

LEARNING TO PRODUCE A FINANCIAL PLAN: STUDENT PERCEPTIONS OF INTEGRATING KNOWLEDGE AND SKILLS

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ABSTRACT

Tertiary education can play an essential role in ensuring that financial planners are professionally equipped to develop strategies and solutions that holistically address a client's circumstances and needs. Survey findings of undergraduate university students in this study reveal differing perceptions of learning the high-level skill of developing strategies and solutions within the process of Personal Financial Planning (PFP). Such differences are found to be associated with demographic groupings of age, gender, first language, home country and work experience. The findings suggest that financial planning programs offered by higher education institutions need to be designed to promote and assess deep learning through cohesive curriculum, practical modelling and work experience opportunities. The study also suggests that there is a need for additional research into the relationship between student perceptions and student performance in assessment tasks requiring students to produce a financial plan.

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Introduction

Overton (2008) describes Personal Financial Planning (PFP) as a process of strategic planning applied to the financial and economic resources of the person or family. This study, conducted at an Australian university, investigates the perceptions of demographically diverse undergraduate students of the difficulty of integrating PFP knowledge and skills in learning to produce a full financial plan as part of a financial planning capstone unit in an accounting degree program. The research question (RQ) addressed is:

RQ: What demographic variables are associated with student perceptions of the difficulty of integrating PFP knowledge and skills in learning to produce an SoA (Statement of Advice)?

Given market complexity and a general lack of financial literacy in society, quality advice provides broader economic and national welfare benefits (Cull and Whitton, 2011) as well as personal benefits to its consumers. As an industry, PFP has grown in social significance in recent decades as a result of increasing affluence and awareness within sections of society of the potential of proper planning to achieve goals in building wealth, protecting assets and funding long retirements (Warschauer, 2002; Cull, 2009; Hunt, Brimble and Freudenberg, 2011). However, professionalism in the industry and the quality of advice provided by financial planners has been questionable, especially in light of potential conflicts of interest posed by adviser commissions on recommended investment products (Rickard, 2006; Ripoll Report, Commonwealth of Australia, 2009; Lampe, 2010; Brimble and Murphy, 2012; Cull, 2015; Cull and Bowyer, 2017) and recent findings of the *Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry* (Commonwealth of Australia, 2018). Political agendas addressing the issue of protection of vulnerable consumers from poor advice include introduction of statutory fiduciary duty, as legislated in Australia from 1 July 2013, and banning of receipt of commissions, as legislated in the United Kingdom from 31 December 2012 and in Australia from 1 July 2013 (Boynton, Newitt and Flinn, 2012; Corporations Act 2001).

What is understood by professionalism in PFP may be an open question (Bruce, Ahmed and Huntly, 2011) and the finer aspects of the fiduciary nature of the financial adviser-client relationship may be arguable. In legal terms, however, professionals must exercise due care and skill (Corones and Galloway, 2013) and act in the best interests of the client (Corporations Act 2001). The benchmark standard of professionalism in terms of competencies in the financial planning process, ethical conduct, relevant experience and continuing professional development is further provided by the Financial Planning Standards Board (FPSB) (FPSB, 2013a; FPSB, 2013b) and the Financial Planning Association of Australia Ltd (FPA, 2013).

This study surveys university students on the difficulty they perceive in developing strategic advice for their major assessment task – a comprehensive financial plan known as a Statement of Advice (SOA). A duty of care and skill is inherent in the task, which requires the application of knowledge of a broad range of financial planning topic areas to develop, recommend and justify strategies to meet the short, medium and long-term goals of a fictional client whilst also considering risk tolerance, personal preferences and family circumstances. Despite receiving scaffolded instruction designed generally in accordance with the six-step financial planning process¹, some students

find it more difficult than others to holistically integrate all relevant matters in order to develop an appropriate SOA.

This paper contributes to the literature on education in PFP that has been of increasing interest to researchers, practitioners and regulators. It explores the importance of tertiary education in providing quality advice to consumers and applies research in strategic thinking and deep learning to financial planning. This research has practical implications for academics by highlighting the need for resourcing PFP programs effectively and provides suggestions as to how learning could be best facilitated in order to meet the differing needs of students. The paper may also make a contribution to discourse about enhanced protection of consumers of financial advice by confirming that appropriate education and training of advisers are essential.

Educational Expectations of Personal Financial Planning

Tertiary education is seen as playing an essential supporting role in the development of PFP as a traditional-style, self-regulating profession such as law and accounting, especially through universities establishing a research agenda and developing a coherent body of knowledge and national curriculum (Black, Ciccotello and Skipper, 2002; Warschauer, 2002; Cowen, Blair and Taylor, 2006; Cull, 2009; Brimble and Murphy, 2012). Overton (2008), in defining PFP as values and goals-driven strategic management of a client's financial resources, strongly argues that PFP requires the use of knowledge and strategic thinking. Kautt (2002, p. 96) maintains that "deciding what recommendations to give clients based on analyses of their situations is arguably the most important professional function of financial planners."

