

DOES TAX LITERACY MATTER? THE RELATIONSHIP BETWEEN SMALL BUSINESS LITERACY AND BUSINESS PERFORMANCE AND CASH FLOW

MELISSA BELLE ISLE*, BRETT FREUDENBERG[‡] AND TAPAN SARKER[#]

Abstract

Resource Based Theory would suggest that owners or managers who efficiently and effectively make use of internal resources and implement strategies in their businesses have a greater chance of realising a competitive advantage over others in the same industry. This research explores whether the internal resource of understanding business tax, financial statements and/or computer accounting software (CAS) by small business owners is related to their business success in the service sector. The results demonstrate that small businesses with a higher understanding of business tax and CAS achieve a higher value of gross annual revenue, as well as net annual income. These results are important in demonstrating the need for small business owners to improve their understanding of business tax and CAS can aid the overall success of their business.

Keywords: Small business, tax literacy, business performance, Resource Based Theory.

I INTRODUCTION

This article explores whether having a better business tax knowledge amongst other things helps small businesses achieve greater profitability. There can be a number of characteristics that contribute to the effective running of a business. Resource Based Theory (RBT) suggests that these characteristics can include internal resources. Internal resources in one business are likely to be different from those evident in other businesses due to varying levels of skill, and capital investments. This diversity can be advantageous when the ability of the business owner and manager allows them to exploit the internal business resources to a greater extent than others in the same industry.¹ RBT indicates that owners or managers who efficiently and

* Lecturer, Griffith University, Email: m.belleisle@griffith.edu.au

[‡] Professor, Griffith University, Email: b.freudenberg@griffith.edu.au

[#] Professor, University of Southern Queensland, Email: Tapan.Sarker@usq.edu.au

¹ Jay Barney, 'Firm Resources and Sustained Competitive Advantage' (1991) 17(1) *Journal of Management* 99.

effectively make use of internal resources and implement strategies that promote those internal resources in their business, have a greater chance of realising a competitive advantage over others in the same industry.² Firm resources are one of the three identified components of RBT, with the others being a competitive advantage and sustained competitive advantage.³ Such firm resources have three components, being: physical capital, organisational capital, and human capital.⁴ Physical capital includes geographical location, plant, equipment, and access to raw materials. Organisational capital encompasses the formal and informal processes and practices implemented within the business. Whereas human capital relates to the training, experience, intelligence, and relationships that exist within the workforce of a business. It can also include the ability of owners and managers to have insight and to make judgements that have a positive impact on the success of the business.⁵

Human capital is critical when considering small businesses, as small business success may be influenced by the managerial capabilities of small business owners ('SBOs'). The skill strengths of SBOs at the commencement of their business can revolve around the technical skills that the owner possesses.⁶ Research has suggested that a major cause of small business failure can be explained by inadequate SBO management skills.⁷ Financial management skills can be lacking for SBOs at the start of their business (except for those operating in finance or accounting).⁸ It is argued the skills and strengths of the SBOs is of critical importance as there can be financial constraints that can inhibit the use of external advisors.⁹ Even when external advice is sought out, it can centre on compliance rather than management advice.¹⁰ This is important to keep in mind as failure rates in new businesses are particularly high in comparison to established firms, with many businesses in the early stages ceasing to exist past five years.¹¹ Viability can be influenced by internal and external barriers in the business environment, including the individual structure and characteristics of the small business; as well as the requirement to comply with the policy, legislation, and regulations.¹²

A related issue is cash flow management, which has been identified as one of the most important problems for businesses.¹³ Effective cash flow management is important to

² Ibid.

³ Ibid.

⁴ Robert S. Nason, and Johan Wiklund, 'An Assessment of Resource-Based Theorizing on Firm Growth and Suggestions for the Future' 44(1) (2018) *Journal of Management* 32.

⁵ Gerald F. Davis and Theodore DeWitt, 'Organization Theory and the Resource-Based View of the Firm: The Great Divide' (2018) 47(7) *Journal of management* 1684.

⁶ Arthur R DeThomas and William B Fredenberger, 'Accounting Needs of Very Small Business' (1985) 55(10) *The CPA Journal* 14.

⁷ Pearl Dahmen and Eileen Rodríguez, 'Financial Literacy and the Success of Small Businesses: An Observation from a Small Business Development Centre' (2014) 7(1) *Numeracy* 1.

⁸ Michael Peel, Nicholas Wilson and Carole Howorth, 'Late Payment and Credit Management in the Small Firm Sector: Some Empirical Evidence' (2000) 18(2) *International Small Business Journal* 17.

⁹ OECD, *Taxation of SMEs in OECD and G20 Countries* (Paris: OECD Publishing, 2015).

¹⁰ Sue Yong and Brett Freudenberg, 'Perceptions of Tax Compliance by SMEs and Tax Practitioners in New Zealand: A Divergent View?' (2020) 26(1) *New Zealand Journal of Taxation Law and Policy* 57.

¹¹ OECD (n 9).

¹² OECD, *Financing SMEs and Entrepreneurs: An OECD Scoreboard – Australia* (Paris, OECD Publishing, 2018).

¹³ Peel, Wilson and Howorth (n 8).

business survival irrespective of the size of the business.¹⁴ For cash flow management, SBOs with advanced human capital resources supporting their ability to collect, analyse and use accounting information, have a greater likelihood of improving and enhancing business processes and strategies.¹⁵ Assessment of small business liquidity suggests that small businesses are less liquid and exhibit more volatility with cash flow and profit than their larger competitors.¹⁶ Research has proposed that liquidity management should be regarded as important at the start and throughout the growth of the business.¹⁷ Cash flow management may change overtime because of external events or due to requests from stakeholders who inadvertently force SBOs to learn new procedures and routines.¹⁸ For example, a bank may require financial statements when an SBO applies for a business loan. In contrast, for those who have never prepared a cash budget or business plan for an external party, they may be unaware of the importance of these skills for implementing effective and efficient cash flow management practices.¹⁹ Recent research by the Australian Taxation Office (ATO) has highlighted that advisors (more specifically tax agents) believe that, with the exception of tax-related advice, small businesses need more assistance with cash flow than with any other area of non-tax-related advice.²⁰ Other areas where experts perceived that SBOs needed guidance included financial management, record keeping, business planning, and staff-related advice.²¹ While external advice could be sought, given financial constraints the use of external advisors could be limited, meaning that the skills and strengths of the SBOs is of critical importance.²² Research demonstrates that even when external advice is sought out, which can be prompted by tax, it appears that the advice is largely about compliance matters rather than managerial insights about the business performance.²³

This research focuses on small businesses, particularly those in the service sector, due to their importance the economy. Small businesses account for 98% of all Australian private sector businesses,²⁴ and play a critical role in business-to-business transactions, providing goods and services to almost two-thirds of all Australian businesses.²⁵ Their contribution to national income is 34.7% of total gross value added ('GVA') and they employ 4.8 million people, representing 45.7% of all Australian private sector employees.²⁶ Furthermore, the magnitude of the service sector to the Australian economy, measured in GVA, is 77.25% or \$2,910.2

¹⁴ DeThomas and Fredenberger (n 6).

