's financial locus of control would be beneficial and may give added insights.

Future research should address these limitations while advancing the conceptual understanding of financial shame. Qualitative approaches such as interviews or narrative methods would provide richer insight into how people make meaning of financial difficulties and how shame is internalized, negotiated, or resisted. Further, there is scope to refine and test the financial shame personas identified here. Cluster-based typologies could be validated across countries or used to design targeted interventions that recognize emotional diversity in financial behavior. Developing theory that integrates financial identity, self-efficacy, and social comparison processes will also be essential for building a comprehensive framework for understanding financial shame.

Brene Brown, a pre-eminent expert on shame, shared in a TED Talk series (2012) that “If you put shame in a petri dish, it needs three things to grow exponentially: secrecy, silence and judgement. If you put the same amount of shame in a petri dish, and douse it with empathy, it can’t survive”. Confronting shame head-on is a powerful antidote. To break down the barrier of financial shame, we must start by breaking down the taboo about money, in our families, in our communities, and in our churches. As a researcher, I hope that this research opens the door for a discussion on this important topic and for others to build up the understanding of financial shame, its factors, moderators and mediators. Only then can we develop effective interventions, and really help the financially vulnerable and financially shamed – those who need help the most.

“Writing this thesis has been cathartic. Talking about financial shame has been cathartic... Because of my life journey, I am very interested with understanding personal debt, why people get into debt, and helping people get out of debt. I now understand, this starts with having a voice to share one’s journey. And discover you are not alone... We all have a financial journey, and we all have a financial shame journey. We are all researchers, and we already do research on financial shame, every day. Our opportunity is to open up the discussion and get everyone talking. This is the remedy for shame, and debt... Let me start by telling you my story...”³²

³² Author’s personal experience and ponderings.

Appendix

A. Ethics Approval



Auckland University of Technology Ethics Committee (AUTEC)

AUT

TE WĀNANGA ARONUI
O TĀMAKI MAKĀU RAU

30 October 2024

Aaron Gilbert
Faculty of Business Economics and Law

Dear Aaron

Ethics Application: 24/331 **Understanding the Factors that Influence Financial Shame**

Your application has been reviewed by AUTEC via the minimal risk pathway and has been approved.

This approval is for three years, expiring 30 October 2027.

Non-Standard Conditions of Approval

1. The Information Sheet should indicate where a summary report or publication might be found.
2. Consider extending the 'prefer not to say' option to some of the other questions.

Non-standard conditions do not need to be submitted to or reviewed by AUTEC unless requested but must be completed before commencing your study.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the [Auckland University of Technology Code of Conduct for Research](#) and as approved by AUTEC.
2. All public facing documents must have the AUTEC approval number and be of a high standard of spelling and grammar. Dates on the Information Sheet(s) and Consent Form(s) must be consistent.
3. Any amendments to the project must be approved by AUTEC prior to being implemented.
4. A progress report is due annually on the anniversary of the approval date.
5. A final report is due at the expiration of the approval period, or, upon completion of project.
6. Any serious or adverse events must be reported to AUTEC, this includes unforeseen issues that might affect continued ethical acceptability of the project.
7. AUTEC grants ethical approval only. You are responsible for obtaining management permission for access from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

The application number and title need to be referenced on all correspondence related to this project.

All forms are available online <http://www.aut.ac.nz/research/researchethics>

For any enquiries, please contact ethics@aut.ac.nz

(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
Auckland University of Technology Ethics Committee

Cc: xyg9463@autuni.ac.nz

B. Financial Shame Survey Participation Information Sheet

Q72 Kia Ora! My name is Evan Legaspi, and I am currently completing my Master of Business (Finance) at AUT University. I am working under the supervision of Professor Aaron Gilbert, at AUT University.

What is the purpose of this research? This anonymous survey explores the factors associated with financial shame. Financial decision-making has far-reaching and long-lasting repercussions on one's well-being. Unfortunately, bad decisions can lead to more bad decisions, becoming a persistent vicious cycle. A significant circuit breaker is getting outside help, however not everyone seeks it. One barrier is financial shame. Arguably, we know very little about financial shame, as it is a relatively new area of research. This research will focus on measuring financial shame, examining the factors that impact financial shame, and identifying potential moderators to financial shame.

