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**The Impact of Pocket Money and Term Time Employment on the
Financial Confidence of Adolescents in New Zealand**

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Abstract: This study uses a large sample of 3,681 twelve- to fourteen-year-olds to examine predictors of adolescent financial confidence. A family financial culture of openness is significantly correlated with greater financial confidence, with the largest effect size of all the variables. Living in a more affluent household, being of male gender, receiving pocket money and having a term time job are all positively correlated with greater financial confidence. Moderation regression analysis examines whether the effect of gender, household affluence or a family culture of financial openness are moderated through receiving pocket money or having a term time job. The increased financial confidence correlated with more affluent households is moderated through an adolescent having a term time job. Youth can mitigate the negative effect on financial confidence of living in a lower affluence household by having a term time job.

Data Availability Statement: The data that support the findings of this study are available from Banqer, but restrictions apply to the availability of these data, which were used under licence for the current study and so are not publicly available. The data are, however, available from the authors upon reasonable request and with the permission of Banqer.

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Introduction

In his seminal work developing social learning theory (1977), Bandurra identified sources of influence on how patterns of behaviour are acquired. Two such influences were learning by direct experience, and learning through modelling. These two aspects of social learning theory have been identified as pertinent to the development of financial attitudes, confidence and behaviour under the umbrella of financial capability. Specifically, the family home has been identified as a source of influence for young people growing up, including modelling behaviour exhibited by parents, having financial discussions in the home, and receiving pocket money. An alternative source of direct experience and learning through modelling which has not been examined as thoroughly is term time employment of children in their early teens. This article applies regression analysis to a large dataset of over 3,500 secondary school students in their early teens in New Zealand. The effects of a range of variables such as family affluence, family financial openness, gender, receiving pocket money or having a term time job on financial confidence are examined. Also examined are the role of receiving pocket money or having a term time job in terms of moderating any influence of family affluence, family financial openness and gender on financial confidence.

Literature Review

Financial Socialisation in the home.

The theoretical foundation of financial socialisation in the home lies in Bandurra's (1977) seminal work on Social Learning Theory, which built on behaviorist learning theories by incorporating two ideas: behavior is learned from the environment through the process of observational learning; and that mediating processes occur between stimuli & responses. As part of his social learning theory, Bandurra argued learning resulting from direct experiences can also be learned vicariously by observing other people's behaviour. Highlighting the impact of learning through modelling, Bandurra suggested "most of the behaviours that people display are learned, either deliberately or inadvertently, through the influence of example" (1977, p. 5). Around the same time, consumer

socialisation was defined as “the process by which young people acquire skills, knowledge, and attitudes relevant to their functioning in the marketplace” (Ward, 1980, p. 380). Social Learning Theory was further refined two decades later when three influences on a child’s development were posited: direct tuition, modelling and enactive experience (Bussey and Bandurra, 1999). In 2015, financial socialisation was positioned as a subset of consumer socialisation, and defined as “the capability to obtain all relevant technical, commercial, behavioural and emotional information that contribute to one’s financial knowledge and skills” (Tezel, 2015, p. 92).

Parental financial socialisation of children has been suggested as being influential in subsequent financial knowledge and behaviour (Gudmunson and Danes, 2011). Previous research has postulated the family to be “the primary socialisation unit in which the individual initially develops” (Gudmunson and Danes, 2011, p. 645). Britt (2016) concurs, stating that “attitudes are developed based on observation of key figures in childhood”, with adult children identifying that “mothers and fathers were the most influential people in forming their own money beliefs and attitudes” (p. 543). Using a sample of school leavers, McNeill and Turner (2013) claimed that “parents are able to exert a huge amount of influence over the financial behaviour of their children”, and that “key financial attitudes and behaviours of young homeleavers are almost directly related to the parental financial education they received whilst growing up and still living at home”(p. 122). Parents were considered the “major force in educating them financially” (p. 129). As further evidence of Bandurra’s ‘observational learning’, Zhu (2018) highlights found parental socialisation processes promote healthy financial behaviours by improving financial attitudes as children replicate their parents’ positive financial behaviours. As the number of studies examining family financial socialisation has grown, formal models and scales have emerged. Recently, LeBaron-Black et al. (2022) developed the Parent Financial Socialization Scale (20 items) measuring methods of family financial socialisation. The methods were categorised under three sub-scales the Parent Financial Modeling Scale (eight items), the Parent–Child Financial Discussion Scale (nine items), and the Experiential Learning of Finances Scale (three items). The scales are designed to be retrospective. Parental financial

modelling and experiential learning of finance are examples of Bandurra's (1977) influences on how behaviours are acquired of direct experience and learning through modelling. The three statements making up the experiential learning of finances scale in LeBaron-Black et al's (2022) Parent Financial Sozialisation Scale are: 'My parents gave me opportunities to practice money management while I was growing up'; 'My parents gave me hands-on experiences with money while I was growing up'; and 'While I was growing up, my parents encouraged me to put a certain percentage of my money away for something like savings or donations'. A child receiving pocket money would be an example of experiential learning of finances. The receiving of pocket money has been found to be positively correlated with financial literacy (Susanti et al, 2019).