¹⁵ Norhasni Haron, Sofri Yahya and Md Harashid Haron. 'Cash Flow Information and Small Enterprises' Performance' (2014) 7 *International Journal of Organizational Innovation* 7.

¹⁶ Peel, Wilson and Howorth (n 8).

¹⁷ Ibid.

¹⁸ David Deakins, Alana Morrison and Laura Galloway, 'Evolution, Financial Management and Learning in the Small Firm' (2002) 9(1) *Journal of Small Business and Enterprise Development* 7.

¹⁹ Ibid.

²⁰ Australian Taxation Office, 'Small Business Engagement 2017' (5 April 2018).

²¹ Ibid.

²² Dedy Suahputra Sijabat and Taufik Fathurohman, 'The Relationship of MSME Owners Financial Literacy Score and MSME's Performance: Case Study of MSME's in School of Business and Management Bandung Institute of Technology' (2017) 2(1) *Journal of Innovation, Business and Entrepreneurship* 23.

²³ Yong and Freudenberg (n 10).

²⁴ Australian Bureau of Statistics, 'Counts of Australian Businesses including Entries and Exits (Jun 2017 to Jun 2021).' (Catalogue No 8165.0, 24 August 2021) (Canberra, ABS, 2021).

²⁵ Department of Industry, Innovation, Science, Research and Tertiary Education, *Australian Small Business Key Statistics and Analysis* (Canberra: Department of Industry, Innovation, Science, Research and Tertiary Education, 2012).

²⁶ Australian Bureau of Statistics (n 24); Australian Bureau of Statistics, 'Australian Industry 2019-20.' (Catalogue No 8155.0, 28 May 2021). (Canberra, ABS, 2021).

billion.²⁷ The service sector employs 87% of all Australian private sector employees and is responsible for 89% of all business registrations.²⁸ Within the service sector, small businesses have a large presence.²⁹ Service sector small businesses employ approximately 41% or 4,053,000 of all service sector employees and contribute \$1,088 Billion to the GVA of Australia.³⁰ Consequently, focusing on small businesses in the service sector makes sense. For this research project, the term ‘small business’ incorporates those businesses identified by their quantitative measures by the ATO and Australian Bureau of Statistics (‘ABS’) as being ‘micro’ and ‘small’.³¹ Broadly, small businesses will be those with an annual turnover of \$10 million or less and a full-time workforce of 20 or fewer employees.

Also, given that small business ongoing success has been associated with the implementation of effective cash flow management systems, it is important to examine whether the personal levels of literacy of SBOs could have some impact on the cash flow management systems that are employed in the business. Research has investigated the financial literacy and taxation literacy of individuals and found that, broadly, SBOs have a higher level of taxation and financial literacy than individuals who are not involved in operating a business.³² However, from a taxation perspective, literacy was measured using tax systems relevant to complying as an individual taxpayer, not as a small business taxpayer.³³ In research that focused on five business taxes applying to SBOs in Australia, it was found that those younger businesses, with simple structures such as a sole trader with lower employee numbers are likely to have a lower business tax literacy.³⁴ However, is increased business tax literacy associated with improved business performance? This research seeks to consider whether effective cash flow management for SBOs in the service sector could be influenced by their level of understanding of business tax, financial statements and computer accounting software (‘CAS’).

Section Two of this article will provide a broad summary of literacy in terms of business tax, professional financial and CAS. The third section will then provide the research method undertaken, followed by the demographics of the participants in section four. The results are presented in Section Five, with Section Six containing recommendations. Limitations and future research are outlined in the seventh section of the article before concluding.

II LITERACY

²⁷ Australian Trade Commission, ‘Why Australia: Benchmark Report 2019’ (8 April 2019).

²⁸ Ibid.

²⁹ Department of Industry, Innovation, Science, Research and Tertiary Education, (n 25).

³⁰ Australian Bureau of Statistics (n 26).

³¹ Australian Bureau of Statistics (n 24); Australian Taxation Office (n 20).

³² Toni Chardon, Brett Freudenberg and Mark Brimble, ‘Tax Literacy in Australia: Not Knowing Your Deduction from Your Offset’ (2016) 31(2) *Australian Tax Forum* 321; Brett Freudenberg, Toni Chardon, Mark Brimble and Melissa Belle Isle, ‘Tax Literacy of Australian Small Businesses’ (2017) 18(2) *Journal of Australian Taxation* 21.

³³ Chardon, Freudenberg and Brimble (n 32).

³⁴ Melissa Belle Isle, Brett Freudenberg and Tapan Sarker ‘The Business Tax Literacy of Australian Small Businesses’ (2022) 37(1) *Australian Tax Forum* 65.

A Owner Literacy

Small business failure has been affiliated with several barriers including financial constraints, market imperfections, resource restrictions, inadequate technical expertise, and limited managerial skills.³⁵ The inability of the SBO to recognise the influence of these barriers on their business can be detrimental, particularly given the central role they can play in their business operations. Some of these barriers are outside of the control of the SBO. For example, in Australia, small business financial constraints were evident during the global financial crises.³⁶ However, many internal barriers could potentially be overcome by an increased level of SBO literacy.³⁷ In recent times the notion of ‘capability’ (compared to literacy) has arisen, as capability covers not only a person’s understanding something but also the confidence and capability to actually use that knowledge. The notion of literacy is not static and it can develop over time,³⁸ and refers broadly to a person’s knowledge and ability to use that information.³⁹ Of course what literacies required by a person can depend upon their activities. When faced with managing a business it has been suggested that SBOs require a broad range of knowledge.⁴⁰ In terms of cash flow for a small business this could include concepts related to business tax, finance and CAS, as well as accounting.