How was I identified and why am I being invited to participate in this research? As an adult, aged 18 years and over, living in Aotearoa New Zealand, we are inviting you to complete the survey.

How do I agree to participate in this research? By taking part in the survey and submitting your answers, you consent to have your responses used in this research. Your participation in this research is voluntary, and the Research Team will not know if you have taken the survey. You can withdraw from the study at any time by simply not completing the survey. If you choose not to complete the survey, any data provided to that point will NOT be used in the study. However, once the findings have been produced, removal of your data may not be possible.

What are the discomforts and risks? If, during the survey, you feel distressed with your financial situation and want to talk to someone, you can find support at MoneyTalks by calling 0800 345 123, texting 4029, emailing help@moneytalks.co.nz or accessing their live chat at Home | Money Talks. You can also engage Christians Against Poverty at 0508 227 111 or you can ask them to call you back by providing your details at CAP Debt Help is a FREE service (capnz.org).

What are the benefits? As the research on financial shame is relatively new, there is limited information available. Your participation in this survey will greatly help expand our understanding of financial shame, and provide valuable insights for regulators and policymakers to develop intervention programs, especially to help those that need it the most.

How will my privacy be protected? No identifying information is collected; your data will be de-identified and anonymous. Any information you provide will be stored securely, in line with the research project's Data Management Plan, and aggregated non-identifiable data may be shared with other researchers. This research has been approved by the AUT Ethics Committee.

What do I do if I have concerns about this research? Whom do I contact for further information about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Professor Aaron Gilbert, at aaron.gilbert@aut.ac.nz or +64 9 921 9999 ext 5713. Professor Gilbert can also answer any general questions you have about the research. Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, ethics@aut.ac.nz, +64 9 921 9999 ext 6038.

Project Supervisor Contact Details: Professor Aaron Gilbert at aaron.gilbert@aut.ac.nz or +64 9 921 9999 ext 5713

C. Financial Shame Survey Questionnaire Summary

Table 40. Summary of Financial Role-based Identity Factor Questions

Survey Focus	Survey Questions Asked	Response Options Provided
Household Financial Responsibility	Who is responsible for the following issues in your household? (1) Managing day-to-day spending and paying bills (2) Making large household purchases (e.g. cars and major appliances) (3) Savings, investments and borrowing	(a) Always/usually me (b) Shared equally between partner & self (c) Always/Usually my partner (d) Always/usually other person(s) in the house (e) Shared equally among household members (f) Always/usually someone not living in house

Note. This table presents the key survey constructs, questions, and response options included in the survey. Response options varied by construct, including categorical, Likert-type (1–5), and numerical scales (0–10).

Table 41. Summary of Financial Group Membership Identity Factor Questions

Survey Focus	Survey Questions Asked	Response Options Provided
Ethnicity Affiliation	Which Ethnic Group/s do you belong to? (Select ALL that apply)	(a) New Zealand European (b) Māori (c) Samoan (d) Cook Island Maori (e) Tongan (f) Niuean (g) Chinese (h) Indian (i) Other 1 (please write) (j) Other 2 (please write) (k) Other 3 (please write)
Ethnic Belonging	How strong is your sense of belonging to each ethnic group you belong to? (0 is no sense of belonging & 10 is a very strong sense of belonging)	0-10
Religious Belonging & Affiliation	What is your Religion?	(a) Yes (Please specify) (b) No Religion (c) Prefer not to say
Religiosity & Divine Punishment	With regards to your Religious Beliefs, please mark the response that best describes your views. (1) My religious beliefs lie behind my whole approach to life (2) My religious beliefs add meaning to my financial decisions (3) When I experience financial difficulty, I wonder what I did for God to discipline me.	(a) Strongly disagree (b) Somewhat disagree (c) Neither agree nor disagree (d) Somewhat agree (e) Strongly agree

Note. This table presents the key survey constructs, questions, and response options included in the survey. Response options varied by construct, including categorical, Likert-type (1–5), and numerical scales (0–10).

