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# Factors that Influence Financial Capability and Effectiveness: Exploring Financial Counsellors' Perspectives

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The financial capability of the community has become a topical issue in recent years around the globe. The role financial education plays improving financial capability is recognised by the G20 countries. With a plethora of programs, workshops, seminars and other resources available in the community, we find that there is little research that measures the impact/usefulness of these programs including what should be included in such programs.

This study seeks to contribute to the understanding of the underlying determinants of financial capability by exploring the factors that influence this. Focus groups were conducted with financial counsellors in Queensland, Australia to explore factors that inhibit and promote financial capability. This included factors that impede the development of capability and the others that impact on the development of intention to engage in financially effective behaviour.

We report that financial counsellors view confidence, self-esteem and self-belief as equally important determinants of financial capability. Also, gender and family socio economic status influence an individual's ability to engage in financially effective behaviour. The results also found that adopting a short-term focus, rather than future orientation, is a key inhibitor of financial effectiveness. Consequently it is suggested that those developing financial capability programs address these behavioural and contextual factors rather than concentrating purely on literacy.

## **Keywords**

financial capability, financial effectiveness, financial decision-making, financial behaviour

## **Cover Page Footnote**

The authors wish to thank the Accounting and Finance Association of Australia and New Zealand (AFAANZ) for funding for this research. We would also like to thank members of the Financial Counsellors Association, Queensland, for their support, input and cooperation, and for comments on an earlier version of this paper.



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**JEL Codes:** G00, D14

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## 1.0 INTRODUCTION AND BACKGROUND

The Australian financial services landscape continues to evolve since financial services deregulation in 1985. There have been fundamental changes in the way consumers are now asked to interact with financial service providers and with money itself. Increased marketing, access to credit, accelerating technological change, and a greater variety of investment and other financial products have made the process of personal financial decision making more complex. At the institutional level, prudential and functional regulation of the financial services sector through the *Financial Services Reform Act* (Commonwealth of Australia 2002) has addressed the need for clearly communicated product and fee disclosure by financial service providers. This was more recently extended by the Future of Financial Advice (FOFA) reforms, which addressed issues such as conflicted remuneration, best interests duties and scaled advice. While these reforms have enhanced disclosure, it is not necessarily the case that consumers have the ability to utilize (or appreciate the need to fully understand) this information in the financial decisions that they make.

In this environment, consumers are also increasingly expected to take responsibility for their personal finances, accumulation of assets, debt management and long term planning to fund their retirement. This fundamental change in the way people are expected to interact with financial services has heightened the requirement for a knowledge and skill base that will enable consumers to make effective personal financial decisions (ASIC, 2011a; OECD, 2005). Conversely, evidence raises concerns about financial literacy<sup>2</sup>, and therefore the financial capability of the community (Roy Morgan Research 2003; Personal Finance Research Centre 2005; Prawitz et al 2006). By financial capability we are referring to the ability to use the information you have to make sound financial decisions (Steward, 2013). Therefore, it is argued that financial capability programs will be enhanced if they include modules that are designed to change attitudes and behaviour as well as increase knowledge and skills (Wiener et al. 2004). This position is supported by the Theory of Planned Behaviour (TpB) (Ajzen 2005), a widely researched and utilised theory of attitude and behaviour.

Current definitions of financial literacy/capability and measures of financial capability have provided a good base from which to develop programs and resources, however, they do not provide a comprehensive understanding of the underlying skills, attributes and behaviours associated with financial capability. Financial capability is multi-dimensional is influenced by a range of factors, and while there has been some development of frameworks and benchmarks (Basic Skills Agency 2004; Personal Finance Research Centre 2005), little is understood about the actual components and drivers of financial capability in an Australian context.

This study seeks to examine the drivers and inhibitors of financial capability of those most likely to need assistance with their financial affairs. We draw on the experiences of financial counsellors, who deal primarily with clients in financial crisis, in order to determine these drivers and inhibitors. The theoretical framework for this research is guided by TpB (Ajzen, 2005; Ajzen, 1991) which is an extension of the Theory of Reasoned Action (TRA) developed during the 1970's by Fishbein and Ajzen.<sup>3</sup> We determine that a complex array of

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<sup>2</sup> Financial literacy is defined as "...a combination of financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions and ultimately achieve individual financial well-being" (Atkinson and Messy, 2012 p.2).

<sup>3</sup> The TRA is based on the notion that performance of behaviour is immediately preceded by the intention to perform the behaviour and that intention is formed by attitudes to the behaviour and subjective norm. Attitude to the behaviour and subjective norm are formed by beliefs about the behaviour and personal normative beliefs (Ajzen & Fishbein, 2005; Ajzen & Fishbein, 1980), and these are constructed from a number of influencing background factors, including socio-economic, age, gender, experience, and education. The TpB extended the TRA in that it included a measure of control beliefs and perceived behavioural control along with normative

factors influence financial capability and present 23 factors in five categories that are aligned with TpB in a descriptive framework on financial capability. This framework should be of use both for those developing (and conducting) financial literacy/capability programs and for those researching them.

The remainder of this paper is structured as follows. In the next section we discuss the TpB factors and their link to financial capability. This is followed by the presentation of the method and data in section 3, the results in section 4 and the final discussion and conclusions in section 5.

## **2.0 TpB AND FINANCIAL CAPABILITY**

Four categories of factors are identified and drawn from TpB: (1) background factors; 2) attitudes; 3) normative influence; and 4) perceived behavioural control. In addition, we added skills and knowledge due to the relevance of this to the financial capability construct as discussed above. In this section we briefly explore each of these in relation to their relevance to financial capability with the section titles forming the research questions for the paper.