The ability to maintain consistent cash flow levels is important for cash flow management. Ekanem argued that SBOs should attempt to avoid extended cash shortages, as supply constraints affect the ongoing operations of the business.⁴¹ For example, creditors may stop supplying goods to the small business, which means the small business cannot trade and generate income. In order to reduce cash constraints and to achieve better control of cash flow, it has been suggested that SBOs need to implement effective cash flow management practices.⁴²

Effective cash flow management practices consist of keeping financial accounts; maintaining a business plan and a cash budget; keeping records of revenue, expenses, creditor and debtor invoicing; and maintaining an inventory schedule.⁴³ Previous research in Australia and the United Kingdom (UK) has suggested that SBOs are not actively involved in systematic cash

³⁵ Suahputra Sijabat and Fathurohman (n 22).

³⁶ Melissa Belle Isle, Brett Freudenberg and Richard Copp, ‘Cash Flow Benefit from GST: Is it Realised by Small Businesses in Australia?’ (2014) 29(3) *Australian Tax Forum* 417.

³⁷ Sandra J. Huston, ‘Measuring financial literacy’ (2010) 44(2) *Journal of Consumer Affairs* 296.

³⁸ *Ibid.*

³⁹ Reva Berman Brown, Mark N.K. Saunders and Richard Beresford, ‘You owe it to Yourself: The Financially Literate Manager’ (2006) 30(2) *Accounting Forum* 171.

⁴⁰ *Ibid.*

⁴¹ Ignatius Ekanem, ‘Liquidity Management in Small Firms: A Learning Perspective’ (2010) 17(1) *Journal of Small Business and Enterprise Development* 123.

⁴² Peel, Wilson and Howorth (n 8).

⁴³ Alejandro Drexler, Greg Fischer and Antoinette Schoar, ‘Keeping it simple: Financial literacy and rules of thumb’ (2014) 6(2) *American Economic Journal: Applied Economics* 1.

flow management practices.⁴⁴ While day-to-day recording of activities involving cash inflow and outflow may be undertaken, the process involved in receiving and making payment for those activities, or in managing cash once received, may not be actively conducted.⁴⁵

Defining the exact literacy requirements of SBOs to effectively manage cash flow could be a challenging exercise due to the heterogeneity of the small business sector. The level of literacy held by SBOs could be wide ranging because of education, experience and social backgrounds. For migrant SBOs, their level of literacy could be further restrained by the challenges from having English as a second language.⁴⁶ For the management of cash flow, this research focuses on the literacy of SBOs in terms of business tax, professional financial literacy and CAS literacy. The importance of literacy in these areas is examined further exploring existing literature and highlighting areas of research that require further investigation.

B Business Tax Literacy

Business tax literacy concerns the tax knowledge that is essential to a taxpayer's situation within the region or country in which that taxpayer resides.⁴⁷ To obtain tax knowledge this can occur as a taxpayer is exposed to and has experience with the tax system; but also, they could undertake courses or training, or obtain advice and assistance.⁴⁸

An area that could benefit from improved tax literacy is potentially tax compliance, as those taxpayers with lower tax literacy could be engaging in unintentional non-compliance behaviour due to inadvertent mistakes.⁴⁹ Such mistakes could result in tax debts leading due to cash shortfalls,⁵⁰ as well as the further financial burden of penalties and interest.⁵¹ Additionally, improved tax literacy could influence taxpayer behaviour through better trust and understanding of the tax system.⁵² Of course, even though higher tax literacy taxpayers might engage in intentional non-compliance behaviour.

⁴⁴ Melissa Belle Isle and Brett Freudenberg, 'Calm Waters: GST and Cash Flow Stability for Small Businesses in Australia' (2015) 13(2) *eJournal of Tax Research* 492.

⁴⁵ Peel, Wilson and Howorth (n 8).

⁴⁶ L Chen, E Sinnewe and Michael Kortt, *Evidence of Migrant Business Ownership and Entrepreneurship in Regions* (Regional Australia Institute, 2018).

⁴⁷ Newman Wadesango, N Mwandambira, Charity Mhaka and Ongayi Wadesango, 'Literature Review on the Impact of Tax Knowledge on Tax Compliance among Small Medium Enterprises in a Developing Country' (2018) 22(4) *International Journal of Entrepreneurship* 1.

⁴⁸ Ibid; Belle Isle, Freudenberg and Sarker (n 34).

⁴⁹ Ibid; Natrah Saad, 'Tax Knowledge, Tax Complexity and Tax Compliance: Taxpayers' View' (2014) 109 *Procedia - Social and Behavioral Sciences* 1069.

⁵⁰ Elisabeth Poppelwell, Gail Kelly and Xin Wang, 'Intervening to Reduce Risk: Identifying Sanction Thresholds Among SME Tax Debtors' (2012) 10(2) *eJournal of Tax Research* 403.

⁵¹ Ibid.

⁵² Rosalita Rachma Agusti and Aulia Fuad Rahman, 'Determinants of tax attitude in small and medium enterprises: Evidence from Indonesia' (2023) 10(1) *Cogent Business & Management* DOI: 10.1080/23311975.2022.2160585.

In relation to business operations, a way that lower business tax literacy could adversely impact is that cash flow forecasting may fail to take into account the correct tax liabilities (including the quantum as well as the timing for payment). This could mean small businesses might have a cash short fall and be unable to pay their tax debt to the tax authority.⁵³ This appears to be a common problem in Australia, as over two-thirds of unpaid tax debt outstanding to the ATO relates to small businesses.⁵⁴

For this research five Federal taxes are considered, being income tax, pay as you go (PAYG) withholding and PAYG instalment, goods and services tax (GST), fringe benefits tax (FBT), and superannuation guarantee (SG), each of which is briefly discussed below.

Generally, income tax will be payable on the income generated by the business, with the tax rates varying according to the business structure utilised. A PAYG instalment is a payment made in advance to reduce the tax payable on expected annual taxable income. PAYG withholding tax is a liability that relates to payments an entity makes to employees and businesses that have not provided an Australian Business Number (ABN) when entering a trade arrangement with that particular entity.

The GST is a multi-staged broad-based consumption tax, with tax collected at more than one stage of the production and distribution chain.⁵⁵ Generally, in Australia, each stage of the supply of goods and services has GST liability imposed if recorded as a Taxable Supply or Taxable Importation. FBT is an employer obligation where tax is calculated on taxable benefits the employer provides to employees. The Australian Government implemented a compulsory Superannuation Guarantee Levy in 1992, which requires employers to make regular SG payments on behalf of most of their employees.