Table 42. Summary of Financial Personal Resources Factor Questions

Survey Focus	Survey Questions Asked	Response Options Provided
Financial Literacy	An investment with a high return is likely to be high risk.	(a) True (b) False (c) Don't Know/ Don't Understand the Question (d) Refuse to Answer
Financial Literacy	Buying shares in a single company usually provides a safer return than buying shares in a number of different companies.	(a) True (b) False (c) Don't Know/ Don't Understand the Question (d) Refuse to Answer
Financial Literacy	Suppose you put \$100 into a no-fee savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account, and you don't withdraw the money. How much would be in the account at the end of the first year?	(a) Exactly \$102 (b) Less than \$102 (c) More than \$102 (d) Don't Know/ Don't Understand the Question (e) Refuse to Answer
Financial Literacy	Imagine now that the interest rate on your savings account was 1% per year and inflation was 2% per year. After one year, would you be able to buy more than today, exactly the same as today, or less than today, with the money in the account?	(a) More than today (b) Exactly the same as today (c) Less than today (d) Don't Know/ Don't Understand the Question (e) Refuse to Answer
Financial Literacy	Suppose that by 2025, your income has doubled, but the prices of all of the things you buy has also doubled. Will you be able to buy more than today, exactly the same as today, or less than today, with your income?	(a) More than today (b) Exactly the same as today (c) Less than today (d) Don't Know/ Don't Understand the Question (e) Refuse to Answer
Self-Efficacy	With regards to your Financial Capabilities, please mark the response that best describes your view. (1) I am confident that I can manage my finances (2) I can easily spend less than my income each month (3) I can confidently deposit money into the bank to plan for the future (4) I have the ability to borrow money from the bank (5) I have what it takes to use financial services to manage my financial goals	(a) Strongly disagree (b) Somewhat disagree (c) Neither agree nor disagree (d) Somewhat agree (e) Strongly agree

Note. This table presents the key survey constructs, questions, and response options included in the survey. Response options varied by construct, including categorical, Likert-type (1–5), and numerical scales (0–10).

Table 43. Summary of Financial Social Comparisons Factor Questions

Survey Focus	Survey Questions Asked	Response Options Provided
Social Status	Consider that the Ladder that I am showing you represents the place that people occupy in Society. At the Top of this Ladder (10) are the people who have more money, more education and better jobs. At the Bottom of the Ladder (1) are the people who have less money, less education and worse jobs (jobs with less recognition) or are unemployed. The Higher you consider yourself in this ladder, the closer you will be to the people who are at the top of the ladder, and the Lower, closer you will be to people who find themselves at the bottom. Where would you place yourself on this ladder?	0-10
Social Networks	I care a lot about my social status in my... (1) Social Networks (e.g. real world groups, clubs, organisations, teams, boards) (2) Digital Social Networks (e.g. Facebook, Instagram, WhatsApp, TikTok, Snapchat, X/Twitter, LinkedIn)	(a) Strongly disagree (b) Somewhat disagree (c) Neither agree nor disagree (d) Somewhat agree (e) Strongly agree
Materialism Views	Please indicate your agreement with each of the following statements (1) I admire people who own expensive homes, cars, and clothes. (2) The things I own say a lot about how well I'm doing in life. (3) Buying things gives me a lot of pleasure. (4) I like a lot of Luxury in my Life. (5) My life would be better if I owned certain things I don't have. (6) I'd be happier if I could afford to buy more things.	(a) Strongly disagree (b) Somewhat disagree (c) Neither agree nor disagree (d) Somewhat agree (e) Strongly agree

Note. This table presents the key survey constructs, questions, and response options included in the survey. Response options varied by construct, including categorical, Likert-type (1–5), and numerical scales (0–10).