### **2.1 Do Background Factors Influence Financial Capability?**

It is widely reported in the literature that individuals with lower education levels including those without a university (college) education have lower financial literacy and/or lack the necessary numeracy skills (Lusardi and Mitchell, 2007a, 2013). Some studies report that background factors such as parent's education levels and the children's financial literacy are significantly correlated (Lusardi et al. 2010; Mahdavi, 2012). Knowledge and exposure to parent's financial behaviours such as saving and investing (Chiteji & Stafford, 1999; Li 2009; Shim et al., 2009) as well as whether their parent's held stock and retirement accounts when they were teenagers (Lusardi et al. 2010) have also been reported to have an impact on an individuals' financial literacy. Furthermore, Berheim and Scholz (1993) report very strong correlations between education and wealth accumulation. With regards to gender, Mahdavi (2012) reports that even well educated women have low financial literacy. The literature suggests that background factors have an impact on an individual's financial capability. Suffice to say that an educated, employed male living in an urban area to be more financially capable than his peers (Lusardi & Mitchell, 2009; Klapper & Panos, 2011) especially if his parents were educated (Lusardi et al. 2010).

### **2.2 Do Attitudes Influence Financial Capability?**

It has also been reported in the literature that having a short term rather than a long term focus, having no concern for financial matters, being materialistic (aspirational) influence the development of financial capability (ANZ & AC Nielsen, 2005). Parents' financial attitudes and beliefs were also found to be very influential on their children's financial attitudes and beliefs (Hira, 1997). In particular their parent's socialization and formal education positively influence the financial knowledge, skill and attitudes of their children (Lyons et al., 2007; Lyons et al. 2006; Moschis, 1987). Shim et al. (2009, p. 720) reports that "self-actualising values were found to be related to young adults' financial attitudes". Self-actualising values are achievement oriented (Shim & Maggs, 2005) whereas social-self oriented values are more about seeking an exciting life (Shim et al., 2009). Moreover, personal values strongly

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beliefs and behavioural beliefs that were already included in the TRA (Armitage & Connor, 2001). This inclusion was seen as having the potential to better explain intention, and has been found to provide greater explanatory power to the model in many studies (Armitage & Connor, 2001). Other factors have also been shown to influence intention and behaviour such as prior experience and past behaviour which improved the explanatory power of the TpB model in a study of share purchase (East, 1993).

influence attitudes which determine behaviour (Homer & Kahle, 1988; Lotz et al. 2003; Shim & Eastlick, 1998; Shim & Maggs, 2005). Having focused achievement oriented personal values appear to promote financial capability.

### **2.3 Do Normative Influences Impact Financial Capability?**

By normative influences we are referring to three factors: 1) influences of a partner, family and friends; 2) the presence of a mentor; and 3) social expectations. Behavioural economists report that most individuals do not behave rationally and predictable, when it comes to spending money (ASIC, 2011b). Even though an individual may be financially literate, this same individual may behave in an irrational financial manner (West, 2012; Citi Australia, 2010). To make personal finances even more challenging, Citi Australia (2010) reports that most individuals care what others think about their personal finances. So much so that, even if they know they should do something, they may not follow through with it because they are worried that their peers might not approve (Citi Australia, 2010). However, Hira (1997) found that friends are an important source of influence when it comes to money values but more so among 20-39 year olds. Family and friends are often called upon for financial advice/sound boarding, before making a financial decision, especially amongst individuals with low education (Lusardi & Mitchell, 2013). Therefore, the financial mentors sought may not have financial qualifications but are more likely to be someone with more life experience making financial decisions. Therefore, partnerships between financial literacy educators and financial planners/advisors may be worth considering (Blue & Brimble, 2013; Finke, 2013). As individuals who lack the presence of a mentor or support person who can provide motivation and encouragement, and also act as a trusted person with whom they can talk about money appears to be at a disadvantage.

### **2.4 Do Perceived Behavioural Control Influence Financial Capability?**

An individual's self-confidence and their belief that things will change and prosper are perceived behavioural controls. Behaviour intentions are used to predict behaviour and have been reported to be the most important predictor of plan completion behaviour (Xiao & Wu, 2008). Therefore, having positive beliefs about your financial circumstances and financial future are believed to be a positive influence since it has been reported that beliefs (personal values) influences your attitudes which influences your behaviour (Homer & Kahle, 1988; Lotz et al. 2003; Sim & Eastlick, 1998; Shim & Maggs, 2005). Also, financial well-being is reported to be one of five elements of what makes a worthwhile life (Anielski, 2007). Therefore, some level of financial resilience and/or self-confidence along with a belief that things can change appear to be necessary elements in enhancing financial capability.

### **2.5 Do Skills and Knowledge Influence Financial Capability?**

Financial practices such as cash-flow management, financial planning and goal setting involve a certain level of numeracy and research skills. Research reports that individuals who plan have higher savings and wealth accumulation (Ameriks et al. 2002; Lusardi 1999) than those individual who fail to plan. Stawski et al. (2007) reports that the benefits associated with retirement planning and having clear goals for retirement have to do with establishing savings tendencies. Moreover, financial literacy/capability is associated with higher levels of retirement planning and wealth accumulation in retirement (Ameriks et al. 2003; van Rooij et al. 2012; Lusardi & Mitchell, 2007a, b; 2009).

Thus the factors drawn from the TpB are applicable to financial capability. Empirically, the question of what elements of these factors are drivers and inhibitors of financial capability remains. We will seek to address this in the following sections.

### **3.0 DATA AND METHOD**

A qualitative research approach was selected for this study to facilitate in-depth descriptions of the experiences (Lichtman, 2006) financial counsellors' encounter. It was also used to understand their perceptions of what inhibits and promotes financial capability. Through this we seek to answer the following research questions: (1) what are the factors that facilitate financial capability and effectiveness; (2) what are the factors that impede the development of financial capability; and (3) what factors impact on the development of intention to engage in financially effective behaviours?

#### **3.1 Recruitment of Financial Counselors**

Financial counsellors offer a unique perspective on the financial capability issue as they assist clients who are in financial crisis through a range of factors including life events, overuse of credit, gambling and lack of skills and knowledge. In addition, they provide group based community education programs to a range of constituent groups with the aim of increasing the financial capability of the participants. All financial counsellors in South East Queensland and in the Wide Bay region were invited to participate in a focus group. In all, 18 financial counselors (5 men and 13 women) participated in the focus groups, which were held in Brisbane (2 groups, 7 and 4 participants) and in Hervey Bay (1 group, 7 participants). Participants also completed a brief demographic questionnaire to identify their income, education, and age.<sup>4</sup>

#### **3.2 Use of Focus Groups**

Focus groups are characterised by three essential components: devotion to data collection; the group discussion is the data source; and the researcher's role to collect data during the group discussion is known (Morgan, 1996). In the context of this research, focus groups were chosen as an appropriate research method as they can stimulate expression of ideas and opinions from discussion within the group. This interaction provides a potentially richer source of data than might otherwise occur from individual or group interviews, where participants are more likely to respond to the researcher rather than to the dynamics and interaction of the group itself.