Recently the business tax literacy of Australian SBOs in the service sector was reported.⁵⁶ This study considers five major Federal taxes that apply to Australian businesses⁵⁷ and demonstrated for service SBOs their overall business tax literacy was below average at approximately 42%.⁵⁸ That is, SBOs are incorrect in their business tax knowledge over half the time. When considering each of the Federal taxes individually, GST had the greatest understanding by SBOs followed by Income Tax, FBT, SG, and then PAYG Withholding. In terms of demographics, it was found that greater business tax literacy is likely to be held by service SBOs who have operated for more than 10 years, employ staff, are set-up in a company or trust/company structure and have prior business experience.⁵⁹ However, it is not clear whether such increased business tax literacy is related to improved business performance, or ability to manage cash flow.

⁵³ Guilia Mascagni and Fabrizio Santoro, 'What is the Role of Taxpayer Education in Africa?' (International Centre for Tax and Development, 2018).

⁵⁴ Commissioner of Taxation, Annual Report 2021-22, Appendix 6.0.

⁵⁵ Cedric Sandford, Michael Godwin, Peter Hardwick and Ian Butterworth, *Costs and Benefits of VAT* (London: Heinemann Educational Books, 1981).

⁵⁶ Belle Isle, Freudenberg and Sarker (n 34).

⁵⁷ Income Tax, Goods and Services Tax, Fringe Benefits Tax, Pay-As-You-Go Withholding and Superannuation Guarantee. Note it is acknowledged that technically Superannuation Guarantee is not a business tax.

⁵⁸ Belle Isle, Freudenberg and Sarker (n 34), 88.

⁵⁹ Belle Isle, Freudenberg and Sarker (n 34).

C Professional Financial Literacy

The notion of professional financial literacy relates to the type of financial literacy that an SBO may need to hold to run their business. Overall, the notion of ‘financial literacy’ is the degree to which an individual understands key financial concepts and possesses the ability and confidence to manage their personal finances through the appropriate short-term decision making and sound long-range financial planning.⁶⁰ While there is research about individual’s level of financial literacy,⁶¹ the focus here is for those conducting a small business as they need greater financial awareness.⁶² Previous research has raised concerns about SBOs having inadequate financial literacy to make important financial decisions for their business.⁶³ The consequences of such defines in professional financial literacy is that SBOs do not have the knowledge or confidence to implement adequate financial management systems in their business and make appropriate decisions.⁶⁴ The concepts that could be encapsulated by ‘professional financial literacy’ include understanding financial statements, the ability to implement and sustain effective cash flow management processes, implementation of internal control mechanisms and corporate governance.⁶⁵ The solvency of the business could hinge on the SBO having sufficient professional financial literacy.⁶⁶ Such knowledge allows the SBO to comprehend the financial position of the business, as well as to allow them to plan for their cash flow.⁶⁷ As part of this knowledge about and understanding the important financial statements could include reading and understanding Balance Sheets, Income Statements, Cash Flow Statements and preparation of a Cash Budget.⁶⁸ Professional financial literacy of SBOs can impact firm growth and productivity: those with higher levels of financial literacy have been known to be more effective when using financial products and are more engaged in using and offering trade credit.⁶⁹

The professional financial literacy of SBOs is important for small businesses when competing in the marketplace. Their larger competitors are more likely to employ experts in the fields of accounting or finance to propose financial decisions and implement effective cash flow management practices.⁷⁰ In contrast, the small business may rely on the knowledge and abilities of the SBO, or of an external advisor who is afforded a snap-shot view of the individual business situation.⁷¹ Therefore, in order to remain solvent in the market, SBOs need adequate financial foundations that allow them to make smart financial decisions. They

⁶⁰ David L. Redmund, ‘Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy’ (2010) 44(2) *Journal of Consumer Affairs* 276.

⁶¹ The Social Research Centre, ‘ANZ Survey of Adult Financial Literacy in Australia’ (May 2015).

⁶² Berman Brown, Saunders and Beresford (n 39).

⁶³ Drexler, Fischer and Schoar (n 43).

⁶⁴ Suahputra Sijabat and Fathurohman (n 22).

⁶⁵ Andrew Worthington, The distribution of financial literacy in Australia (No. 185) (School of Economics and Finance, Queensland University of Technology, 2004).

⁶⁶ Berman Brown, Saunders and Beresford (n 39).

⁶⁷ DeThomas and Fredenberger (n 6).

⁶⁸ Berman Brown, Saunders and Beresford (n 39).

⁶⁹ Miriam Bruhn and Bilal Zia, ‘Stimulating Managerial Capital in Emerging Markets: The Impact of Business Training for Young Entrepreneurs’ (2013) 5(2) *Journal of Development Effectiveness* 232.

⁷⁰ Jack Foley, ‘We Really Need to Talk About Owner-Managers and Financial Awareness!’ (2018) 25(1) *Small Enterprise Research* 90.

⁷¹ *Ibid.*

also need to implement strategic business plans that allow them to recognise risk, maintain cash flow and utilise assets to ensure maximum profit generation.⁷² This can be difficult, as SBOs are multitasking in their business and carrying out a multitude of roles from the primary generator of income, such as human resource manager and administration assistant to the financial controller. As such it is thought that an SBO would need some professional financial literacy to assist with managing their business cash flow.

D Computer Accounting Software (CAS) Literacy

With improvements with technology, the affordability and useability of CAS has improved over the last decades.⁷³ If small businesses use and understand such CAS, they may have enhanced profitability.⁷⁴ CAS may be able to produce reports that provide insights into the financial health of the business, as well as provide for automated warnings and/or reminders, such as overdue accounts.

In the context of a small business, it may be the SBO that has to be the one to understand and use the CAS. This is because small businesses may not have the financial resources to employ others or pay external advisors to use the CAS;⁷⁵ or even when they do have employees, these employees may lack the expertise required.⁷⁶

CAS has been advocated as being of great importance to small business success. This can be explained partly due to the digital management support of the CAS system and the fact that it allows the SBO to measure performance with up-to-the-minute data.⁷⁷ Recent Australian research has indicated that the CAS is not being used effectively to assist with the management of cash flow, as there was a low engagement in the use of the CAS reporting options.⁷⁸ It is argued that this may be a result of limited knowledge about the use and benefits that a CAS system can create for small businesses, which can be compounded by the lack of SBO confidence or by their anxiety about their ability to operate the CAS efficiently.