Table 44. Summary of Past Childhood Financial Experiences Factor Questions

Past Childhood Financial Experiences Factors		
Survey Focus	Survey Questions Asked	Response Options Provided
Family Financial Socialization	While growing up at home, based on your experience, please indicate your agreement with each of the following statements. (1) My family discussed family financial matters with me (2) My family spoke to me about the importance of saving (3) My family discussed with me how to establish a good credit rating (4) My family taught me how to be a smart shopper (5) My family taught me that my actions determine my success in life	(a) Strongly disagree (b) Somewhat disagree (c) Neither agree nor disagree (d) Somewhat agree (e) Strongly agree
Childhood Socioeconomic Status	When you were growing up, how would you describe your family's overall total income?	(a) Much less than what we needed (b) Somewhat less than what we needed (c) About right for our needs (d) Somewhat more than what we needed (e) Much more than what we needed (f) Not sure
Childhood Socioeconomic Status	When you were growing up, which of the following best described your family	(a) We did not save and usually spent more than our income (b) We did not save and usually spent all of our income (c) We did not really save, but usually there was some money left over at the end of the year (d) We only saved extra income we got but spent all the regular income (e) We saved regularly by putting aside money every month (f) Not sure
Childhood Socioeconomic Status	When you were growing up, what was the overall financial situation of your family.	(a) We were in debt (b) We were drawing on our savings (c) We could just about manage (d) We could save some money (e) We could save a lot of money (f) Not sure
Age of First Financial Experience	Do you recall if and when you had your first financial discussion with your family?	(a) Yes, and it was around age: (please write) (b) Yes, but I don't recall my age (c) No, I never had a financial discussion/cannot recall
Age of First Financial Experience	Do you recall if and when you had received your first pocket money from your family?	(a) Yes, and it was around age: (please write) (b) Yes, but I don't recall my age (c) No, I never had a financial discussion/cannot recall

Note. This table presents the key survey constructs, questions, and response options included in the survey. Response options varied by construct, including categorical, Likert-type (1–5), and numerical scales (0–10).

Table 45. Summary of Past Financial Shocks and Current Financial Situation Factor Questions

Survey Focus	Survey Questions Asked	Response Options Provided
Financial Hardship	Have you experienced financial hardship?	(a) Yes (b) Maybe (c) No (d) Don't Know
Material Deprivation	In the past, have you had times when you had trouble paying for any of the following? (select ALL that apply)	(a) Food (b) Housing (c) Heat and Electricity (d) Medical Needs (e) Transportation (f) Childcare (g) Debts (h) Other (i) None of these
Financial Trajectory	Compared to two years ago, how satisfied are you with your present financial situation?	(a) Much more satisfied today than two years ago (b) A little more satisfied (c) Somewhat satisfied (d) A little less satisfied (e) Much less satisfied
Current Financial State	Given your current needs and financial responsibilities, would you say that you and your family are...	(a) Prosperous (b) Very comfortable (c) Reasonably comfortable (d) Just getting along (e) Poor (f) Very Poor

Note. This table presents the key survey constructs, questions, and response options included in the survey. Response options varied by construct, including categorical, Likert-type (1–5), and numerical scales (0–10).

Table 46. Summary of Financial Well-being Factor Questions

Survey Focus	Survey Questions Asked	Response Options Provided
Subjective Financial Well-being	With regards to your financial well-being, please mark the response that best describes your situation. (1) I can enjoy life because of the way I'm managing my money (2) I could handle a major unexpected expense	(a) Strongly disagree (b) Somewhat disagree (c) Neither agree nor disagree (d) Somewhat agree (e) Strongly agree
Subjective Financial Well-being	With regards to your finances, please mark the response that best describes how you feel and think (1) I feel on top of my day-to day finances (2) I am comfortable with my current levels of spending relative to the funds I have coming in (3) I am on track to have enough money to provide for my financial needs in the future	(a) Strongly disagree (b) Somewhat disagree (c) Neither agree nor disagree (d) Somewhat agree (e) Strongly agree
Objective Financial Well-being	Did you save any money last year?	(a) Yes (b) Maybe (c) No (d) I don't know (e) Refuse to Answer
Objective Financial Well-being	Did you miss any payments on any obligations (eg loans, mortgage, power bill) in the past year?	(a) Yes (b) Maybe (c) No (d) I don't know (e) Refuse to Answer
Objective Financial Well-being	Did you owe any money on your credit card after the last payment was due?	(a) Yes (b) Maybe (c) No (d) I don't know (e) Refuse to Answer
Objective Financial Well-being	Including all your assets, was more than 10% of the value in liquid assets (eg cash, savings in the bank etc.)?	(a) Yes (b) Maybe (c) No (d) I don't know (e) Refuse to Answer
Objective Financial Well-being	Are your total debt repayments (principal and interest) less than 40% of your income?	(a) Yes (b) Maybe (c) No (d) I don't know (e) Refuse to Answer