The focus groups were conducted using a standardised approach, and a discussion guide was developed to stimulate the discussion and allow for probing where necessary. The discussion questions began with an ice-breaker that asked participants to recall their first pay from employment and what they did with that money. This led on to participants recalling their own financial decisions and then finally asked them to reflect on the factors that contribute to and inhibit financial capability and effectiveness. The focus groups were recorded and transcribed.

#### **3.3 Coding the Data**

The transcribed interviews were analysed using NVivo. To begin the data was sorted into major categories and then the data was re-examined once it was placed into a category. Coding was developed through a line-by-line examination of the text to identify themes. This coding was refined to identify five main categories and 23 concepts (factors) which are illustrated in Table 1. These findings have also been compared to those reported in the literature in the discussion section of this article.

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<sup>4</sup> The project obtained research ethics clearance from Griffith University for this method and the instruments used.

## 4.0 RESULTS

This section presents results from the focus groups structured around the categories in the TpB plus Skills and Knowledge. Within each of these categories a number of factors were identified in the focus groups, and these are illustrated with example participant responses. Table 2 summarises these factors by category and according to whether the factor promotes or inhibits financial capability as determined in the focus groups.

**Table 1: Factors associated with financial capability**

Category	Factors that influence financial capability
1 - Background factors	<ol style="list-style-type: none"> <li>1. Family upbringing and childhood experiences</li> <li>2. Security of employment, location and relationships</li> <li>3. Life changing events</li> <li>4. Income</li> <li>5. Gender</li> <li>6. Health</li> <li>7. Access to Credit</li> </ol>
2 - Attitudes	<ol style="list-style-type: none"> <li>8. Money management</li> <li>9. Risk appetite</li> <li>10. Desire for change</li> <li>11. Planning horizon</li> <li>12. Money consciousness</li> <li>13. Spending</li> </ol>
3 - Normative influences	<ol style="list-style-type: none"> <li>14. Influence of a partner, family and friends</li> <li>15. Mentor</li> <li>16. Social expectations</li> </ol>
4 - Perceived Behavioural control	<ol style="list-style-type: none"> <li>17. Self-confidence/esteem</li> <li>18. Belief - future change</li> <li>19. Belief - future prosperity</li> </ol>
5 - Skills and Knowledge	<ol style="list-style-type: none"> <li>20. Cash flow</li> <li>21. Planning and goal setting</li> <li>22. Numeracy and research skills</li> <li>23. Knowledge</li> </ol>

### 4.1 Background Factors

There are seven background factors that arose from the focus groups as factors that inhibit financial capability and six that promote financial capability.

#### *Family Upbringing and Childhood Experiences*

The first of these factors was family upbringing and childhood experiences which had the potential to either positively or negatively affect financial capability as children developed skills from parents. This factor was seen as highly important as it had the potential to influence ones financial capability across a wide array of dimensions including financial decisions, access to resources, skills, social expectation and confidence. In particular, learning behaviours within the family environment were seen as influential on future behaviour. Importantly, having a parent who was an effective financial manager was seen to have a positive influence on not only skill development but also on behaviour.



*'My mother was the financial manager in our household if you like and she did an extremely good job, I mean I come from very, very humble beginnings ...it was a tough road for them and I think I grew up in that environment and ... I would like to think that I've been a reasonable money manager myself over the years' Male, FV2*

However, the connection with early experience and parental modeling, and the financial decisions and behaviour of adult children was not seen as predictable or straightforward, with some participants reflecting on different attitudes and behaviours of siblings and how children can make decisions that are quite different to the ones that their parents made, as a re-action to their upbringing.

### **Security**

Security of employment, location and relationships was an important factor that was seen to promote financial capability, while insecurity of these factors was detrimental to the development and maintenance of financial capability. This was related to having sufficient income to provide for basic needs, but also connected with emotional and mental health factors. In addition, fulfillment of these fundamental needs was an influencing factor on the level of security a person felt, their attitude to risk and their self-esteem.

*'I guess part of our lack of confidence was that I was sort of in and out of work because every time we moved I would have to wait until I could get another teaching position or some part time teaching or something like that and when the children were small it was very awkward to have, for me to teach full time because of the difficulties with finding someone to mind the children and things like that.' Female, FV1*

### **Life Changing Events**

Life changing events, while creating problems, also created opportunities for people to make different choices about their financial future and behaviour. It was seen as an opportunity for change. Most life changing events that participants referred to were associated with interpersonal relationships, and included widowhood, divorce, marriage and having a family.

*'Leaving my husband was a pretty good financial decision, the mortgage was maxed and the credit cards were maxed and the personal loan was maxed and it was only after I separated and had control of the finances that things started to go back in the black instead of being in the red.' Female, FV2*

### **Income**

Insufficient income was regarded as a major impediment to developing financial capability. Many difficulties were reported by individuals whose only source of income was social assistance from the Government (Centrelink) or were in casual and poorly paid employment. In particular, when coupled with debt repayments in addition to general living expenses, an impact on self-esteem and self-belief seemed insurmountable. However, many people in this situation may in fact be financially capable within their resources, and be making the most efficient decisions regarding spending and credit use.

*'You look at what you were earning and what you needed to just survive you think well, I really was actually a incredibly good financial manager at the time with what I had, which wasn't enough and I should have been patting myself on the back and the fact that I had a credit card maxed is what it took.' Female, FV2*

Lack of income and poverty along with the desire to escape from difficulties is a factor that may increase the propensity to spend on smaller items, and decrease the ability to escape the lure of shopping centers.