Considering that small businesses might be non-employing or have a small number of employees, it is fair to suggest that the SBO could be tasked with understanding all necessary requirements for cash flow management. This includes compliance with tax systems relevant to their business, the use and understanding of financial statements and CAS. This could mean that cash flow management could be influenced by SBO literacy in these areas and as a consequence, the overall performance of the business could be impacted by their literacy.

⁷² Ibid.

⁷³ Timothy L. Pett and James A. Wolff, 'SME Identity and Homogeneity – Are There Meaningful Differences between Micro, Small, and Medium-Sized Enterprises?' (2012) 6(2) *Journal of Marketing Development and Competitiveness* 48.

⁷⁴ Paul Matthews, 'ICT Assimilation and SME Expansion' (2007) 19(6) *Journal of International Development* 817; Morikawa, 2004; Mike Rich, 'IT-Savvy Businesses are more Profitable' (2012) 25(11) *NZ Business* 26.

⁷⁵ Ibid; Kossai and Piget, 2014; Kossai and Piget, 2014.

⁷⁶ Matthews (n 74); Pett and Wolff (n 73).

⁷⁷ Rich (n 74).

⁷⁸ Belle Isle, Freudenberg and Copp (n 36).

This research seeks to investigate the relationship between cash flow management, SBO literacy, and business performance.

III RESEARCH METHOD

In terms of cash flow management and RBT, a positive significant influence on performance has been associated with the extent of the cash flow information used in the preparation of cash budgets and cash flow statements.⁷⁹ Strategies implemented to effectively manage cash flow have been advocated as providing a competitive advantage when compared to others in the same industry who do not create well developed strategies.⁸⁰ Cash flow information is ranked higher for business performance than other sources of information used for decision making. Further studies suggest that there is a significant positive relationship between improved performance and the use of accounting information in formal and informal planning.⁸¹

To ascertain any possible relationship between literacy and cash flow management a survey was designed to measure the various areas of literacy, as well as the performance of the small business. The survey was informed by prior interviews with SBOs and advisors.⁸² This was also combined with the prior literature, particularly that relevant to tax knowledge of small businesses.⁸³ Creating the current instrument by combining past survey questions with contemporary responses obtained, was thought to improve the strength of the survey's content validity.

The survey was circulated in the form of self-administered questionnaires, where the method of participation was in electronic form. Previous research suggests that administering electronic surveys as opposed to mail surveys offers the advantage of a reduction in time from sending and receiving traditional mail.⁸⁴ This also allows for quicker and more accurate generation of data files, as the possibility of transcribing errors is eliminated at the data capture stage.⁸⁵

The survey was constructed using a web-link to the survey created in the Survey Monkey online survey platform. This web-link was used on multiple platforms to engage with SBOs

⁷⁹ Haron, Yahya and Harashid Haron (n 15).

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Melissa Belle Isle, Brett Freudenberg and Tapan Sarker, 'Is the literacy of small business owners important for cash flow management?: The experts' perspective' (2018) 13(1) *Journal of Australasian Tax Teachers Association* 31.

⁸³ Margaret McKerchar, 'Understanding Small Business Taxpayers: Their Sources of Information and Level of Knowledge of Taxation' (1995) 12 *Australian Tax Forum* 25.

⁸⁴ Edith de Leeuw, 'To Mix or Not to Mix Data Collection Modes in Surveys' (2005) 21(2) *Journal of Official Statistics*, 233.

⁸⁵ Chris Evans, Binh Tran-Nam and Brian Andrew, 'Towards Systematic Reform of the Australian Personal Income Tax: Developing Sustainable Model for the Future' (2007) 22(2) *Australian Tax Forum* 15.

in the service industry (service SBOs), as it was cost effective and provided the ability to have greater geographic reach.⁸⁶

The sample of service SBOs in Australia was achieved through three different sampling techniques, being convenience, snowballing, and stratified sampling.⁸⁷ Convenience sampling was used to contact both professional and personal contacts of the research team using email, Facebook, and LinkedIn. This also resulted in snowball sampling techniques, as possible participants were encouraged to share the survey with their own networks. Additionally, industry associations and representatives of professional bodies were contacted to share the survey web-link with their network. These bodies included Business South Australia, The Tax Institute, and the Australian Institute of Credit Management.

The ABN register was used to do a stratified sample of businesses, with businesses categorised by their geographical location. A conscious decision was made to exclude Queensland from just the stratified sample method, which was because the research team resided in Queensland, and that small business participants drawn from the convenience and snowball sampling were more likely to be Queensland based.

A specific response rate is not possible due to the variety of sampling techniques, although it is possible calculate the completion rate. A total of 259 started the survey and a total of 116 completed it, giving a completion rate of 45%. While 116 is slightly disappointing, engaging small businesses in research has been previously identified as problematic.⁸⁸ Nevertheless, the results are still useful to demonstrate insights into the literacy of service SBOs and how literacy influences business performance.⁸⁹

The survey was designed to collect demographic information relating to the service SBO, the sources of advice and the tax systems relevant to the research. The survey questions also sought to measure service SBO literacy related to business tax literacy, understanding financial statements, and CAS systems. A literacy score was determined based on the number of correct answers to the literacy questions for each participant which is similar to other tax literacy research in Australia.⁹⁰ The literacy score when established, was used for comparative analysis with net income and gross annual revenue as well as with the adoption of cash flow activities in the business.

An overview of each of the 43 questions and its classification within the three areas explored in the research project can be found in Appendix A. There were twenty-six business tax literacy questions, seven financial statements, and ten CAS questions. Of the twenty-six business tax literacy questions, eleven were relevant to income tax, there were four questions for GST, SG and FBT and there were three questions for PAYG withholding. Literacy scores

⁸⁶ de Leeuw (n 84).

⁸⁷ John W Creswell and Vicki L Plano Clark, *Designing and Conducting Mixed Methods Research* (Sage Publications, 1st Ed, 2007), 123; ‘Stratified Random Sampling’ Lærd Dissertation (2018) Dissertation.laerd.com (Web Page) <<http://dissertation.laerd.com/stratified-random-sampling.php>>.