The skills required by the financial planner are outlined in the six-step financial planning process (ISO, 2005; FPSB, 2006) and stipulated in ASIC's Regulatory Guide (RG) 146 (ASIC, 2012a)¹. Goetz, Tombs and Hampton (2005) identify the wide array of skills required by professional financial planners, asserting that financial knowledge alone is insufficient and that the ability to apply and synthesise knowledge is required. Furthermore, the Australian Qualifications Framework (AQF) (AQF Council, 2013, p. 48) specifies that graduates of a bachelor degree will have "cognitive skills to review critically, analyse, consolidate and *synthesise* knowledge" and "cognitive and creative skills to exercise critical thinking and judgement in identifying and solving problems with intellectual independence."

Good strategic advice considers the client circumstances in terms of how strategies affect other areas and that several strategic options would usually be expected to be explored. Evidence from ASIC (2003) indicates that financial planners sometimes overlooked more cost-effective options for their clients, and that the cognitive aspect of skills, usually acquired through formal educational qualifications, was challenged (Jackling and Sullivan, 2007).

As shown in Table 1, integration of knowledge and skills and the application of high-level thinking skills, including analysis, synthesis and evaluation, to formulate potential strategies and assess all impacts of possible recommendations, are central to the PFP process of providing good quality advice and effective planning (ASIC, 2012b; Financial Planning Education Council (FPEC) and Financial Planning Association (FPA) of Australia, 2012).



Table 1: Features and functions of the financial planning process

Regulatory Guide 175 on features of process of providing good quality advice	Australian Higher Education Curriculum on main functions of effective financial planning
(ASIC 2012b, RG 175.222)	(FPEC and FPA of Australia 2012, p.9)
<ul style="list-style-type: none"> a. Define scope of advice and relevant circumstances b. Investigate client's relevant circumstances c. Set prioritised, specific measurable goals d. Consider potential strategies and options to meet objectives and needs e. Consider all aspects of impact of advice such as tax and social security consequences f. Ensure good communication so that advice and recommendations are understood g. Make strategic and product recommendations appropriate to client circumstances 	<p>Collect required information and identify related facts by making required calculations and arranging client information for analysis.</p> <p>Analyse: identify and consider issues, perform financial analyses, assess resulting information to develop strategies.</p> <p>Synthesise information to develop and evaluate strategies to create a financial plan.</p>

The paper proceeds with a literature review of educational issues that may be encountered within cohorts undertaking the high-level learning required in financial planning. An explanation of the research design follows, including details of the research instrument, its administration, response rate and description of the sample. The results of the study are presented and findings reflected upon and discussed. This leads to conclusions about how educators may address varying student needs to learn the knowledge and skills required to develop client-appropriate strategies and solutions.

Literature Review

Deep versus Surface Learning

There is general acceptance by educators that the manner in which an individual approaches a learning situation has an impact on his or her learning outcome (Booth, Lockett and Mladenovic, 1999; Davidson, 2002; Cassidy, 2004; Hall, *et al.* 2004). Despite inconsistent terminology and confusion associated with measurement of the manner or style of learning associated with particular models, instruments and learning inventories (Curry, 1990; Cassidy, 2004), the deep versus surface approach to study (Marton and Säljö 1976a, 1976b), and the idea that students' learning approaches reflect the interaction of individual characteristics, learning context, content

and demands of the learning task, are well established in the literature (Entwistle, Hanley and Hounsell, 1979; Entwistle, 1981; Biggs, 1987; Ramsden, 1992; Biggs, 1993; Sharma, 1997).

Students taking a deep approach relate ideas to a wider context and look for reasoning, justification and logic behind ideas, while students taking a surface approach focus on factual information in isolation to the wider picture and are possibly anxious about the organisation and volume of material (Sadler-Smith, 1996, p. 370). Although there is some evidence that accounting students (mainly the subjects of this study) favour surface learning approaches over deep learning approaches (Hall, *et al.* 2004), especially in the later years of studies (Gow, Kember and Cooper, 1994; Booth, Luckett and Mladenovic, 1999), the acquisition of knowledge and skills are ideally approached by students as matters of inquiry and extrapolation, of self-regulation and of appreciating what they do not know (Glaser, 1984).

The literature indicates that the teaching context, including the amount of syllabus content and assessment methods, can strongly influence the quality of a student's learning (Ramsden, 1985; Trigwell, Prosser and Lyons, 1999; Chin and Brown, 2000). In essence, students may adopt a deep approach when they are motivated to understand and also encounter well-structured knowledge (Gibbs, 1995) but may adopt a surface approach, failing to recognise fundamental guiding principles and relying more on a reproductive strategy of rote learning when they perceive that assessment tasks can be undertaken superficially or the syllabus to be overloaded with content (Hassall and Joyce, 2001).

Students are likely to perceive the teaching context of PFP as content-rich, technically complex and loosely structured as it brings together concepts from several disparate areas of expertise including investment portfolio management, risk management, insurance and retirement planning (Warschauer, 2002; Overton, 2008; Brimble and Murphy, 2012; Cull and Davis, 2013). Textbooks are typically built from contributions from specialist practitioners and academics in areas such as taxation, superannuation, social security, investments and so on (for instance, see Taylor, 2017) and hence tend to cover concepts compartmentally. Although provision of a full financial plan derived from case data (for instance, see Hartnett, 2008; McKeown, *et al.* 2012; Taylor, 2017) exemplifies high-level thinking, textbook formats commonly do not explicitly present an integrative approach to financial planning, one that explores interrelationships of diverse knowledge areas and demonstrates how strategies are formulated for clients. This led to the formation of the first statement (S1) to be addressed by students in this study: "The most difficult part of completing the SOA was in understanding the interrelationship of topic areas."