*'The poorer you are, the more attractive all those bright lights are ...when you're lino at home is 50 years old and all torn and in bits and your kitchen cupboard doors are hanging off and you have crappy bits of peeling Formica and crappy old furniture, you just want to get out of your house, you get out of your house and you go to the shops and you look at all of these little things, what can you possibly afford, the little things that you can afford like a scatter rug or a vitamiser or something and you think well if I only had that then things would be okay, then my house would feel would feel like a home, then the kitchen wouldn't look so disgusting and so you are trying to sort of Band-Aid your life and I guess because money is worrying you so much it is affecting emotionally and sort of possessing you and it makes you thrive for shopping more.'* Female, FV2

### **Gender**

Gender also emerged as a factor with women are particularly vulnerable and suffer financially and emotionally when they are in relationships where money is used as a mechanism for control, or where they must share their financial resources in order to secure the relationship.

*'I did meet someone at one stage and I felt oh this is it this is going really well until one day there was a peculiar question asked of, if I remarried again would I put everything in joint names and I still could never ever work out how the lie rolled off my tongue and I said oh everything is in trust for the kids {LAUGHTER} and he disappeared within a few weeks.'* Female, FVI

Women are also vulnerable to exploitation within the relationship, and even if they are good managers within their income, they are at risk of falling into debt if they allow the partner to access their accounts or take responsibility for loans for him.

*'But it's also they get a guy and they invest so much trust in the guy because they really want this to work, you know they have very romantic ideas about relationships and they invest just so much trust in the guy, it goes well for a little while then they break up, the number of times the guy, and he's got her pin number and he goes to the bank and completely clears the account, so she's got nothing for the rent, nothing for the electricity no food for the baby, nothing and that happens again and again and again.'* Male HB

### **Health**

Background factors related to physical and mental health and addictions impacted on the ability to effectively manage their personal finances. Ability to earn income, the cost of health care, carer stress, and the effect of living stressful lives compound existing problems of poor physical and mental health. Depression and mental health issues related to work life balance increase the propensity to spend money to provide temporary relief from these issues. In addition, spending on addictions, and associated effects of addictions affect the ability to change, and impede efforts to change financial behaviour.

*'Someone who is highly stressed, over worked um it's very emotionally vulnerable and that's exactly the profile of person who to keep themselves mentally stable will absolutely need to go and have the facial or the cup of coffee or the whatever, just to get them through ...to the next week.'* Female FV2

### ***Access to credit***

Change in access to credit was seen as a problem, particularly for those who use credit to buy household items and to supplement income for everyday expenses. In particular, the marketing of credit and lending criteria of financial institutions were seen to compound financial problems.

*'Anyone could walk in and get money nowadays it is so available so it's the lending institutes.'* Male, HB

*'There is an expectation on everywhere you go, where's your credit card, I don't use one, oh there is something wrong with you then.'* Male, HB

## **4.2 Attitudes**

There are six factors that were identified to promote and inhibit financial capability under this category.

### ***Entitlement***

We report that it was perceived that an attitude of entitlement, where others are responsible to provide for material goods and experiences in addition to basic necessities of living does not contribute to the development of financial capability. An example of this is the provision of welfare benefits by Government (Centrelink) directly to the child once he or she turns 16. The child sees this money as disposable income, and there is a belief that they are entitled to spend this money in any way they wish, with no responsibility to provide for their living expenses.

*'There is also an issue with say Centrelink benefits and things like that, that I have noticed time and time again, when the child hits 16 and they are entitled to Youth Allowance that that's the kids money to spend, even though Mum is struggling along on sole parent pension and trying to support that child and all of the other kids with less money, the kid is not willing to hand the money over or there is not something in there that says hey this is to support you, this is pocket money, and it's mine and I'm going to spend it and it is causing more hardship for the family.'* FV1

There was a view that some people believe that they are entitled to items that are not generally affordable within the amount that is provided as a benefit from Centrelink. These items were seen to be normal entitlements, as shelter and food is.

*But it is also coming back to this expectation of entitlement, the young person on \$430 from Newstart, He believes, or she believes I must have a car, I'm entitled to have a car I can't have any sort of life without a car I can't get a girlfriend without a car, or whatever.'* HB

### ***Spending as reward or to compensate for deprivation***

Living with financial stress and the accompanying need to not spend on essential items in order to pay bills contributes to a desire to spend more when money becomes more available.

This reward as compensation then leads to further financial stress, and so continues the cycle. Also, ongoing poverty and deprivation is an influencing factor on the desire to spend, with more difficulty in control over spending experienced when money is less available. In contrast, financial stability and greater access to money is a moderator on the desire to spend.

*'I think that when I was very, very poor and much shorter of money I had so much more urge to go and spend, which was a lot harder to control and I had to really work to control it and I think it was and emotional need looking back on it and the more financially stable I am I have no trouble at all now. I am flat out talking myself into spending \$3 on a coffee if I go into a Westfield shopping centre. I just don't feel the need to spend like I used to, I know it's tied to your emotional state and your feeling of yourself and your needs in life so yeah it's just a lot harder for people I think, than for better off people. What you can't have, it's like being hungry and being in a food shop, it really makes you want to eat doesn't it.'* Female, FV2

### **Materialism**

For some, a measure of success is the appearance of wealth and the accumulation of material goods rather than assets. This attitude is linked to social expectation.

*'People who have the perception of being extremely wealthy really a lot of them, really are just flying by the seat of their pants'* Male, FV2

### **Living within your means**

Comparisons were drawn between people who manage effectively on small incomes and those who cannot manage on greater incomes. In particular, people who live within their means were described as having different values, being frugal and making effective decisions about wants and needs. Adopting attitudes that led to people living within their means is core to financial capability.

*'They have probably got a different set of values to, to people that think they have got to have these things, that those other people would think would be frills that they can do without, when they have to in life, and where the others have got to have them now, regardless of whether they can afford them or not. They think it is essential to have something that is really is a non-essential really.'* Female HB

### **Risk**

Participants responded to discussion related to investment decisions and financial effectiveness with comments and reflections on attitude to risk as an influencing factor, and some felt that an overly cautious approach to opportunities that they had impeded their financial capability and effectiveness. This was a limiting factor on their accumulation of wealth, and there was regret associated with the memory of past inaction for what would have been profitable investment opportunities. In addition, financially effective people were described as those who recognise opportunities and are willingly take on risk.