⁸⁸ Ian Wallschutzky and Brian Gibson, ‘Small Business Cost of Tax Compliance’ (1993) 10(4) Australian Tax Forum 511; Belle Isle, Freudenberg and Copp (n 36).

⁸⁹ The survey was concluded in June 2019 and therefore the data was collected prior to the economic effect of the COVID-19 pandemic.

⁹⁰ Chardon, Freudenberg and Brimble (n 32).

were used to create a mean score which was applied in discussions related to the service SBOs of those businesses. The literacy business tax literacy scores (with detailed discussion about demographic variations) have been reported elsewhere,⁹¹ as have the potential relationship between business tax literacy and professional and CAS literacy.⁹² What this article uniquely considers is the possible relationship of these literacy scores with business performance, as well as cash flow management activities. It is suggested that this is critical to consider, as it could give weight as to whether such literacies are important for SBOs or not.

A Participants

Table 1 details the descriptive characteristics of the survey participants. The sample, which demonstrates that almost two-thirds of participants have an Australian domicile by birth, with the remaining one-third arriving in Australia as migrants, is similar to the pattern of the percentage of ownership of Australian small businesses.⁹³

⁹¹ Belle Isle, Freudenberg and Sarker (n 34).

⁹² Melissa Belle Isle and Brett Freudenberg, 'A comprehensive analysis of the business literacies of Australian small businesses' (2021) 23(1) *Journal of Australian Taxation* 67.

⁹³ CGU Insurance, *Migrant Small Business Report* (Australia, CGU Insurance, 2018) available at <https://apo.org.au/node/128756>. Accessed on Feb. 21 2020.

Table 1: Summary of service SBO participants

Demographic	Categories	N = 116	Percentage
Residency	Less than 5 years	1	0.9%
	More than 5 years but less than 10 years	7	6.0%
	More than 10 years but less than 15 years	8	6.9%
	More than 15 years but less than 20 years	8	6.9%
	More than 20 years	17	14.7%
	I was born in Australia	75	64.7%
Education	Left school before completion of year 10	1	0.9%
	Year 10	1	0.9%
	Year 12	8	6.9%
	TAFE qualification	23	19.8%
	University undergraduate degree	36	31.0%
	University post graduate degree	47	40.5%
Business Age	Less than 2 years	22	19.0%
	More than 2 years but less than 5 years	19	16.4%
	More than 5 years but less than 10 years	28	24.1%
	More than 10 years	47	40.5%
Number of Employees (excluding the owner)	Zero	46	39.7%
	1 to 5	51	44.0%
	6 to 10	9	7.8%
	11 to 20	10	8.6%
Past Business Experience	Yes	62	53.4%
	No	54	46.6%
Annual Turnover	Under \$50000	30	25.9%
	\$50001-\$200000	36	31.0%
	\$200001-\$2000000	44	37.9%
	\$2000001-\$5000000	4	3.4%
	\$5000001-\$10000000	2	1.7%

* Percentages may be affected by rounding

The responses suggest that just over 40% of participants had a postgraduate qualification and slightly fewer than one-third had an undergraduate qualification. A TAFE qualification was the highest level of education completed by 23 respondents (20%), with the remaining respondents having their highest level of education at a secondary school. These proportions of service SBO education levels in the sample differ from those previously reported for all business owner/managers in Australia.⁹⁴ The results reported in the Census suggest that post graduate study among Australian business owner/managers is as low as 7%, whereas those who have their highest level of education at a secondary school is 31%.⁹⁵ Therefore, the participants involved in this research appear to have higher levels of education than the levels of the general population of small businesses owner/managers in Australia. This could mean that the education of participants could be higher than the normal population, so this needs to be considered when determining the results.

Participants were asked to indicate the age of their businesses as it was thought this might be important when discussing service SBO literacy and business survival. Businesses trading for less than 5 years made up 35% of all participants, 16% had been in operation for 2 to 5 years and 19% have been active for less than 2 years. The remaining 63% of businesses were represented by those trading for 5 to 10 years (24% or 28 businesses) and those trading for more than 10 years (41%).

Almost half (44%) of the participants employed between 1 and 5 employees and 40% were non-employing entities. The employment brackets of 6 to 10 and 11 to 19 employees were each represented by 7.8% and 8.6% of participants, respectively. The survey data indicates an under-representation of non-employing businesses compared to the Australian population.⁹⁶ In Australia, 64% of all businesses employing between 0 to 20 employees are non-employing businesses.⁹⁷ In contrast, the employment brackets of 1 to 5 and 6 to 20 are over-represented in the survey when compared to the Australian small business population of businesses employing 0 to 20 employees. According to ABS data, in 2019 Australian businesses employing 1 to 5 employees are represented by 28% of the businesses, compared to 44% in the survey, and 9% of the businesses employing 6 to 20 employees whereas 16% of survey participants employed between 6 and 20 employees.⁹⁸

The annual turnover of each respondent was categorised according to the ABS catalogue no. 8165-0.⁹⁹ For businesses earning ranges of \$0-\$50,000, \$2,000,001-\$5,000,000 and \$5,000,001-\$10,000,000, the survey representation is comparable to the population for the same income groups when calculated as a percentage of total businesses earning up to \$10 million.¹⁰⁰ The survey responses differ only marginally by one percentage point in all three turnover groups, compared to the population. Compared to the population for the annual turnover category of \$50,001-\$200,000, the survey responses under-represent the Australian

⁹⁴ Australian Bureau of Statistics, 'Census of Population and Housing: Reflecting Australia - Stories from the Census 2016.' (Catalogue No 2071.0, 11 July 2018) (Canberra, ABS, 2018).

⁹⁵ Ibid.

⁹⁶ Australian Bureau of Statistics (n 24).

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ Ibid, Table 17.

population by 3% and the income group of \$200,001-\$2,000,000 is over-represented in the survey by 4%.¹⁰¹

B Results

The results are now discussed in terms of the potential relationship between SBO literacy and business performance.