As well as providing an opportunity for experiential learning through spending and saving, pocket money also creates an opportunity for financial discussions with parents in the home. As the financial socialisation literature evolved Gudmunson & Danes (2011) developed a model of financial socialisation. The model suggested that given personal and family characteristics; financial attitudes are influenced by two sources of family socialisation: family interaction and relationships, along with purposive financial socialisation within the family setting. The separation of implicit and purposive family socialisation is based on the work of Moschis (1985) and Alhabeeb (1996). Gudmunson & Danes (2011) describe how Moschis (1985) identifies three ways learning occurs in families: conscious or unconscious communication of norms and expectations resulting from observations or imitation of behaviors; family members' positive and negative reinforcement; and overt communication. As with LaBaron's (2022) experiential learning of finances scale, Gudmonson & Danes (2011) recognise the importance of Bandurra's concept of observational learning. When developing their model Gudmunson & Danes (2011) separated out implicit financial socialisation (family interactions and relationships) and purposive financial socialisation in the home. They also suggest implicit rather than purposive as the major source of financial socialisation. The concept of implicit financial socialisation has also been referred to as unintentional family financial socialisation (Deenanath et al., 2019). Unintentional family financial socialisation is conceptualised as the

information, knowledge, and skills that parents pass on to their children without the intention of teaching their children this information. This could be through discussions or observations of confident financial behaviours (Deenanath et al., 2019). It was found that subjective financial knowledge was significantly impacted by processes of unintentional family financial socialisation due to participants reporting they felt more confident about financial matters after having conversations with parents about money. Using a dataset of responses from over twelve hundred 15 year olds, Agnew (2018) investigated the effect of family financial socialisation mechanisms on impulsive spending behaviour, financial quiz scores, saving intentions and whether parents were seen as role models. The three financial socialisation mechanisms examined were the age when financial discussions between parent and child commence, the age of a child when pocket money is first received, and the age when a savings account is first opened. Financial discussion in the home between parent and child was the most influential of the three factors examined.

There has also been research exploring the possibility of part-time work providing a financial socialisation experience for students. The financial benefits of working part-time (other than direct pecuniary benefits) include greater skill when managing money, increased financial literacy, and a greater likelihood to save (Mortimer 2003; Erskine et al. 2006). A study examining the relative benefits of different sources of financial socialisation found high school financial education, parents, and work experience during adolescence all to be positively correlated with financial learning, attitude and behaviour of college students (Shim et al, 2009). In their 2012 New Zealand Financial Literacy Report, PISA (Program for International Student Assessment) acknowledge that financial knowledge, skills and understanding are used in a range of settings for youth, including the home, family, education and work. The report specifically recognised that some students may already be working in casual employment outside of school hours. In New Zealand, 75% of 15 year olds were found to be working outside of school hours (OECD average: 66%). By comparison, 58% received pocket money for doing chores, with 37% receiving pocket money without doing chores (OECD average: 38% and 51%) (Whitney et al. 2014). An analysis of the PISA data found earning money

from work was not correlated with increased financial literacy. This finding does come with a caveat however. Work was defined as earning money from doing chores in the home or working outside the home (Whitney et al. 2014). This definition blurs the lines between work and pocket money. It is worth noting that the PISA definition of financial literacy is more than just financial knowledge. It also includes the skills, motivation and confidence to apply such knowledge. (Whitney et al. 2014).

Financial Confidence

In a study commissioned by the Financial Consumer Agency of Canada, financial confidence was defined as “having the self-assurance to make important decisions”. (Palameta et al. 2016, p. i). Using microdata from the 2014 Canadian Financial Capability Survey the results identified the important role of confidence in financial behaviours (Palameta et al. 2016). In addition, financial confidence was found to be a more accurate predictor of outcomes related to day-to-day money management than financial knowledge. Youth were specifically identified as a group at risk of low financial confidence. (Palameta et al. 2016). The study found that knowledge did not compensate for a lack of confidence. Specifically;

“In those with high levels of knowledge are likely to experience relatively poor outcomes in areas such as meeting financial commitments, making bill payments, budgeting, and managing debt, if they also have low levels of confidence. Conversely, those who have relatively low levels of knowledge achieve good outcomes in these areas if they have high levels of confidence” (Palameta et al. 2016, p. iii).