Arguably, an articulation of a conceptually sound basis from which to build a cohesive body of knowledge (Black, Ciccotello and Skipper, 2002; Schuchardt, *et al.* 2007), one that captures and explains the complications and constraints of clients and their households (Campbell, 2006), would facilitate deep learning in PFP. Perceptions of difficulty in mastering the skill of developing client-appropriate strategies and solutions stem from the interaction of the current PFP teaching context with personal variables of the student context (also discussed in the next section). Richardson (1995), for instance, found that age is significant in contributing to a deep approach to learning and interrelating of ideas. Sadler-Smith (1996) also found that students who were

mature (defined as 23 years or older) reported taking a deeper approach than younger students.

In addition, Sadler-Smith (1996) found females to have higher levels of anxiety and found males perceive themselves as taking a deeper approach to their learning ($p = 0.0004$) and having higher levels of academic self-confidence than females ($p = 0.0130$) (p. 376).

Student Perception of Difficulty

According to Experiential Learning Theory (ELT), resolution of abstract and concrete experience is inherent to integrative learning and each learner is seen as creating, through interplays of the objective and subjective, concepts that integrate observations into personal logical theories (Kolb, 1984, pp. 30–31). ELT provides a framework by which to examine the difficulties associated with integrating PFP knowledge and skills in learning to produce an SOA.

The competent application of knowledge and skills to make sound judgments and solve problems, such as those required in PFP, are conceived as involving the holistic integration of experience, perception, cognition and behaviour within the context of one's total life situation (Kolb, *et al.* 1986, pp. 20–21). Thus, life situations of students limit, to varying extents, their frames of reference and understanding of Australian institutions and financial matters. It follows then that personal contexts and demographic differences may affect students' perceptions of difficulty in making the complex trade-offs required in formulating strategies to meet client goals. Thus, the second statement (S2) posed to students in this study is: "I struggled to formulate investment strategies and a retirement plan suitable to the goals and personal situation of the client."

The literature suggests that the personal context of age (Richardson, 1995; Sadler-Smith, 1996; Ackerman and Beier, 2006) affects perception of learning and, consistent with ELT, younger students with less life experience, all else being equal, were expected to perceive more difficulty. The context of gender, despite the similar capability of males and females, was also expected to pervasively affect perceptions of difficulty in learning to provide quality advice (Meyers-Levy, 1989; Lundeberg, Fox and Punčohař, 1994; Payne, Bettman and Luce, 1996; Sadler-Smith, 1996; Powell and Ansic, 1997; Barber and Odean, 2001; Estes and Hosseini, 2001; Graham, *et al.* 2002; Ackerman and Beier, 2006).

Lundeberg, Fox and Punčohař, (1994) concluded that males tend to be more confident that they are right when they are wrong (p. 120). Furthermore, Powell and Ansic (1997) found that females, being more risk averse, tend to focus on financial strategies that avoid the worst situation for the sake of security but that males, being less risk averse, tend to focus on strategies that they believe will make the most gains. Barber and Odean (2001) provided support for models of behavioural finance predicting that males, because they are more overconfident than females, will trade more in the securities market and reduce returns more than females.

Graham *et al.* (2002) posit the selectivity hypothesis (Meyers-Levy, 1989)—that males tend to use heuristics and selectively process available information relevant to decisions, whereas females tend to process all relevant information comprehensively—as an explanation of research findings that females are less confident in investment strategies and decisions. Whilst the hypothesis does not predict that one gender will process information better, it does suggest that failure to properly

match processing strategy with the requirements of a task or decision may impair performance (Payne, Bettman and Luce, 1996). Estes and Hosseini (2001) also found that gender was the most statistically significant variable in terms of confidence in investment decisions. Likewise Ackerman and Beier (2006) found that females were on average less confident in their abilities to solve financial problems even though males and females performed equally in financial issues knowledge tests, both before and after independent study in the knowledge domain.

Just as practitioners may take heuristic shortcuts (Roszkowski and Grable, 2005) and overconfidently base recommendations on insufficient knowledge of the investment environment and client's circumstances (Charupat, Deaves and Lüders, 2005; Cordell, Smith and Terry, 2011), it is likewise acknowledged that students' perceptions of difficulty may be affected by misplaced confidence, inaccurate estimations of their competence and not knowing what is not known about the complexity of the task (Kruger and Dunning, 1999; Dunning, *et al.* 2003; Erhlinger, *et al.* 2008). As found by Hershey and Wilson (1997), all participant groups of their study (younger and older, trained and untrained) completing a series of complex financial decisions appreciably misjudged their solution quality.