Note. This table presents the key survey constructs, questions, and response options included in the survey. Response options varied by construct, including categorical, Likert-type (1–5), and numerical scales (0–10).

Table 47. Summary of Shame and Withdrawal Factor Questions

Survey Focus	Survey Questions Asked	Response Options Provided
Financial Shame	<p>Please answer the following statements about how you FEEL about your financial situation</p> <p>(1) My financial situation makes me feel ashamed</p> <p>(2) When I think about my finances, I want to hide</p> <p>(3) My financial affairs sometimes make me feel small and worthless</p> <p>(4) My finances make me feel humiliated and disgraced</p>	<p>(a) Strongly disagree</p> <p>(b) Somewhat disagree</p> <p>(c) Neither agree nor disagree</p> <p>(d) Somewhat agree</p> <p>(e) Strongly agree</p>
Financial Withdrawal	<p>Please answer the following statements about how you ACT with regards to your financial situation.</p> <p>(1) I avoid opening bills</p> <p>(2) I don't tell anyone about my financial situation</p> <p>(3) I would not answer a phone call if I knew it was from my bank</p> <p>(4) I ignore emails if they are about my finances</p> <p>(5) I hide my money worries from friends and family</p>	<p>(a) Strongly disagree</p> <p>(b) Somewhat disagree</p> <p>(c) Neither agree nor disagree</p> <p>(d) Somewhat agree</p> <p>(e) Strongly agree</p>
Shame	<p>For each of the following listed FEELINGS, please choose a response that reflects how common the feeling is for you.</p> <p>(1) Embarrassment</p> <p>(2) Feeling ridiculous</p> <p>(3) Self consciousness</p> <p>(4) Feeling humiliated</p> <p>(5) Feeling "stupid"</p> <p>(6) Feeling 'childish'</p> <p>(6) Feeling helpless or paralysed</p> <p>(7) Feelings of blushing</p> <p>(8) Feeling laughable</p> <p>(9) Feeling disgusting to others</p>	<p>(a) You never experience the feeling</p> <p>(b) You experience the feeling rarely</p> <p>(c) You experience the feeling some of the time</p> <p>(d) You experience the feeling frequently but not continuously</p> <p>(e) You experience the feeling continuously or almost continuous</p>
Withdrawal	<p>For each of the listed ACTIONS, please choose a response reflecting how common the feeling is for you.</p> <p>(1) I would rather be alone than with others</p> <p>(2) I am secretive or keep things to myself</p> <p>(3) I keep from getting involved with others</p> <p>(4) I avoid information I find unpleasant</p> <p>(5) I keep personal information to myself</p>	<p>(a) Strongly disagree</p> <p>(b) Somewhat disagree</p> <p>(c) Neither agree nor disagree</p> <p>(d) Somewhat agree</p> <p>(e) Strongly agree</p>

Note. This table presents the key survey constructs, questions, and response options included in the survey. Response options varied by construct, including categorical, Likert-type (1–5), and numerical scales (0–10).