The authors of the report drew the conclusion that confidence is indicative of good day-to-day financial practices, resulting from learning by doing. This is similar to the finding by Bandura in his early work that both skills and confidence are necessary for effective functioning (Bandura, 1993). Oehler et al. (2017) concurs with the notion that confidence is inter-linked with good financial practices, stating “individuals need applied financial literacy which covers not only the knowledge and understanding of financial concepts but also the skills, motivation, and confidence to apply such

knowledge in order to make effective decisions”. (p. 329). Other researchers believe financial confidence is an important influencer of financial behaviour (Lee & Durksen, 2018; Atlas et al., 2019). Some have even suggested that as well as objective content and skills, youth need to be taught to have confidence in their ability to stick to a plan (Shim et al., 2009). Within a larger, over-arching study aimed at better understanding key facets of family financial socialisation, LeBaron-Black et al’s (2022) outline the impacts different aspects of experiential learning have upon children’s financial knowledge and behaviours. Interview responses were analysed to determine the impacts of financial socialisation through experiential learning and suggest that the best way for children to learn positive financial behaviours is by providing and facilitating key financial experiences to highlight the connection between working and earning money for completing work.

Gender and Household Affluence

As stated by Preston et al (2024), on average, women are financially less literate than men (Bottazzi & Lusardi, 2021; Bucher-Koenen et al., 2021; Cupák et al., 2018; Fonseca et al., 2012; Preston & Wright, 2019; Robson & Peetz, 2020; Tinghög et al., 2021). The gender gap in financial literacy explains, in part, the gender difference in pension savings and the gender difference in stock market participation (Preston et al, 2024). Financial socialisation may be a contributing factor to the financial literacy gender gap. Women who participate in the management of household finances generally have higher financial literacy (Grohmann & Schoofs, 2021; Rink et al., 2021). Preston et al conclude that “Parents play an important role (be it explicit or implicit) in the transmission of financial literacy and thus the creation of gender gaps” (2024, p. 149). The notion of an implicit role of parents another statement founded in Bandurra’s (1977) social learning theory process of observational learning. In both Australia (Preston and Wright (2022) and Italy (Bottazzi and Lusardi (2021) it has been found that daughter’s financial literacy is significantly higher for those who have mothers in paid employment, leading Preston et al to conclude “such outcomes are consistent with differing household cultures and messages regarding gender stereotypes” (2024, p. 149). In their

2015 paper, Agnew & Cameron-Agnew identified a gender bias in the age when parents start having financial discussions with their children. They found that on average, males had their first financial discussion in the home at an earlier age than females. For males, after accounting for various control variables, the age of the first financial discussion in the home was correlated with financial literacy knowledge later in life (Agnew & Cameron-Agnew, 2015). Agnew and Cameron-Agnew cite other research when stating that children first learn about money in the home, with what they learn filtered through their parents (Danes and Haberman, 2007; Lusardi et al., 2010).

In their 2014 PISA report, the OECD acknowledge the possibility of differing financial experiences by girls and boys growing up:

“For example, as boys and girls grow up, they may be exposed to different opportunities to learn and improve their financial competencies, such as different access to labour and financial markets, and therefore they may develop different levels of financial knowledge and different financial strategies in adulthood over time” (Literacy Skills, F., 2014, p. 81).

Different socio economic status (SES) of the family home may also result in different financial socialisation experiences for children growing up. Recent research found the relationship between parental financial teaching and financial attitude to be moderated by parental income, leading the author to conclude “the relationship between parental financial teaching and financial literacy is moderated by parental SES” (Ndou, 2023, p. 219).

This study aims to contribute to the existing literature by exploring potential correlations and moderating influences between gender, affluence, family financial culture, receiving pocket money and part-time employment with the financial confidence of youth in New Zealand.

Materials and Methods

The secondary dataset utilised in this research was provided by a nationwide financial education programme for children and adolescents across participating primary and secondary schools in New

Zealand. A fully anonymised version of this dataset was generously shared with our research team, and the project has been granted an exemption by the [Institution's] Human Ethics Committee, ensuring its ethical appropriateness for research purposes.

As a preliminary step in their involvement with the programme, students were invited to describe the current attitudes and perceptions of personal finance in their home. The responses of 3,681 Year 9 and 10 (twelve to 14 year old) students to these items constitute the primary data explored in our current research.

The data contained five point Likert scales responses to statements examining the financial confidence of the students, as well as a range of statements examining the financial culture of the home. Variables measuring family affluence, gender, employment and pocket money were also collected. A combination of principal component analysis, ordinary least squares regressions, and moderation regression analysis are used to answer the research questions.

Descriptive statistics of the variables used in the regression models are given in table 1.

Table 1. Sample Descriptive Statistics.