The literature also supports that home country (Halliday, 1993; Halliday, 1999; English, Lockett and Mladenovic, 2004; Manikutty, Anuradha and Hansen, 2007) and work experience (Kolb, *et al.* 1986; Zhang, 2000; Hershey and Walsh, 2000/2001; Hershey, Jacobs-Lawson and Walsh, 2003; Goetz, Tombs and Hampton, 2005; Osburn and Mumford, 2006; Brimble, *et al.* 2012; Baxter and Kavanagh, 2012) may influence students' learning in financial planning. Demographic variables such as first language, home country (local vs. international) and work experience have been found to have an impact on personal finance knowledge amongst university students (Cull and Whitton, 2011) and may also affect their learning in a PFP course.

Strategic Thinking

The thinking skills needed in an increasingly complex investment environment (Black and Ellis, 2010) and the process of financial planning are built through “remembering”, “understanding”, “applying”, “analysing”, “evaluating” and importantly “creating”—all of the cognitive domains of Bloom's Taxonomy (Bloom, 1956) as revised and presented in Anderson and Krathwohl (2001).

There has been little research on how to develop strategic thinking. Overton (2008, p.25) suggests that in financial planning, strategic thinking requires information from environmental and resource analyses commonly associated with strategic planning. Strategic thinking may be thought of as a synthesising process involving creativity and intuition (Liedtka, 1998) and diagnosis of strategic issues from ambiguous data and stimuli (Dutton, Fahey and Narayanan, 1983, p. 307). Strategic thinking and other various concepts of thinking such as critical thinking, problem-solving and creating are difficult to theoretically distinguish from each other and define precisely (Garrison, 1991; Tavakoli and Lawton, 2005; French, 2009). Halpern (1998), in noting the definition of “critical thinking” used in many studies as “the deliberate use of skills and strategies that increase the probability of a desirable outcome” (p. 449), describes the attitudes of the critical thinker as including a willingness to persist at a complex task, habitual use of plans, flexibility or open-mindedness, a willingness to abandon non-productive strategies and self-correct, and an

awareness of the social realities that need to be overcome to enable actions (p. 452). This definition and associated attitudes broadly describe the strategic thinking required in PFP practice and required to produce a financial plan.

Osburn and Mumford (2006) studied a sample of 174 undergraduate students to investigate whether training in planning skills and forecasting of downstream consequences could enhance thinking and ability to solve a complex problem scenario. The results suggested that training led to more original planning but mostly benefited students who were already identified as having divergent thinking skills.

Research into thinking skills indicates the important role of domain-specific knowledge as represented in long-term memory acquired over time and developed as a result of training and expertise (Sawyer, 2011). Further, the literature in strategic thinking emphasises the transferability of thinking skills taught in one knowledge domain to other domains (Halpern, 1998). Similarly, the transfer of knowledge across different domains is required when producing a financial plan. As a result, this study asked students to respond to the statement (S3): "It was difficult to address the many topic areas covered by an SOA to come up with a plan to meet the client's short-term and long-term goals." The study then further examines if student experiences associated with demographic variables are associated with student perceptions of the difficulty of integrating PFP knowledge and skills in learning to produce an SOA. For example, Ackerman and Beier (2006) found that extant general and broad cultural knowledge was more highly predictive of financial issues domain knowledge after independent study in financial issues (including financial planning, retirement planning, and debt management) than abstract reasoning-type abilities.

A review of the literature on student learning approaches, strategic thinking and ELT has provided a conceptual framework by which to examine differences in learning and applying the knowledge and skills of PFP to produce a financial plan (SOA). This paper reports on and discusses results from a survey of associations between demographic variables and perception of difficulty in learning to develop a financial plan. The findings show that some students have different perceptions of the difficulty in learning to produce a financial plan depending on how their personal contexts equip them for the challenges of the teaching context. Accordingly, the research findings have pedagogical implications for financial planning programs.

Research Design

Research Instrument

The survey instrument, available on request from the author, captured demographic information and posed statements to students, as presented below, on perceptions of learning difficulty in integrating knowledge and skills to develop solutions and strategies appropriate to the goals and circumstances of a client. The instrument also encouraged students to make free responses about teaching and learning in the subject.

Students were asked to indicate, on a Likert scale of 1–5, how strongly they agreed (with 1 indicating ‘strongly disagree’; 3 indicating ‘neither agree nor disagree’; and 5 indicating ‘strongly agree’) with each of the following statements:

Statement 1 (S1): *The most difficult part of completing the SOA was in understanding the interrelationship of topic areas.*

Statement 2 (S2): *I struggled to formulate investment strategies and a retirement plan suitable to the goals and personal situation of the client.*

Statement 3 (S3): *It was difficult to address the many topic areas covered by an SOA to come up with a plan to meet the client’s short-term and long-term goals.*

The topic areas referred to in Statements 1 and 3 are superannuation, estate planning, social security, taxation, insurance, investment, credit and debt, home ownership and regulatory compliance. The retirement plan referred to in Statement 2 involves holistic investment and superannuation strategies over time towards retirement age and during retirement.

Administration, Response Rate and Limitations

The paper-based survey was administered to undergraduate students enrolled in a core financial planning unit at an Australian university, in tutorials after completion of the SOA task at the end of each of four semesters over a three-year period. Enrolments over the four semesters totalled 1,031 and a total of 649 surveys were returned, giving a response rate of 63 per cent of the population of enrolled students. Attendance at classes was not mandatory and participation in the survey was voluntary. Anonymity of response was guaranteed. Furthermore, the same teaching team taught across multiple time periods, reducing the likelihood of teaching quality across time periods interfering with results.