*'Working in the Financial Counseling industry I'd seen a great many bankruptcies and it took quite a number of years to realise that that was having quite an impact on my making decisions on financial future, if it wasn't 100% or 90% secure I didn't sort of want to jump into it and it is only just recently that I have started to dabble again.'* Female, FV2

*'The only thing that stopped us from going ahead with that was our traditional value of always being secure and never taking a high risk and never stepping out on the water.'*  
Male HB

### **Change**

Desire for change is integral to change in behavior. This desire can begin with dissatisfaction with the current situation and that the only way things can change is if they take action. Concern and worry provide motivation for change. Financial counsellors saw that clients with high levels of anxiety about their situation were more likely to have a sufficiently strong desire to change and therefore were more likely to accept assistance and move towards financial capability.

*'I think people have to want it, have to want to change for a start, that they actually get to the stage where you know only I can do something about this,'* Female, FV2

### **Focus**

Focus only on the present is a major impediment to financial capability, with short term needs being met at the expense of medium and long term needs. This attitude of living for today and not worrying about the future compounds existing problems and does not provide a sound basis for financial management. Alternatively those who focus on the future, set goals and plan are more likely to be financially effective.

*'There is no planning, it is living from week to week, the money that comes in there is nothing set aside for bills that are intermittent, their registration is not pre planned, their electricity is not pre planned it is, that is the amount of money we've got and subsequently when a bill then does arrive it actually then takes away from the whole of their lifestyle.'*  
Female, FV1

*'I keep saying to her S, you know like, what happens if you know, something happens down the track or whatever, and she's oh you only live once, that's her attitude, live for the moment.'* Female, FV2

### **Concerned about money**

Concern about money is a requirement for change and for financial capability. Those that express that they are not concerned or don't care about money are unlikely to be able to change their actions. However, this 'unconcern' is seen to be more of a shield behind which the person has ambivalent feelings about their relationship to money.

*'I think they care about spending money you can see that, if they really didn't care about money they wouldn't have as big debt's on their credit cards so um it is a funny sort of ambivalence saying you don't care about it but actually being the person who's at the shops all the time or at wherever, clubs or wherever spending it.'* Female, FV2

## **4.3 Normative Influences**

There are three factors that emerged as promoting and inhibiting financial capability under this category.

### ***Influence of Partner, Family and Friends***

Family, friends and partners can assist the development of financial capability in that they have complementary skills, allow learning from each other and work together towards their

goals. Participants reported that to some extent the decision to commit to a relationship is influenced by the financial capability of the potential partner, in addition to love. However, in vulnerable relationships, decisions to commit to a partner are influenced by romantic notions with pragmatic considerations having less importance. This influence works against the development of financial capability and entrenches the person in financial distress. In particular, where partners have different values, attitudes and upbringing about money then it is likely that there will be conflict over financial decisions, and the benefits of working effectively together as a couple will be lost. Friends, as well as partners and family also influence financial decisions and actions.

*'And their friends as well, it's a peer thing it what their friends are all doing, and it's who they compare themselves with.'* Male HB

### ***Social Expectations***

Related to the attitude of entitlement is the normative influence of social expectations of what is an acceptable consumption. Expectations of new furniture and large homes, cars, and mobile phones were examples given to support the idea of a sense of entitlement. This was in contrast to personal experience of participants of when they were young and establishing their first home.

*'I know when I started out when I first got married, a starter home, we all started with what we call a starter home which is just a little place, the best you could afford, a starter home now is 4 bedroom with an ensuite, double garage and a pool, they start at the top now.'* Male, HB

*'And the pressure on people, you know young ones are expected to have a nice home and a new four wheel drive, there wasn't that expectation on us when we were young.'* Female, HB

### ***Presence of a Mentor***

Having the support and encouragement of a mentor assists in the development of financially effective behaviours. It is not imperative that this person is a family member, nor that this mentorship is established at an early age, however those that have access to such a person are at an advantage. Financial counsellors and volunteers in community organizations can play an important role in developing the motivation and assisting the person to recognize opportunities so that they are able to become more financially effective.

*'So it's so good to have someone to come along and encourage you and give you opportunities.'* Male, HB1

*'Well they have got to have encouragement or support from family or someone outside, friends or whatever or counselors and that can help them along'* Male, HB

Mentors can act as a sounding board for financial decisions. Those that do not have access to such a person find it difficult to talk about financial decisions and money issues, and are not provided with encouragement to maintain motivation. This impedes the development of financial capability.

*'He sort of, would pick up the phone and ring me and say hey dad what do you think about this what do you think about that.'* Male, FV2

*'They have got no one giving them something to think about, should I buy that or shouldn't I buy that, like you do with your dad you know.'* Female, FV2

#### **4.4 Perceived Behavioural Control**

There are three factors that were identified to promote and inhibit financial capability under this category.

##### ***Self-Confidence/Esteem***

Self-confidence is central to financial capability, and in particular any attempt at change needs to have a belief in self and confidence. Family upbringing, vulnerable relationships and poverty work against the development and maintenance of self-confidence and esteem.

*'If you grow up and are told that you will never be nothing and never amount to anything it is very hard if you are sitting in that situation, to believe in yourself.'* Female, HB

*'They have to have self-worth, they have to believe in themselves, and otherwise you can't make a decision at all.'* Female, FV1

Poverty, and messages that reinforce that you are an ineffective money manager, work against the maintenance of self-confidence and esteem, and as such further compound difficult financial circumstances by making change more difficult to achieve.

*'I actually think it gets back to your self-esteem too because at the time when you're dirt poor and everything is crappy around you, you sort of feel when like you're obviously a hopeless money manager.'* Female, FV2

##### ***Belief That Things Can Change***

People in financial difficulties have often lost the belief that they can change their circumstances and become resigned to continual problems with no resolution. Developing a belief that things can change and that they have the ability and the power to make changes is integral to the development and maintenance of financial capability. Financial counsellors see this as a most important role that they play with their clients. It is also important because clients often lack an effective financial mentor in their lives who would ordinarily provide encouragement and support.