	<i>Yes</i>	<i>No</i>
Term Time Job	553	3,128
Holiday Job	413	3,268
Pocket Money	2,038	1,643
<i>Gender:</i>		
Male	1,849	
Female	1,832	
	<i>Mean</i>	<i>SD</i>
Financial Confidence (15)	10.46	2.660
Affluence (12)	9.35	1.923
<i>Family Financial Culture:</i>		
Openness (25)	15.25	4.486

In order to answer the proposed research questions, the validity of the scales used to represent family financial culture and financial confidence in the later regression analysis needs was assessed for reliability. This was done through the use of principal component analysis and examining

Cronbach's alpha. Note, as the affluence scale has already been validated in the literature, it did not make up part of the principal component analysis.

Principal Component Analysis.

SPSS v29 was used for this analysis, using a dataset of 3,681 participants with no missing values.

Participants were asked to respond to sixteen statements about the financial culture of their home, using five point Likert scales from (1) strongly disagree to (5) strongly agree. They were also asked to respond on a five point Likert scale to three questions measuring their confidence in talking about money, managing their money, and making financial decisions (1 = Not at all confident, 5 = Very confident).

In terms of the suitability of factor analysis for this dataset, Bartlett's test for sphericity was significant ($\chi^2_{120} = 12,135.519$, $p < .001$), while the KMO statistic of .806 demonstrated a strong sampling adequacy. In addition, the large sample size of 3,681 gave a 230:1 ratio of cases-to-variables, which is well above both traditional and more recent ideas of best practice (Field, 2005; Hogarty, et al., 2005). Due to the likelihood of the different scales measuring financial culture in the same family being correlated with each other, a direct oblimin extraction method using principal component analysis was used. The correlation matrix returned a determinant value of 0.031. With a highest correlation matrix coefficient of 0.618, no evidence of multicollinearity was detected.

Using Eigenvalues greater than one coupled with an examination of the scree plot, the factor extraction suggested a four factor solution containing all 16 of the variables. All 16 variables met the loading threshold of 0.30 suggested by Hair et al. (1998) for a sample size of 350 or greater, and the cut-off of 0.4 irrespective of sample size suggested by Stevens (2002). The loadings shown in table 2 range from 463 to 841 and explain 53% of the variance.

Table 2. Principal Component Analysis Factor Loadings.

<i>Factor One - Saving</i>	
1. My family regularly save money.	0.709
2. My family saves money over long periods of time to buy significant things (e.g. a car or television).	0.751
3. My family try to not run out of money.	0.658
<i>Factor Two - Success</i>	
4. My family believe more money means more success.	-0.841
5. My family believe that the amount of money people have makes them 'better' or 'worse' in life.	-0.730
6. My family has a goal to make more money.	-0.458
7. My family want me to make good money in life.	-0.552
<i>Factor Three - Openness</i>	
8. My family avoids talking about money problems.	-0.463
9. My family explain their money talks and decisions to me.	0.819
10. My family include me in talks and decisions about money.	0.815
11. My family openly talks about money.	0.767
12. My family teach me about money.	0.603
13. My family openly talk about their saving goals.	0.694
<i>Factor Four - Anxiety</i>	
14. My family don't know how to help with my questions about money.	0.740
15. My family often worries about money.	0.508
16. My family don't understand money very well.	0.768

When assessing scale validity, Cronbach's alpha for factors one (0.610), two (0.6.04) and four (0.466) were not sufficiently high enough to use the scales in this study. Deleting items from the scales did not sufficiently improve the alpha values. The six variables in factor three returned an alpha value of 0.667, however removing item eight increased Cronbach's alpha to an acceptable 0.821. An 'openness' factor including variables 9 to 13 was maintained as a family culture variable.

A similar analysis was carried out to determine whether the three individual Likert scales on confidence talking about money, managing money and making financial decisions could be combined into one financial confidence measure. A direct oblimin extraction method using principal component analysis was used. Bartlett's test for sphericity was significant ($\chi^2_3 = 3,031.992$, $p < .001$), while the KMO statistic of .657 demonstrated a sgood sampling adequacy. The correlation matrix returned a determinant value of 0.439. With a highest correlation matrix coefficient of 0.647, no evidence of multicollinearity was detected. Using Eigenvalues greater than one coupled with an

examination of the scree plot, the factor extraction suggested a one factor solution containing all three of the individual confidence variables. Due to only one component being extracted, the solution was not rotated. The factor loadings for the one component were relatively high, with loadings of 0.849 for confidence managing money, 0.744 for talking about money and 0.871 for confidence making financial decisions. The component explained 68% of the variation. When assessing scale validity, Cronbach's alpha returned a satisfactory 0.760.

This study had hoped to use a variety of family financial culture variables to explore the relationship between the family home and financial confidence. However, as a result of the reliability issues with the anxiety, saving and success household variables identified by the principal component analysis, financial openness is the sole family financial culture variable included in the following analysis.