Whilst the demographic profile of the sample was generally representative of the average profile of the student population in the business faculty over the survey period, higher sample proportions of students less than 25 years of age (75% vs. 65%) and full-time students (75% vs. 64%) indicate that non-responders were more likely to be older and working. It is acknowledged that this limitation of the study may affect the generalisability of the findings due to the lack of data from those students who did not participate. Another limitation of this study is that final grades/results were not considered due to the anonymous nature of the survey. In addition, the sample was drawn from students at one Australian university so it is possible that the results may not generalise to all institutions in all countries.

Sample demographics

A summary of the demographics profile of the sample is provided in Table 2. Analysis of the sample of students found that approximately 50 per cent are male and 50 per cent female, 75 per cent are 25 or younger, 45 per cent record English as their first language, 20 per cent are international students, 75 per cent study full-time (FT) and 25 per cent study part-time (PT) and 56 per cent have full-time work experience and 38 per cent have subject-relevant work experience.



Table 2: Demographics of sample

Student demographic		Percentage of Sample
Gender	Male	51%
	Female	49%
Age	<25 yrs	75%
	>25 yrs	25%
First Language	English	45%
International student		20%
Study mode	Full-time	75%
	Part-time	25%
Full-time work experience		56%
PFP-relevant work experience		38%

Results and Discussion

Although perception of difficulty, being a product of subjective and environmental factors personal to each student, is a blunt measure for high-level learning in PFP, analysis and comparison of responses across various demographic groupings of age, gender, first language, home country and work experience provided educational insights as discussed below. Further insight was gained from students' comments about difficulties experienced in learning to provide advice. Where data was found to be normally distributed, parametric tests such as independent samples t-test (referred to as t-test) and one-way analysis of variance (referred to as ANOVA) have been used to explore demographic differences. Where data was not normally distributed, non-parametric tests (Mann-Whitney Test, Kruskal-Wallis, Chi-Square) have been used (Pallant, 2007, p. 110). Furthermore, in some cases the dependent variable is treated as categorical (such as age, gender, first language, work experience) and others as continuous (such as difficulty level provided on a five-point Likert scale for statements (S1), (S2) and (S3)).

Age

Table 3 sets out the descriptive statistics for S1, S2 and S3 in age groupings. As the age data was negatively skewed and did not follow a normal distribution, the non-parametric Kruskal-Wallis test was used to analyse the data. Kruskal-Wallis tests revealed a statistically significant difference in perceptions of formulating strategies (S2) across the five different age groups ($\chi^2 = 15.75$, 4 DF, $p = 0.00$). The older age groups of 31 to 45 years and 46 years plus perceived less difficulty (Median (Md.) both = 3.5) than the younger age groups (Md. all = 4.0). In addition, the Kruskal-Wallis tests revealed a difference at the 0.06 level in perception of difficulty of meeting client goals

(S3) across the five different age groups ($\chi^2 = 8.89$, 4 DF, $p = 0.06$). The age group 31 to 45 years perceived the least difficulty (Md. = 3.0) and the age group 26 to 30 years perceived comparatively less difficulty (Md.= 3.5) than the remaining age groups (Md. = 4.0).

Table 3: Comparison of perceptions of difficulty: by age group

Age	N	Mean	Std. Dev.	Median	
S1: Interrelationship of topic areas	18-21	206	3.38	.984	3.00
	22-25	247	3.59	.962	4.00
	26-30	69	3.46	.901	4.00
	31-45	73	3.41	1.070	4.00
	46 +	14	3.79	.693	4.00
S2: Formulation of investment and retirement strategies	18-21	205	3.43	1.006	4.00
	22-25	246	3.76	1.041	4.00
	26-30	70	3.54	.958	4.00
	31-45	74	3.35	.957	3.50
	46 +	14	3.43	.938	3.50
S3: Meeting a client's short and Long-term goals	18-21	205	3.43	.961	4.00
	22-25	247	3.61	.977	4.00
	26-30	70	3.40	.907	3.50
	31-45	73	3.22	1.070	3.00
	46 +	14	3.43	.938	4.00

The findings of less perception of difficulty for the two oldest age groups for S2 and the 31 to 45 years age group for S3 are consistent with ELT—all else being equal, older students, with richer backgrounds of life experience, more developed personal theories and frames of reference than younger students, may be able to accommodate high-level learning more easily and be more ready for the deep learning required in PFP. This also supports the literature on deep learning approaches (Richardson, 1995; Sadler-Smith, 1996) and domain knowledge and strategic thinking (Ackerman and Beier, 2006).

Interestingly, according to the means for each statement, the younger 18 to 21 years age group perceived less difficulty than the 22 to 25 years age group. This could be due to the Dunning-Kruger effect (Kruger and Dunning, 1999). This suggests that PFP educators may need to address any evidence of the Dunning-Kruger effect and be aware of potential generational shifts (see Twenge and Campbell, 2008; Petroulas, Brown and Sundin, 2010).