Table 48. Summary of Demographics Factor Questions

Survey Focus	Survey Questions Asked	Response Options Provided
Demographics	What is your gender?	(a) Male (b) Female (c) Non-binary/ third gender (d) Prefer not to say
Demographics	What is your current age?	(please enter your current age in years)
Demographics	What is your current marital status?	(a) Single (b) In a committed relationship (boyfriend, girlfriend, partner) (c) Married, Civil Union or De facto relationship (d) Divorced or Separated (e) Widowed
Demographics	What is your the highest level of education you have completed?	(a) Some secondary (b) Secondary (c) Vocational training including trade certificates (d) Some university but no degree (e) Bachelor's degree (f) Post-graduate qualification (MA, MS, MBA, PhD etc.)
Demographics	Which of the following best describes your employment status (tick all that apply)?	(a) Employed full time (30 hours per week or more) (b) Employed part time (less than 30 hours per week) (c) Studying full time (d) Studying part time (e) Self-employed/Contractor/Running own business (which can include Uber, Airbnb) (f) Not employed and not looking for work (e.g. homemaker or stay at home parent) (g) Not employed, looking for work (h) Other, please specify)
Demographics	What is your personal annual income from all sources, before tax?	(a) 0-4,999 NZD (b) 5,000-9,999 NZD (c) 10,000-19,999 NZD (d) 20,000-29,999 NZD (e) 30,000-39,999 NZD (f) 50,000-59,999 NZD (g) 60,000-69,999 NZD (h) 70,000-79,999 NZD (i) 80,000-89,999 NZD (j) 90,000-99,999 NZD (k) 100,000-149,999 NZD (l) 150,000 NZD or more

Note. This table presents the key survey constructs, questions, and response options included in the survey. Response options varied by construct, including categorical, Likert-type (1–5), and numerical scales (0–10).

D. Additional Financial Shame Factor Analyses

Table 49. Descriptive Statistics of chosen Ethnicity Affiliations

Ethnicity Affiliation	As the		Ethnicity Affiliation	As the	
	Primary Ethnicity (N)	As an Ethnicity (N)		Primary Ethnicity (N)	As an Ethnicity (N)
New Zealand European	441	485	Caucasian	1	1
Māori	63	109	Danish	-	1
Indian	32	34	Dutch	1	1
Samoan	26	32	Eastern European	1	1
Chinese	23	26	French	1	1
British	10	11	Greek	-	1
Tongan	3	8	Italian	-	1
Western European	8	8	Lebanese	1	1
Filipino	5	6	Middle Eastern	1	1
Korean	6	6	Other Pacific Islanders	1	1
Australian	5	5	Pakistani	1	1
Cook Island Māori	4	5	Persian	1	1
Fijian	1	4	Polish	-	1
African	3	3	Russian	1	1
Asian	3	3	Scandinavian	-	1
Fiji Indian	5	3	Scottish Irish	-	1
German	2	3	South African	1	1
Irish	2	3	Sri Lankan	1	1
Malaysian	3	3	Sub-continent Indian	1	1
New Zealand Pākehā	2	3	Thai	1	1
North American	3	3	Tokelauan	1	1
Scottish	2	3	Tuvaluan	1	1
South African	3	3	Welsh	1	1
Japanese	2	2	Māori & NZ European	23	-
Niuean	-	2	Samoan & NZ European	1	-
Southeast Asian	2	2	Fijian & NZ European	1	-
Vietnamese	2	2			
Ashkenazi (EU Jew)	1	1	Total Responses	704	801

Note. The table summarises respondents' self-identified ethnic affiliations, distinguishing between their *primary ethnicity* (the main ethnic identity selected) and *other ethnic affiliations* (additional ethnic identities chosen). Counts (N) reflect the number of respondents who selected each category. A dash (–) indicates no responses recorded. Two respondents reported equal belongingness to Indian and Fijian ethnicities; these cases were classified under *Fiji Indian* as the primary ethnicity. 23 respondents reported equal belongingness to Māori & New Zealand European ethnicities; one reported equal belongingness to Samoan & New Zealand European ethnicities; and one reported equal belongingness to Fijian & New Zealand European ethnicities. Total responses (801) exceed the total number of participants (704) due to multiple ethnic affiliations selected by some respondents.

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