This research attempts to add to the existing literature by asking the following research questions:

1. Allowing for gender, family affluence and family financial openness, what is the correlation, if any, between receiving pocket money, having a holiday job, or having a part-time job during term time, and the financial confidence of adolescents?
2. What is the correlation, if any, between gender, family affluence, and family financial openness; with the financial confidence of adolescents?
3. How are any effects of gender and family affluence on the financial confidence of adolescents moderated through receiving pocket money or having a part-time job?
4. How are any effects of a family financial culture of openness on the financial confidence of adolescents moderated through receiving pocket money or having a part-time job?

Research questions one to three attempt to establish through the use of a large dataset of responses from adolescents, factors correlated with financial confidence. The comparing of standardized coefficients will allow for comment to be made on the relative effect sizes of the variables on financial confidence. Research questions four and five aim to establish whether

receiving pocket money or having a part time job is able to significantly lesson or heighten any effect on financial confidence of gender, household affluence and family financial openness.

Ordinary Least Squares Regression Analysis.

An ordinary least squares (OLS) regression was run to answer research questions one to three. When assessing the assumptions of regression analysis, the largest correlation coefficient of 0.395 confirmed no evidence of multicollinearity, while a Cooks distance of 0.006 confirmed a lack of outliers. Due to the sensitivity of the Shapiro Wilk and K-M tests of normality to large sample sizes plots were used to assess the normality of the distribution. The normal P-P and Q-Q plots confirmed a normal linear distribution.

The OLS model is shown below.

$$Y^* = \alpha + \beta_1 \text{Term Time Job} + \beta_2 \text{Holiday Job} + \beta_3 \text{Pocket Money} + \beta_4 \text{Female Gender} + \beta_5 \text{Affluence} + \beta_6 \text{Openness} + e.$$

The dependant variable is a financial confidence score out of fifteen. The term time job, holiday job, receives pockey money and gender variables are all binary. The affluence variable is measured using a modified version of the Family Affluence Scale (FAS) (Currie et al, 2014). The FAS is a widely recognised tool designed to measure socioeconomic status, especially in the context of adolescent health and lifestyle studies. The self-report scale measures affluence by examining the tangible assets and certain family experiences. In order to be appropriate for the New Zealand context, there were slight modifications in the phrasing of the original questions. The scale is shown in appendix 1, with the possible range of scores (0) low affluence to (12) high affluence. Finally, the family financial openness variable is a score out of 25.

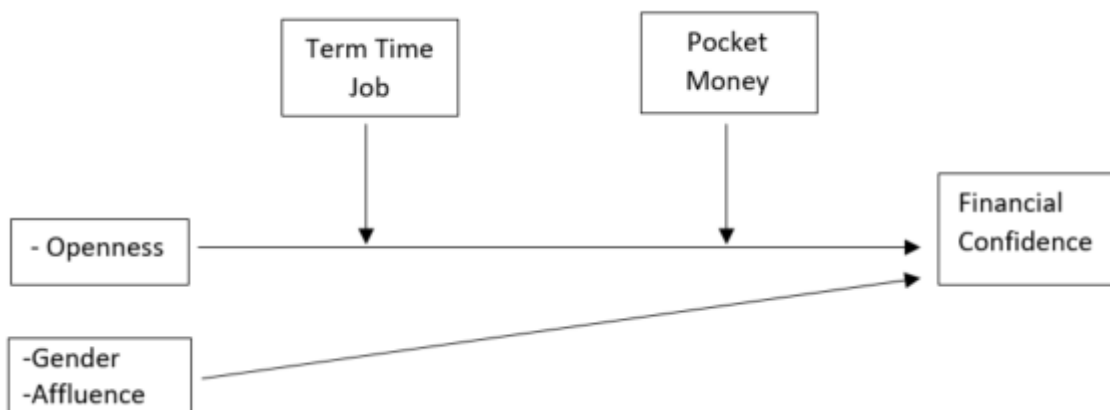
Moderation Analysis.

To answer research questions three and four, the SPSS (29) PROCESS 4.2 module was used to examine whether having a part time job or receiving pocket money moderates the effect on financial

confidence of being female, coming from a more affluent household, or coming from a household with a culture of greater financial openness.