*'It is important I find to ask them how they've come to this point, how they've survived you know and they'll probably say that they've struggled and I say well, look really you have done really well, because we all want to hear that we've done ok, you know, so I just move on from that and sort of look at their strengths and ok well how do you think, now you can do this better.'* Female, FV1

The development of self-belief, and belief in their ability to enact change opens up thinking so that opportunities are identified and change becomes possible.

*'She had a belief about her ability, or had a belief in income, she sort of said like I'm not going to worry about that because it will happen'* Female, FV2

*'So many of them have said you believed in me, you told me I could do it and I have done it.'* Female, HB

### ***Belief That They Will Prosper***

Those who have confidence and belief in a positive future are more likely to identify opportunities and to maintain a future focus.

*'The incredible part, and I've actually looked at this, she had a belief about her ability, or had a belief in income, she sort of said like I'm not going to worry about that because it will happen and she would even though she kept a good budget, she bought herself a house while she was on the benefit through the government plan, you know the housing commission and um sometimes she was really poor but she didn't act poor, I can remember us going out one night and she only had a little bit in her purse but she looked like...(a million dollars),'* Female, FV2

### **4.5 Skills and Knowledge**

There are three factors that were identified to promote financial capability and four that inhibit it under this category.

#### ***Cash Flow Management***

Cash flow management and budgeting are important skills in that they provide a realistic estimation of income and expenses. In many cases people in financial difficulties have unrealistic ideas of what they earn and what the purchasing power is of that income. Financially capable people, on the other hand are aware of the cost of living and of their income and expenditure. While budgeting was important, there was acknowledgement that this term had negative connotations of deprivation and that other terms such as money plan and cash flow had better acceptance. It was also acknowledged that any attempt at budgeting by clients, no matter how naïve, should be praised, as it indicated a desire to change, even if the skill was lacking.

*'You sort of have to sit there, well how long does it take you, that's 5 years and the credit card is now \$10,000 so you have been supplementing your income for \$2000 ever year which is more than what you earn and now you are at the stage, this is how you got there, and then they suddenly realise well yes I have because it is all of those extras go on the credit card.'* Female, FV1

#### ***Planning and Goal Setting***

Financially capable people were seen as having goals and a plan for the future. Those who did not have goals, no matter how short term or small, were at a disadvantage because goals provide the momentum to continue to move forward and also achievement of goals is affirming and contributes to self-esteem and a belief that they can change their circumstances.

*'Good planning is very important, like for instance if you start off with not very much but you have a plan as to where you want to go then they can often get there by just being careful.'* Female FV1

#### ***Numeracy skills and Researching***

Basic numeracy skills, and being comfortable with using simple calculations along with the ability to research and find information are necessary skills for financial capability.



*'I'm convinced of it, you've got to understand figures'. Female, FV1*

*'I don't think you can be ad-hoc it's got to be planned it's got to be researched properly'. Female, FV1*

### **Knowledge**

Financial capability was not seen as having a relationship to knowledge; in fact in some cases knowledge can be detrimental to financial capability.

*'I always thought that more a case of sort of understanding how to handle money until I met an accountant who was in financial strife up to his neck, over his head somewhere so I thought that is obviously not the answer.' Female, FV1*

*'I find it interesting that the academic level of a person is not necessarily reflective of their economic ability to manage their finances, very interesting in fact it is almost the reverse.' Male, HB*

Applying categories drawn from the research and theory of planned behavior (Ajzen, 2005 & 1991) we identify 23 factors that appear to influence the financial capability of those in financial difficulty (summarised in table 2 below). Of these, most can act to be both inhibitors and drivers, highlighting the complex nature of financial capability and the difficult task of those seeking to improve it.

**Table 2 Descriptive Framework for factors associated with financial capability**

Category	Factors that promote financial capability	Factors that inhibit financial capability
Background factors	<ol style="list-style-type: none"> <li>1. Family upbringing and childhood experiences</li> <li>2. Security of employment, location and relationships</li> <li>3. Life changing events</li> <li>4. Income</li> <li>5. Gender – male</li> <li>6. Health - good</li> </ol>	<ol style="list-style-type: none"> <li>1. Family upbringing and childhood experiences</li> <li>2. Insecurity of employment, location and relationships</li> <li>3. Life changing events</li> <li>4. Insufficient income</li> <li>5. Gender – female</li> <li>6. Health – problems (emotional, physical and addictions)</li> <li>7. Access to credit</li> </ol>
Attitudes	<ol style="list-style-type: none"> <li>1. Living within your means</li> <li>2. Risk – willing to take a risk</li> <li>3. Desire for change</li> <li>4. Future focus</li> <li>5. Concern about money</li> </ol>	<ol style="list-style-type: none"> <li>1. Entitlement</li> <li>2. Risk – unwilling to take a risk</li> <li>3. Materialism</li> <li>4. Focus on present</li> <li>5. Unconcerned about money</li> <li>6. Spending as reward or to compensate for deprivation</li> </ol>
Normative influences	<ol style="list-style-type: none"> <li>1. Influence of a partner, family and friends</li> <li>2. Presence of a mentor</li> <li>3. Social expectations</li> </ol>	<ol style="list-style-type: none"> <li>1. Influence of a partner, family and friends</li> <li>2. Absence of a mentor</li> <li>3. Social expectation</li> </ol>
Perceived Behavioural control	<ol style="list-style-type: none"> <li>1. Self-confidence/esteem</li> <li>2. Belief that things will change</li> <li>3. Belief that they will prosper</li> </ol>	<ol style="list-style-type: none"> <li>1. Lack of confidence/ self esteem</li> <li>2. Lack of belief that things will change</li> </ol>
Skills and Knowledge	<ol style="list-style-type: none"> <li>1. Realistic about their cash flow</li> <li>2. Planning and goal setting</li> <li>3. Numeracy and research skills</li> </ol>	<ol style="list-style-type: none"> <li>1. Unrealistic about their cash flow</li> <li>2. No planning or goal setting</li> <li>3. Poor numeracy and research skills</li> <li>4. Knowledge</li> </ol>

## **5.0 CONCLUSION AND FUTURE RESEARCH**

We find that financial capability and financial effectiveness are complex and difficult to define. This suggests that more effort and rigor is required to support the development, design and evaluation of financial literacy/capability programs in the pursuit of positive outcomes for participants. The findings from this research show that there are wide ranging factors that contribute to financial capability and consideration of these in the design of financial literacy resources, programs and interventions may contribute to their effectiveness. These results must be viewed with several research limitations in mind. First, this research reflects the opinions and experiences of a sample of 18 financial counsellors in an Australian context and hence the results may not be generalisable. Second, the counsellors themselves are not financial experts and no action was undertaken to determine the level of financial capability of the participants.