I Service SBO literacy and Resource-Based Theory

The foundations for RBT suggest that businesses with a higher level of internal resources should achieve a higher level of performance. A superior level of internal resources should allow businesses to procure and maintain a competitive advantage in the marketplace in which they reside. To measure the performance of the participants, two values were chosen for statistical analysis. The values recorded for gross annual revenue and net income (calculated by subtracting participant responses to gross annual revenue and gross annual expenses)¹⁰² were compared to the three literacy scores to determine if the internal resource ‘literacy’ of service SBOs has a relationship with business performance. Table 2 displays the results of the linear regression tests conducted for gross annual revenue and suggests that business tax literacy score and CAS literacy score yielded significant results when compared to gross annual revenue. This suggests that those service SBOs with higher levels of literacy for business tax and CAS achieve a higher value of gross annual revenue for their businesses. In contrast, the results for financial statement literacy score, when compared to gross annual revenue, does not produce a significant relationship. This suggests that business performance in terms of gross annual revenue does not appear to be a significant relationship to the level of financial statement literacy held by service SBOs.

Table 2: The relationship between literacy score (IV) and Gross Annual Revenue (DV)

Literacy scores (IV)	Sum of Squares	df	Mean Square	F	Sig*.
Business tax literacy score [#]	6.795E+12	1	6.795E+12	5.453	.011 ^b
Financial statement literacy score [#]	2.168E+12	1	2.168E+12	1.685	.099 ^b
CAS literacy score [#]	1.028E+13	1	1.028E+13	7.695	.004 ^b

* a one-tail test was undertaken to ascertain if income increases when literacy increases.

DV = Dependent Variable, [#]IV = Independent Variable.

Business performance in terms of RBT was also examined using net income and the internal resource of literacy, using the service SBO literacy scores. Linear regression was conducted

¹⁰¹ Ibid.

¹⁰² Net income has been an accepted measure of performance for RBT in previous studies: Christopher D. Ittner and David F. Larcker, ‘Total Quality Management and the Choice of Information and Reward Systems’ (1995) 33 *Journal of Accounting Research* 1; Sally K. Widener, ‘Associations Between Strategic Resource Importance and Performance Measure Use: The Impact on Firm Performance’ (2006) 17(4) *Management Accounting Research* 433.

with net income as the dependent variable and each of the literacy scores as the independent variable. The results displayed in Table 3 demonstrate that the ability to achieve a higher level of net income for the business has a significant relationship with business tax literacy score and CAS literacy score. Similar to the results for gross annual revenue, it was found that financial statement literacy score was not significantly related to business performance when measured in accordance with net income. This suggests that an improvement in the value of net income when considering RBT is unlikely to be explained by the financial statement literacy of service SBOs.

Table 3: The relationship between literacy score (IV) and Net Income (DV)

Literacy scores (IV)	Sum of Squares	df	Mean Square	F	Sig*.
Business tax literacy score [#]	4.397E+11	1	4.397E+11	4.528	.018 ^b
Financial statement literacy score [#]	2.053E+11	1	2.053E+11	2.070	.077 ^b
CAS literacy score [#]	5.586E+11	1	5.586E+11	5.493	.011 ^b

* a one-tail test was undertaken to ascertain if income increases when literacy increases.

DV = Dependent Variable, #IV = Independent Variable.

Overall, the results from measuring the net income and gross annual revenue to the literacy of service SBOs suggest that small businesses with a greater level of internal human capital (that is SBO literacy) achieve higher performance. Participants with higher business tax literacy and CAS literacy appear to realise a greater amount of income and revenue when compared to those with lower levels of literacy. Financial statement literacy does not seem to relate to the improvement of financial performance, which is unusual, considering that the determination of business performance could relate to the ability of SBOs to understand financial statements. This could suggest that a basic understanding of financial statements is all that is required for business performance or that SBOs rely on the information of expenses and income readily available in CAS as an alternative to having a thorough knowledge of financial statements. From the results for RBT, when literacy is the measure of internal human capital, those with higher business tax literacy and CAS literacy have a competitive advantage over those in the same market who have lower literacy in these two areas.

II *Service SBO literacy and cash flow management*

To understand how SBO literacy could be related to cash flow management a variety of data was collected in the survey relevant to cash flow. Initially, literacy scores were used to determine whether literacy of service SBOs influences their ability to implement cash *inflow* and cash *outflow* activities for cash flow management.

III *The SBO literacy and cash flow activities*

The ability of SBOs to maintain cash flow is vitally important for their success. Cash flow stability can be achieved by enacting effective cash flow management strategies. Some strategies have been proposed as essential for ensuring that cash is incoming in a short period and that cash outflow is extended to the maximum allowable time.¹⁰³ To assist cash *inflow*, practices can include invoicing quickly, requesting part payment before commencement of work, providing easy payment options and payment incentives, enquiring about outstanding payments and resolving any payment disputes in a timely manner.¹⁰⁴ Prior research suggests that SBOs spend insufficient time and place low importance on these activities.¹⁰⁵ Table 4 illustrates various activities that can be implemented to improve the collection time of revenue, along with the responses of the participants as to whether these practices are used in their business. It is possible that participants that selected ‘not applicable’ may trade on cash and not credit basis, hence these activities may not need to be followed.

Table 4: Cash flow activities of participants

My business makes use of these cash flow activities ...	Not Applicable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Raise Progress invoices	43	1 (1.4%)	9 (12.3%)	5 (6.8%)	34 (46.6%)	24 (32.9%)
Invoice in Advance	23	3 (3.2%)	24 (25.8%)	15 (16.1%)	27 (29.9%)	24 (25.8%)
Provide Direct Debit options	33	10 (12.0%)	17 (20.5%)	6 (7.2%)	26 (31.3%)	24 (28.9%)
Chase outstanding accounts	20	4 (4.2%)	7 (7.3%)	5 (5.2%)	50 (52.1%)	30 (31.3%)
Negotiate shorter trading terms	41	2 (2.7%)	13 (17.3%)	10 (13.3%)	33 (44.0%)	17 (22.7%)
Have stock on hand for orders	60	1 (1.8%)	6 (10.7%)	12 (21.4%)	19 (33.9%)	18 (32.1%)

¹⁰³ Australian Small Business and Family Enterprise Ombudsman ‘Payment Times and Practices Inquiry – Final Report (April 2017).’ (Canberra, Australian Small Business and Family Enterprise Ombudsman, 2017); Australian Taxation Office (n 20).

¹⁰⁴ Ibid; Australian Taxation Office (n 20).

¹⁰⁵ Belle Isle and Freudenberg (n 44).

* Note: ‘not applicable’ is not included in the percentage calculations due to the other responses being part of a Likert scale (which is then used for statistical analysis).