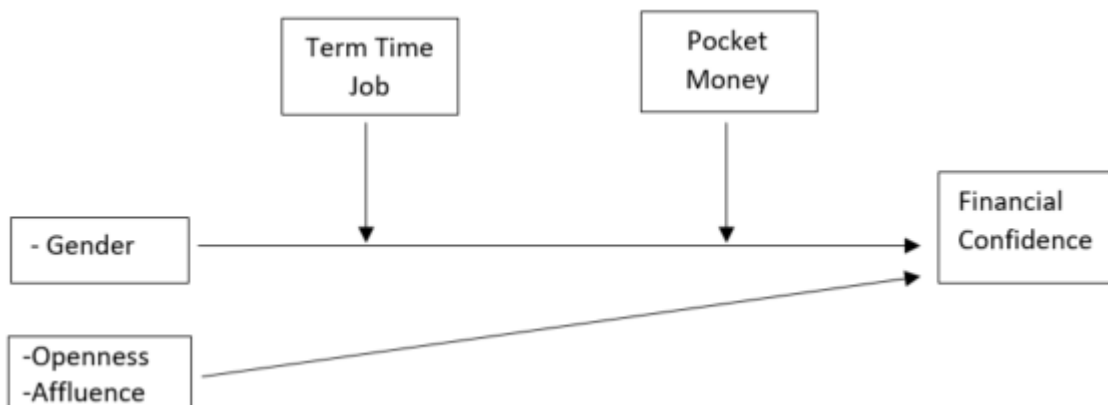
Model 1 examines whether the effect on financial confidence of greater household financial openness is moderated through receiving pocket money or having a part-time job, while accounting for co-variates of female gender and levels of household affluence.

Model 1:



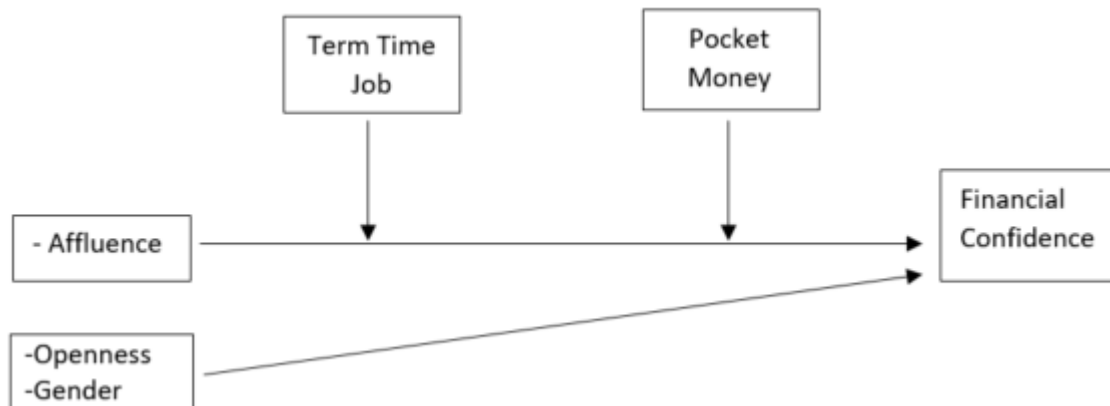
Model 2 examines whether the effect on financial confidence of being of female gender is moderated through receiving pocket money or having a part-time job, while accounting for co-variates of levels of household financial openness and household affluence.

Model 2:



Model 3 examines whether the effect on financial confidence of residing in a more affluent household is moderated through receiving pocket money or having a part-time job, while accounting for co-variables of levels of household financial openness and being of female gender.

Model 3:



Results

Ordinary Least Squares Regression.

The results are shown in table 3 below. Controlling for the demographic variables of gender and family affluence, along with family financial openness, having a term time job and receiving pocket money are positively correlated with greater levels of financial confidence. Having a holiday job is not significantly correlated with financial confidence. When examining the standardized coefficients (measured in standard deviations), having a term time job (0.084) has a 2 times greater effect on confidence than receiving pocket money (0.042). Having an affluent family background has a similar effect to having a term time job. The largest standardised coefficient is for the family financial openness variable, with a value considerably larger at 0.341. The second largest standardised coefficient is for gender (-0.179), approximately half that of family financial openness. The negative coefficient for gender reflects lower financial confidence levels for females. The model accounts for 17.5% of the variance in financial confidence.

Table 3. Ordinary Least squares Regression Coefficients.

	Financial Confidence
Constant	6.592*** (0.229)
Term Time Job	0.623*** (0.122)
Holiday Job	0.212 (0.138)
Pocket Money	0.225*** (0.081)
Affluence	0.109*** (0.021)
Female Gender	-0.954*** (0.080)
Openness	0.202*** (0.009)
Adjusted R ²	0.175

Notes: ***p < 0.01, **p < 0.05

Moderation Analysis

Moderation analysis was used as an approach to answer research questions three and four. Based on the results of the ordinary least squares regression where having a holiday job was not significantly correlated with financial confidence, there was no benefit in including holiday job in the moderation analysis. The results of all three moderation models are shown in table 4 below. Across all three models, being male, coming from a family with greater affluence, and coming from a family with a culture of greater financial openness are all correlated with higher levels of financial confidence. In model 1, the influence of family financial openness on financial confidence is not significantly moderated through having a term time job or receiving pocket money. However, when the interaction terms are included, neither the term time job nor receiving pocket money variables are significantly correlated with financial confidence. In model 2, The negative effect of being female on financial confidence is not significantly moderated through having a term time job or receiving pocket money. The term time job and receiving pocket money variables both remained significantly correlated with financial confidence once the interaction terms were included in the model. For

model 3, neither the pocket money variable nor the pocket money interaction term were significantly correlated with financial confidence. Both the term time job and the term time job interaction variable were however significant at the 99% confidence level. As a result of the interaction term being included in the model the R² increased by 0.002. The negative coefficient can be interpreted as having a term time job lessens the positive influence of affluence on financial confidence.