Gender

As shown in Table 4, results of t-tests indicate statistically significant gender differences in perception of difficulty in formulating strategies (S2) and meeting clients' goals (S3), with males perceiving less difficulty. Evidence of difference related to gender was expected in accordance with the literature, which suggests that nuances of gender in learning to develop strategies and solutions may potentially affect the approach taken to the PFP process of formulating advice and producing a financial plan.

Table 4: Independent samples t-tests of perceptions of difficulty: by gender

Gender	Sex	Number	Mean	Std. Dev.	<i>t</i>	<i>ρ</i>
S1: Interrelationship of topic areas	Male	311	3.47	.929	-0.44 (605)	.66
	Female	296	3.50	.978		
S2: Formulation of investment and retirement strategies	Male	310	3.39	1.045	-4.45 (605)	.00
	Female	297	3.75	.952		
S3: Meeting a client's short and long-term goals	Male	311	3.37	.968	-2.57 (605)	.01
	Female	296	3.57	.964		

The results support the Dunning-Kruger effect (Kruger and Dunning, 1999) as well as behavioural finance literature which suggests that males are more confident in financial decisions than females (Ackerman and Beier, 2006; Barber and Odean, 2001; Estes and Hosseini, 2001; Graham, *et al.* 2002; Powell and Ansic, 1997) and that females perceive greater ambiguity leading them to feel less knowledgeable and to underestimate their ability to evaluate and process information accurately (Heath and Tversky, 1991). As a result, educators may need to explicitly address misconceptions and manage perceptions of difficulty associated with gender in integrating knowledge and skills to produce a financial plan.

First Language; Local vs. International students

Table 5 presents the descriptive statistics of the 44 different first languages reported by respondents, grouped as English, Asian (including Cantonese, Mandarin and Vietnamese), Indian (including Hindi and Punjabi), Middle Eastern (including Persian and Arabic) and Other (including 39 different languages, all with $N < 11$, except Bengali with $N=31$).

Kruskal-Wallis tests for the whole sample revealed significant differences based on first language for S1, difficulty of interrelationship of topics S1 ($\chi^2 = 21.93$, 4 DF, $\rho = 0.00$), S2, difficulty of formulating strategies ($\chi^2 = 46.11$, 4 DF, $\rho = 0.00$) and S3, meeting a client's goals ($\chi^2 = 20.00$, 4 DF, $\rho = 0.00$). The medians of S1, S2 and S3 for English as a first language were 3 compared to medians of 4 for all other first languages (except for Middle Eastern languages with a median of 3 for S1).

Table 5: Comparison of perceptions of difficulty: by first language

First Language		S1	S2	S3
English	N	273	272	272
	Mean	3.31	3.24	3.28
	Std. Dev.	0.98	1.07	1.02
	Median	3.00	3.00	3.00
Asian	N	130	129	129
	Mean	3.72	3.82	3.68
	Std. Dev.	0.8	0.84	0.84
	Median	4.00	4.00	4.00
Indian	N	38	38	38
	Mean	3.76	4.05	3.74
	Std. Dev.	0.94	0.7	0.72
	Median	4.00	4.00	4.00
Middle Eastern	N	30	30	30
	Mean	3.27	3.67	3.63
	Std. Dev.	1.11	1.06	1.07
	Median	3.00	4.00	4.00
Other	N	141	143	143
	Mean	3.55	3.79	3.55
	Std. Dev.	0.93	0.92	1.07
	Median	4.00	4.00	4.00

Domestic students reported 39 different first languages. The most common were English (53.5%), Chinese (12%), Vietnamese (5%) and Indian (5%). Overseas students reported 31 different first languages. The most common were Chinese (28.5%), Bengali (18%) and Indian (12%). Within the domestic demographic, due to the high proportion of students with English as a first language, Kruskal-Wallis tests revealed significant differences in perceptions for S1 ($\chi^2 = 18.480$, 10 DF, $\rho = 0.05$), S2 ($\chi^2 = 39.975$, 10 DF, $\rho = 0.00$) and S3 ($\chi^2 = 27.645$, 10 DF, $\rho = 0.00$). Comparative results of responses from domestic students with first languages other than English are likely to be confounded due to their varying lengths of time in Australia. For international (overseas) students, Kruskal-Wallis tests revealed no significant differences in perceptions for S1, S2 and S3 based on first language.

The number of different home countries of overseas students totalled 16 and countries most represented were China (31), Bangladesh (25), India (12), Sri Lanka (10) and Kenya (8). As shown in Table 6, overseas students perceived more difficulty than domestic students, with t-tests revealing statistical differences in perceptions for each statement up to the 0.06 level.

Table 6: Independent samples t-tests of perceptions of difficulty: international and local

International and Local students		N	Mean	Std. Dev.	t	ρ
S1: Interrelationship of topic areas	Intl	126	3.62	.828	1.82 (610)	.05
	Local	486	3.45	.976		
S2: Formulation of investment and retirement strategies	Intl	126	3.87	.867	4.36 (610)	.00
	Local	486	3.48	1.033		
S3: Meeting a client's short and long-term goals	Intl	126	3.61	.867	1.91 (610)	.06
	Local	486	3.45	.990		

The results presented in Tables 5 and 6 show that the domestic students with English as their mother tongue perceived least difficulty with learning Australian financial planning. As discussed by Manikutty, Anuradha and Hansen (2007), cultural background is an important student context especially as overseas students may be confronted by a different education system and learning expectations. Moreover, the linguistic framework of financial planning requires students to become familiar with the language of both the discipline (Halliday, 1993; English, Lockett and Mladenovic, 2004) and the underlying cultural context and elements (Halliday, 1999) of PFP advice. Cultural impacts evident from the differences in perceptions of difficulty between local and international students, shown in Table 6, raise questions about the educational benefits and place of PFP as a subject for international students returning to their home countries.