This research contributes to our understanding of financial capability, by exploring the factors that facilitate and impede financial capability from the perspective of financial counsellors in Australia using a focus group approach. Financial counsellors, who are in a position of working with people in a financial crisis also witness significant change in some clients. This contributes to our understanding of the factors that influence financial capability and effectiveness. In addition, they have provided some insight into the types of interventions that may prove effective. Our contribution to the literature from this research relates to the development of future programs and interventions dealing with financial literacy and capability. It should be noted that, to a large extent, programs and interventions are being developed with the best of intentions but with insufficient rigorous research to inform the design of such a program. Hence, understanding the impact of these factors on the formation of intention and then the influence of intention on behaviour is an important missing link that this paper starts to address.

In summary, it is clear that financial counsellors have an important role to play in the development of financial capability, and by acting as mentors and addressing some of the factors reported in this paper they may be able to improve client outcomes. In addition, there is also a need to extend this research to other stakeholders in financial capability including financial planners and others. This will provide a wider view of the issues concerning financial capability to both further enhance our understanding of it and to assist in the development of programs and other resources to develop the financial capability of the community.

## References

- Atkinson, A & Messy, FA 2012, 'Measuring Financial Literacy: Results of the OECD INFE Pilot Study', OECD Working Papers on Finance, Insurance and Private Pensions, No. 15, *OECD Publishing*.
- Australian Securities and Investments Commission (ASIC) 2011a., 'National financial literacy strategy'. Report 229. Sydney: Australian Securities and Investments Commission.
- Australian Securities and Investments Commission (ASIC) 2011b, 'Financial Literacy and Behaviour Changes', Report 230. Australian Securities and Investments Commission, Sydney.
- Ameriks, J, Caplin, A & Leahy, J 2003, 'Wealth accumulation and the propensity to plan', *Quarterly Journal of Economics*, vol. 118, pp. 1007-1047.  
<http://dx.doi.org/10.1162/00335530360698487>
- Ameriks, J, Caplin, A & Leahy, J 2002, 'Retirement Consumption: Insights from a survey'. NBER Working Paper No. 8735.
- ANZ and AC Nielsen 2005, 'Understanding Personal Debt & Financial Difficulty in Australia'. Retrieved from:  
[http://www.anz.com.au/resources/2/6/26028f804d2bd4f282339b69785e67b9/ANZ\\_UPD\\_fin\\_difficulty.pdf?MOD=AJPERES](http://www.anz.com.au/resources/2/6/26028f804d2bd4f282339b69785e67b9/ANZ_UPD_fin_difficulty.pdf?MOD=AJPERES)
- Ajzen, I 1991, 'The theory of planned behaviour'. *Organizational behaviour and human decision processes* vol. 50, no. 2, pp. 179-211.
- Ajzen, I 2005, 'Behavioral Interventions based on the Theory of Planned Behavior', available from <http://www-unix.oit.umass.edu/~ajzen/pdf/tpb.intervention.pdf> accessed September 2005.
- Ajzen, I & Fishbein, M 1980, 'Understanding attitudes and predicting social behaviour'. Englewood Cliffs, NJ: Prentice Hall.
- Ajzen, I & Fishbein, M 2005, 'The influence of attitudes on behavior'. *The handbook of attitudes*. Albarracin, D, Johnson, BT, and Zanna, MP (Eds.). Mahwah, NJ, Erlbaum: 173 - 221.
- Anielski, M 2007a. *The Economics of Happiness: Building Genuine Wealth*: New Society Publishers.
- Armitage, C & Connor, M 2001, 'Efficacy of the Theory of Planned Behaviour: A meta-analytic review', *The British Journal of Social Psychology*, vol. 40, pp. 471 - 499.  
<http://dx.doi.org/10.1348/014466601164939>
- Basic Skills Agency 2004, Adult financial capability framework. London, Basic Skills Agency.
- Bernheim, D & Scholz, JK 1993, 'Private Saving and Public Policy', in *Tax Policy and the Economy*, Poterba, J (ed.), MIT Press 7: 73-110.
- Blue, L & Brimble, M 2013, 'Reframing the expectations of financial literacy education: bringing back the reality'. Working paper.
- Chiteji, N, & Stafford, F1999, 'Portfolio Choices of Parents and their Children as Young Adults: Asset Accumulation by African American Families', *American Economic Review* vol. 89, pp. 377-380. <http://dx.doi.org/10.1257/aer.89.2.377>
- Citi Australia 2010, 'Evidence vs. Emotion: How do we really make financial decisions?' The Australian Institute, Canberra.
- Commonwealth of Australia 2002, Corporations (Financial Services Reform Amendments) Act.
- East, R 1993, 'Investment decisions and the theory of planned behaviour', *Journal of Economic Psychology* vol. 14, no. 1993, pp. 337-374.