Table 4. Moderation Analysis – Two Moderator Model.

	Model 1	Model 2	Model 3
	Financial Confidence	Financial Confidence	Financial Confidence
Constant	6.5580*** (0.2758)	6.5803*** (0.2330)	6.1932*** (0.3111)
Female Gender	-0.9590*** (0.0800)	-0.9723*** (0.1255)	-0.9594*** (0.0799)
Affluence	0.1106*** (0.0211)	0.1107*** (0.0211)	0.1519*** (0.0312)
Openness	0.2048*** (0.0139)	0.2035*** (0.0091)	0.2036*** (0.0090)
Term Time Job	0.2148 (0.4280)	0.6607*** (0.1593)	2.4890*** (0.6124)
Pocket Money	0.3785 (0.2839)	0.2243** (0.1137)	0.5420 (0.3968)
Openness x Term Time Job	0.0292 (0.0253)	-----	-----
Openness X Pocket Money	-0.0102 (0.0179)	-----	-----
Gender X Term Time Job	-----	0.0665 (0.2234)	-----
Gender X Pocket Money	-----	0.0040 (0.1606)	-----
Affluence X Term Time Job	-----	-----	-0.2090*** (0.0614)
Affluence X Pocket Money	-----	-----	0.0691 (0.0416)
R ²	0.1767	0.1763	0.1784

Notes: ***p < 0.01, **p < 0.05

Discussion

The literature discussed above is suggestive of a child receiving pocket money being an opportunity for an adolescent to engage in financial discussions with parents, while also providing the youth with

the resources to engage in experiential learning. The finding that receiving pocket money is correlated with greater financial confidence is supportive of that suggestion. The less discussed notion that having a job may also provide the resources for experiential learning to take place is more nuanced. While having a term-time job is correlated with higher financial confidence, having a holiday job is not. Both of them provide financial resources to the adolescent. One possible explanation is that a holiday job for a young teen may be more likely to be for a relative than a term-time job. In which case, the holiday job may be duplicating the positive effect on financial confidence of receiving pocket money, given that the same source is providing any associated financial discussions. A piece of evidence supporting this hypothesis is that when the family financial openness variable is not included in the regression, all of pocket money, term time job and holiday job are significantly correlated with greater financial confidence. Enough of the correlation between having a holiday job and financial confidence is captured by the level of family financial openness when it is included in the model so as to make the effect of having a holiday job no longer significant. The answer to research question one is that after allowing for gender, family affluence and family financial openness, receiving pocket money and having a job during term time are significantly correlated with greater financial confidence of adolescents, while having a holiday job is not.

Research question two asks what is the correlation, if any, between gender, family affluence, and family financial openness; with the financial confidence of adolescents? All three variables are significantly correlated with the financial confidence of adolescents. In line with previous findings that females have lower financial literacy than males, female adolescents have lower financial confidence than their male counterparts. The findings from the literature outlined above such as females reporting a later first financial discussion with parents than males, could also lie behind the gender gap in financial confidence. What is concerning is that as identified earlier, it has been hypothesised that confidence is indicative of good day-to-day financial practices, resulting from learning by doing. Not only may female youth not be privy to the same level of financial discussion,

they may also be deficient in their opportunities to display good day-to-day financial practices. Coming from an affluent family is positively correlated with financial confidence. This may be a by-product of having access to greater financial resources to facilitate experiential learning, and stimulate financial discussions in the home. Regular exposure to financial decision-making and larger financial responsibilities may build confidence. Worryingly, when comparing standardised coefficients, the negative effect of being female is more than twice that of the positive effect of coming from a more affluent family household (measured in proportions of a standard deviation). On a more positive note, there is clear evidence for the benefit of having an open family financial culture. The standardised coefficient for openness is the largest of all the variables, by some margin. It is twice that of the second largest standardised coefficient of gender. When the family financial openness variable is removed from the model, the R^2 falls from 17.5% to 6.6%. The percentage of financial confidence explained by the family financial openness variable is greater than all the other variables in the model combined. Family financial openness is an important predictor of financial confidence. A willingness to discuss financial ideas and experiences in the household may encourage youth to be more proactive in learning about finances, trying new financial strategies, and seeking out financial advice, leading to higher financial confidence. They may be more adaptable and resilient to financial changes or challenges, increasing their confidence in handling financial situations effectively.