Work Experience

ANOVAs were conducted on responses to explore differences in perceptions between groups based on employment experience relevant to PFP (84% in accounting and 16% in banking and finance and financial planning), other full-time work experience and no full-time work experience. Statistically significant differences were revealed for each statement, as shown in Table 7. *Post-hoc* comparisons, using Tukey HSD tests, indicated that the means for each statement, S1, S2 and S3, for PFP-relevant employment and no employment were significantly different. For S2, formulation of strategies, the means for PFP-relevant employment and other employment were also significantly different.

Table 7: Analysis of variance: perceptions of difficulty by PFP-relevant employment, no employment and other employment

Employment		N	Mean	Std. Dev.	F	ρ
S1: Interrelationship of topic areas	PFP employment	227	3.35	.982	4.922 (2, 607)	.01
	No employment	267	3.61	.883		
	Other employment	116	3.43	1.006		
S2: Formulation of investment and retirement strategies	PFP employment	229	3.33	1.061	11.181 (2, 607)	.00
	No employment	265	3.75	.899		
	Other employment	116	3.59	1.071		
S3: Meeting a client's short and long-term goals	PFP employment	228	3.32	.996	5.647 (2, 607)	.00
	No employment	266	3.61	.885		
	Other employment	116	3.51	1.051		

These results indicate that students with full-time work experience, particularly PFP-relevant experience, perceive less difficulty than students without work experience. Further, work (and travel) experiences have been significantly and positively related to deep learning approaches and negatively associated with a surface approach to learning (Zhang, 2000).

Brimble *et al.* (2012) argue that learning financial planning requires contextualisation within the practising profession and advocate the teaching and learning benefits of inclusion of work-integrated learning into university programs through engagement with industry. Goetz, Tombs and Hampton (2005) and Brimble *et al.* (2012) suggest that colleges and universities facilitate work experience in financial planning courses to provide students with valuable perspectives and further develop their critical thinking and professional skills.

Student Comments

Of the free comments, 323 related to perceptions of learning difficulty. Of these, 147 reflected the need for high-level learning in PFP by referring to its demanding nature as outlined in the student comments below:

A lot of preparation involved, and time and effort. Too demanding.

This unit should be an advanced financial planning course.

The most difficult part was choosing between endless options and limiting length of SOA.

Even with tutor advice I found this difficult.

Too much to learn and understand and remember.

SOA complex and challenging.

These comments reflect the difficulty that students perceived in preparing a compliant SOA and indicate that the task involved much preparation, was time-consuming, complex and challenging. Although the unit design included five progress checks throughout the semester to scaffold student learning, students still found the task difficult, even with tutor advice.

Additional student comments suggesting how learning could best be facilitated provide useful guidance to educators for designing PFP curriculum to address the difficulty of integrating knowledge and skills to produce an SOA. As summarised in Table 8, the remaining 176 free responses from students provide suggestions on how learning could be facilitated. These comments indicate that students believe that they need more progressive help towards completion of the SOA, more detailed explanations and more representative and practical examples.

Table 8: Student suggestions on learning

Comments	Frequency
More assistance/time required with developing strategies	29
More discussion of each section and coverage of all topics required before SOA due	29
More examples of SOA required	20
More feedback required	16
More examples and calculations required in class	15
More examples required	14
SOA template should be provided	12
More detailed explanations and examples required for SOA	11
Need more progress checks or more information on topics, such as Estate Planning and Insurance, after final progress check on investment strategies	7
More details needed to be covered in lectures	6
Would have liked to explore and discuss SOA in entirety in class	6
Need to be shown how to compile SOA	4
More practical questions need to be done	2
Need qualified financial or para-planner to explain SOA	2
Further explanation needed of concepts not covered in text	1
More consultation hours required	1
Site visit or movie of real practice required	1
	176

With only 38 per cent of students having PFP-relevant work experience (refer to Table 2 in previous section of paper), it is understandable that the 62 per cent of students lacking PFP-relevant work experience felt that their learning would be enhanced with more exposure to the practical side of completing an SOA such as site visits, 'real life' practical examples, more calculation questions in class and guest lectures from financial planners. This supports the literature on ELT with Kolb *et al.* (1986) advocating that experiential exercises and simulations, as well as on-the-job training, provide a framework for integrative education that is internalised and specific to each individual (pp. 21–22). In addition, these student comments support Goetz, Tombs and Hampton (2005) who maintain that learning PFP requires both work experience as well as appropriate pedagogic approaches such as problem-based case studies and simulations that bring the profession into the classroom. Further, the student comments support the findings of Baxter and Kavanagh (2012) who suggest embedding real case studies in the university curriculum to develop critical thinking skills.