- Finke, M 2013, 'Financial Advice: Does It Make a Difference?' In: *The Market for Retirement Financial Advice*. Eds. O. S. Mitchell and K. Smetters. Oxford, UK: Oxford University Press. Forthcoming.  
<http://dx.doi.org/10.1093/acprof:oso/9780199683772.003.0011>
- Hira, TK 1997, 'Financial attitudes, beliefs and behaviours: differences by age', *Journal of Consumer Studies and Home Economics* vol. 21, pp. 271-290.  
<http://dx.doi.org/10.1111/j.1470-6431.1997.tb00288.x>
- Homer, PM & Kahle, LR 1988, 'A structural equation test of the value-attitude-behaviour hierarchy', *Journal of Personality and Social Psychology*, vol. 54, no. 4, pp. 638-646.  
<http://dx.doi.org/10.1037/0022-3514.54.4.638>
- Klapper, L & Panos, G 2011, 'Financial Literacy and Retirement Planning: The Russian Case', *Journal of Pension Economics and Finance* vol. 10, no. 4, pp. 599-618.  
<http://dx.doi.org/10.1017/S1474747211000503>
- Li, G 2009, 'Information Sharing and Stock Market Participation: Evidence from Extended Families', Federal Reserve Board Working Paper.
- Lichtman, M 2006, 'Qualitative research in education. A user's guide', Thousands Oak: Sage.
- Lotz, S, Shim, S & Gehrt, K 2003, 'A study of Japanese consumers' cognitive hierarchies in formal and informal gift-giving situations', *Psychology & Marketing*, vol. 20, no. 1, pp. 59-85. <http://dx.doi.org/10.1002/mar.10059>
- Lusardi, A 1999, 'Information, Expectations, and Savings for Retirement' in Henry Aaron (ed.), *Behavioral Dimensions of Retirement Economics*, Washington, D.C.: Brookings Institution and Russell Sage Foundation, pp. 81-115
- Lusardi, A & Mitchell, OS 2007a, 'Baby Boomers' Retirement Security: The Role of Planning, Financial Literacy and Housing Wealth', *Journal of Monetary Economics* vol. 54, pp. 205-224. <http://dx.doi.org/10.1016/j.jmoneco.2006.12.001>
- Lusardi, A & Mitchell, OS 2007b, 'Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education', *Business Economics*, vol. 42, no. 1, pp. 35-44. doi: 10.2145/20070104 <http://dx.doi.org/10.2145/20070104>
- Lusardi, A & Mitchell, OS 2009, 'How ordinary consumers make complex economic decisions: financial literacy and retirement readiness', *NBER Working Paper 15350*.
- Lusardi, A, Mitchell, OS & Curto, V 2010, 'Financial Literacy Among the Young', *Journal of Consumer Affairs* vol. 44, no. 2, pp. 358-380. <http://dx.doi.org/10.1111/j.1745-6606.2010.01173.x>
- Lusardi A & Mitchell OS 2013, 'The economic importance of financial literacy: theory and evidence', Cambridge, MA: National bureau of economic research.
- Lyons, AC, Chang, Y & Scherpf, EM 2006, 'Translating financial education into behavior change for low-income populations', *Journal of Financial Counseling and Planning*, vol. 17, no. 2, pp. 27
- Lyons, AC, Scherpf, E & Neelakantan, U 2007, 'Intergenerational transfer of financial behaviors from parents to children', *The Journal of Consumer Education*, vol. 23, pp. 64-76.
- Mahdavi, M 2012, 'Financial Literacy among Educated Women: Room for Improvement', Working Paper, Smith College.
- Moschis, GP 1987, 'Consumer socialization: A life-cycle perspective', Lexington, MA: Lexington Books.
- OECD 2005, 'Improving financial literacy: analysis of issues and policies', Paris, France: OECD.
- Personal Finance Research Centre 2005, 'Measuring financial capability: an exploratory study', Financial Services Authority.

- Prawitz, AD, Garman, ET, Sorhaindo, B, O'Neill, B, Kim, J & and Drentea, P 2006, 'InCharge Financial Distress/Financial Well-being Scale: Development, Administration, and Score Interpretation', *Financial Counseling and Planning* vol. 17, no. 1, pp: 34-50.
- Roy Morgan Research 2003, 'ANZ Survey of Adult Financial Literacy in Australia: Final Report'. Melbourne, ANZ Banking Group.
- Shim, S, Xiao, JJ, Barber, BI, & Lyons, AC 2009, 'Pathways to life success: A conceptual model of financial well-being for young adults', *Journal of Applied Developmental Psychology* vol. 30, pp: 708-723. <http://dx.doi.org/10.1016/j.appdev.2009.02.003>
- Shim, S. & Eastlick, MA 1998, 'The hierachical influence of personal values on mall shopping attitude and behavior', *Journal of Retailing*. vol. 74, no. 1, pp: 139-160. [http://dx.doi.org/10.1016/S0022-4359\(99\)80091-8](http://dx.doi.org/10.1016/S0022-4359(99)80091-8)
- Shim, S. and Maggs, J 2005, 'A cognitive and behavioral hierarchical decision-making model of college students' alcohol consumption', *Psychology & Marketing*, vol. 22, no. 8, pp. 649-668. <http://dx.doi.org/10.1002/mar.20078>
- Stawski, RS, Hershey, DA & Jacobs-Lawson, JM 2007, 'Goal clarity and financial planning activities as determinants of retirement savings contributions', *International Journal Aging and Human Development* vol. 64, no.1, pp.13-32. <http://dx.doi.org/10.2190/13GK-5H72-H324-16P2>
- Steward, T 2013, 'Are efforts to boost financial literacy missing their mark?', Money Management. Retrieved on 23 August from <http://www.moneymanagement.com.au/analysis/financial-planning/2013/griffith-uni-mark-brimble-financial-literacy#.UhSxumWfj6Y.twitter>
- van Rooij, M, Lusardi, A, & Alessie, R 2012, 'Financial literacy, retirement planning, and households wealth', *Economic Journal*, vol. 122, pp. 449-478. <http://dx.doi.org/10.1111/j.1468-0297.2012.02501.x>
- West, J 2012, 'Financial advisor participation rates and low net worth investors', *Journal of Financial Services Marketing*, vol. 17, no. 1, pp. 50. doi: 10.1057/fsm.2012.4 <http://dx.doi.org/10.1057/fsm.2012.4>
- Wiener, R, Gross, K, Block-Lieb, A & Baron-Donovan, C 2004, 'High and Low SES Debtors: The Use of Psychological Measures to Determine Differences', Building Assets, Building Credit: A Symposium on Improving Financial Services in Low-Income Communities, Harvard University.
- Xiao, JJ & Wu, J 2008, 'Completing Debt Management Plans in Credit Counseling: An application of the theory of planned behavior', *Journal of Financial Counselling and Planning* vol. 19, no. 2, pp. 29-46.