As shown in table 3 above, having a term time job and receiving pocket money are both correlated with greater financial confidence. Receiving pocket money or having a term-time job may provide practical experience in managing income, expenses, and savings. This hands-on experience could significantly boost financial confidence by giving individuals real-world financial management skills. Moderation regression analysis is included in this study to examine if the effect on financial confidence of family household affluence, gender, and family financial openness is moderated by the receiving of pocket money or having a term time job. In model 1, after accounting for gender and household affluence, the positive effect of family financial openness is not significantly moderated

by receiving pocket money or having a term time job. In other words, the positive impact on financial confidence of coming from a financially open household is not significantly channelled through an adolescent having a term time job, or receiving pocket money. Interestingly, in contrast to the OLS regression results in table 3, when the two interaction terms are included in model 1, neither term time job nor receiving pocket money remain significantly correlated with financial confidence. Therefore, to answer research question four, after accounting for gender and family affluence, the effects of a family financial culture of openness on the financial confidence of adolescents is not significantly moderated through receiving pocket money or having a part-time job.

Model 2 examines whether the effect on financial confidence of having a term time job or receiving pocket money is moderated through gender, after accounting for affluence and family financial openness. Bearing in mind that female adolescents have significantly lower rates of financial confidence than males (holding other variables constant), theoretically, the 'harm' of being female to financial confidence may be lessened if she receives pocket money or has a term time job. However, gender is not significantly moderated through receiving pocket money or having a term time job. Disappointingly, a female adolescent is not able to increase her confidence relative to males by having a term job or receiving pocket money. An intuitive explanation for this may be that if girls are having fewer financial discussions than boys, receiving pocket money will not change the relative frequency of those discussions relative to boys. The initial OLS regression shows that adolescents receiving pocket money have higher financial confidence. However, for girls, receiving pocket money does not close the confidence gap relative to boys. Any benefit to financial confidence to girls of receiving pocket money is also received by boys, thus maintaining the relative gap. Similarly for term time employment. Financial confidence for both boys and girls is increased if they have a term time job, whether it be the result of extra income providing more experiential learning opportunities, or increasing financial confidence through interactions at work. As model 2 shows, the term time job variable and pocket money variable are both still significant. There is positive

correlation with financial confidence for both of them. That financial confidence boost however occurs independent of gender. Girls do not close the financial confidence gap relative to boys by having a term time job or receiving pocket money.

In model 3, once the interaction terms are included for receiving pocket money and having term time employment, the pocket money variable no longer has a significant correlation with financial confidence. The pocket money X household affluence interaction term is also not significant.

Whether or not an adolescent receives pocket money is not significantly correlated with financial confidence, once the interaction terms are included. Both the term time job and the term time job X household affluence are significantly correlated with financial confidence. Having a term time job is associated with significantly greater financial confidence for youth regardless of the affluence of the household they reside in. Further, the relative gap in financial confidence between lower and higher affluent households is closed for those with a term time job. Having a term time job decreases the financial confidence advantage of coming from a more affluent household. The overall effect of including the term test x affluence interaction term is a 0.002 increase in the R^2 value of the model. Social learning theory provides a possible explanation for this finding. Of the three influences on child development: direct tuition, modelling and enactive experience, funds earned from a term time job may allow for greater levels of enactive experience for those from lower affluent households than would otherwise be possible. This explanation is further supported by the non-significant effect of the pocket money X affluence interaction variable in model 3. The level of pocket money given in lower affluence households may be insufficient to substantially influence experiential learning opportunities. Note that in this study the receiving of pocket money elicited a binary yes or no response. The amount of pocket money not measured. More income from a term time job may give poorer kids greater opportunity for experiential learning that pocket money doesn't. To answer research question three, after accounting for gender and family financial openness, the effects of coming from a more affluent household on the financial confidence of adolescents is not significantly moderated through receiving pocket money. The effects of coming

from a more affluent household on the financial confidence of adolescents is significantly moderated through having a term time job.

Conclusion

This study supports previous research showing the impact of financial socialisation in the home. The financial openness of the family home clearly has a substantial positive influence on the financial confidence of adolescents. Pocket money has previously been posited as a tool for the financial socialisation process. Those youth who receive pocket money have greater financial confidence, after accounting for other variables such as affluence, gender and financial openness. Evidence is also found for term time job being correlated with higher financial confidence, with larger effect sizes than pocket money. A unique finding from this study is evidence for the correlation between greater household affluence and higher financial confidence being moderated through a term time job. Put simply, having a part time job is an opportunity for youth from lower affluent households to be able to raise their financial confidence relative to higher affluent households.

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