The abovementioned suggestions around ELT may also assist international students and students with English as their second language by providing the situational, cultural and linguistic context that is needed to appropriately approach the SOA task. Furthermore, ELT enables students to become more acutely aware of the social realities that impact on the preparation and execution of a financial plan and provides useful opportunities for academics to develop the critical thinking skills (Halpern, 1998) of their students and encourage deep learning of students at the highest level of Bloom's Taxonomy ('create').

Conclusion

The findings indicated a range of perceived learning difficulty across demographic groups in learning to produce a financial plan. Statistical analysis of the study data assists in answering the research question, '*What demographic variables are associated with student perceptions of the difficulty of integrating PFP knowledge and skills in learning to produce an SOA?*' by showing significant differences across demographic groups of age, gender, home country, first language and work experience.

The results of this study contribute to the literature on behavioural finance, strategic thinking and ELT by empirically demonstrating that older students, males, students from English speaking Australian families and those with work experience relevant to PFP perceive less difficulty. Thus, the student demographic perceiving the least difficulty was found to consist of males, aged between 31 and 45, from English speaking Australian families with work experience relevant to financial planning. Conversely, younger females from non-English speaking countries and no work experience relevant to financial planning found the most difficulty in integrating knowledge and skills when learning to produce a financial plan.

Furthermore, the results support the Dunning-Krueger effect and suggest that educators need to be aware of the potential for younger students and male students to be overconfident, and for female students to be less confident, resulting in students misjudging their own capabilities. The challenge is to develop, design and deliver PFP programs that promote deep learning and a greater

awareness of the social realities relevant to producing a financial plan. As suggested by students, this may include *'more examples of SOA'*, *'more examples and calculations required in class'*, a *'qualified financial or para-planner to explain SOA'* or a *'site visit or movie of real practice'*. Such suggestions support ELT and the idea of bringing the profession to the classroom. This may be particularly beneficial for students with no relevant work experience as well as students from non-English speaking and non-Australian backgrounds who perceive more difficulty in preparing a financial plan due to the lack of context and 'real-life' experience. To this end, facilitation of relevant work experience in financial planning programs would further develop students' critical thinking and professional skills as advocated by Goetz, Tombs and Hampton (2005) and Brimble *et al.* (2012).

This study concludes that programs ideally need to involve deliberate connections between topic areas, practical modelling, real case studies and work experience in personal financial planning. Financial planning programs may benefit from the adoption of appropriate mental models or concept maps that expose students to more holistic, well-designed representations of tasks and problems to be solved (Hershey and Walsh, 2000/2001). The educational advantages of both practical experience and mental modelling to analyse and exemplify realistic financial planning scenarios require priority in program design.

Further, as suggested by students (*'More discussion of each section and coverage of all topics required before SOA due'*, *'Need more information on topics such as Estate Planning and Insurance after final progress check on investment strategies'*) and supported by Hershey, Jacobs-Lawson and Walsh (2003), additional training in domain-specific knowledge may assist students in developing their SOA. In some financial planning programs this may mean creating a prerequisite structure and/or additional units that better scaffold student learning of financial planning. Moreover, a purposeful fostering of a deep learning approach including generous explanations of how strategies can be accomplished through trade-offs and judgements based on the different circumstances and goals of clients, is suggested.

Recommendations have been made based upon the literature, as well as survey feedback from students about their learning and how it may be best facilitated. It is hoped that this research will assist PFP academics to design educational programs that consider the difficulties faced by students with differing personal contexts as they learn to holistically integrate PFP knowledge and skills to create a financial plan.

The results not only contribute to ELT but expand knowledge in the area of teaching financial planning which is particularly pertinent in the current social, cultural, economic and political climate. The study has implications for ongoing knowledge development by highlighting the need for additional research into the use of concept maps as a learning tool in financial planning and the incorporation of relevant work experience opportunities into the curriculum. Future research is also required to examine the relationship between student perceptions of learning to produce a financial plan and student performance. Further, with government legislation now requiring financial advisers to have a bachelor degree or higher, financial planning education plays a crucial role in advancing the financial planning profession by developing future financial planners who

have the “cognitive and creative skills to exercise critical thinking and judgement in identifying and solving problems with intellectual independence” (AQF Council, 2013, p. 48).

Notes

¹ *The professional Personal Financial Planning process*

Professional six-step financial planning process (ISO 2005; FPSB 2006)	Australian Regulatory Guide 146 on Skill Requirements (ASIC 2012a, App. B, Table B, p. 54)
1. Establish and define the client-planner relationship.	1. Establish relationship with client
2. Gather client data, including goals.	2. Identify client objectives, needs and financial situation
3. Analyse and evaluate client’s financial status.	3. Analyse client objectives, needs, financial situation and risk profile
4. Develop and present financial planning recommendations and/or alternatives.	4. Develop appropriate strategies and solutions 5. Present appropriate strategies and solutions to client 6. Negotiate financial plan with client
5. Implement the financial planning recommendations.	7. Coordinate implementation of agreed plan 8. Complete and maintain necessary documentation
6. Monitor the financial planning recommendations.	9. Provide ongoing service (at discretion of client)

² *This study has been approved by the University’s Human Research Ethics Committee (approval number H6150).*

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