For those businesses offering services that allow them to issue invoices during the time when a contract is being provided, it appears that almost 80% of participants raise invoices during the process of the work being completed. Just over half of the participants who could implement issuing invoices in advance suggested that they are engaging in this activity. Those disagreeing or strongly disagreeing represented close to one-third of participants. Being unable to issue in advance could suggest that this practice is not common for the service industry, or it could be that the service SBOs did not feel they could request money in advance from their trading partners for work yet to be completed.

In terms of improving payment times from debtors, participants were asked to advise whether they provide direct payment methods to their customers. Direct payment methods can include setting up an authority that allows a supplier to debit a customer’s account and to withdraw the relevant funds that are outstanding when it is due for payment. It also includes the ability for the customer to pay outstanding amounts directly to the supplier using a transfer from their bank account to the supplier account or making use of debit, credit, or bank cards to pay directly to the suppliers’ account. In terms of the participant responses, it can be seen, that slightly less than two-thirds of the participants suggested that direct payment methods are used to assist with cash management. However, almost one-third of participants suggest they do not make use of direct payments. This could imply that almost one-third of the service SBOs are not making use of effective payment options to improve the inflow of cash on a timely basis. This could be due to lack of knowledge in how to implement direct debit payment options.

In terms of cash flow activities questions related to contacting customers to request payment for outstanding invoices and to negotiating shorter trading terms with customers. Both questions relate to the provision of credit to customers, allowing the customer to receive goods or services and pay sometime in the future. Common credit terms in Australia include payment in 7 days, 14 days, 28 days or 30 days from the end of the month. Contacting customers about outstanding invoices achieved a very high response, compared to the other cash inflow activity questions with almost 85% confirming that they are contacting customers about outstanding accounts. In contrast, negotiation of shorter trading terms with customers was confirmed by only two-thirds of those participants. This could be due to service SBOs feeling that they lack power in their customer trading relationship or believing that negotiation of trading terms could have negative consequences for ongoing trade.¹⁰⁶

The final question related to whether participants held stock to satisfy customer orders. It was expected that there would be a high number of ‘not applicable’ responses due to the research being centred around participants who are offering services in contrast to selling goods. The question was posed nonetheless, as some businesses may sell a portion of goods to supplement the services they offer. The results suggest that two-thirds of participants who carry goods will keep stock to satisfy future customer orders. Cash restrictions have been linked to the accumulation of trading stock in anticipation of future orders.¹⁰⁷

¹⁰⁶ Ibid.

¹⁰⁷ Belle Isle, Freudenberg and Copp (n 36).

Therefore, service SBOs responding with affirmative answers may be restricting their cash inflow by holding goods for longer periods than necessary to satisfy customer orders in the future.

The survey also explored the trading relationship that participants have with their suppliers. Prior research indicates that the effective use of trade credit facilities can be an alternative source of finance when more formal options are not available.¹⁰⁸ Other activities promoted as being useful in improving cash flow for small business includes replacing the old stock with fast moving stock and only ordering stock when necessary.¹⁰⁹ Three questions were posed to determine whether service SBOs are optimising the time delay between the purchase and the payment date of supplies: Table 5.

Table 5: Cash *outflow* activities of participants

My business makes use of these cash flow activities ...	Not Applicable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Negotiate extended trading terms	50	4 (6.1%)	15 (22.7%)	11 (16.7%)	25 (37.9%)	11 (16.7%)
Make use of early settlement discounts	32	2 (2.4%)	3 (3.6%)	9 (10.7%)	43 (51.2%)	27 (32.1%)
Always have the cash to pay suppliers	1	3 (2.9%)	3 (2.9%)	16 (15.2%)	55 (52.4%)	28 (26.7%)

* Note: ‘not applicable’ is not included in the percentage calculations due to the other responses being part of a Likert scale (which are then used for statistical analysis).

More than half of the participants who trade on credit with suppliers suggest that they have arranged extended trading terms with suppliers in contrast to one-quarter confirming they have not engaged in negotiations (see Table 5). This suggests that at least half of participants are attempting to hold onto cash for longer periods of time. For those not negotiating this could be due to service SBOs feeling that the supplier was non-approachable about changing trading terms. Alternatively, it could be that service SBOs are reluctant to place strain on the relationship they have with those providing important resources for their business.¹¹⁰

The results also demonstrate that a large proportion of participants take advantage where possible of early settlement discounts. This type of discount is becoming increasingly popular

¹⁰⁸ Mervi Niskanen and Jyrki Niskanen, ‘Small Business Borrowing and the Owner-Manager Agency Costs: Evidence on Finnish Data’ (2010) 48(1) *Journal of Small Business Management* 16.

¹⁰⁹ Belle Isle, Freudenberg and Copp (n 36).

¹¹⁰ *Ibid.*

in the energy, telecommunication and government service industries, among others. More than 80% of businesses agreed or strongly agreed that they make use of early settlement discounts. This is likely to improve cash flow, as it allows the monetary value of the discount percentage to be kept as business income. This strategy also removes the requirement for service SBOs to request changes to trade with their suppliers, relieving the possibility of placing strain on the business relationship. The participants were also questioned about whether they keep enough cash on hand to settle their supplier accounts. Slightly more than three-quarters confirmed that they pay their suppliers within trading terms. This could suggest that three-quarters of service SBOs appear able to manage their cash flow to pay suppliers on time. Alternatively, it could suggest that service SBOs place more importance on maintaining a favourable trading relationship with their suppliers, and as such pay their supplier invoices before other debts. Literature suggests that SBOs are apprehensive about jeopardising the rapport they have with suppliers, being concerned that goods and services will be restricted for non-payment.¹¹¹

These cash flow activities enacted by the participants were compared to the service SBO literacy scores to explore whether literacy influences the implementation of cash flow management systems and procedures. Simple linear regression tests at the .05 level of significance were conducted where the literacy score was the independent variable, and the cash activity was the dependent variable: Table 6.

When regression tests were carried out between literacy and the cash *inflow* activity of ‘contacting customers regarding outstanding accounts’, all literacy scores were found to be linearly related. This suggests that service SBOs with a high level of literacy in business tax, financial statements and CAS engage in the activity of enquiring about outstanding accounts, with the relationship strongest with business tax literacy (.003), followed by CAS literacy (.005) and then financial statement literacy (.019).

¹¹¹ Australian Small Business and Family Enterprise Ombudsman (n 103); Belle Isle, Freudenberg and Copp (n 36).

Table 6: Service SBO literacy (IV) and cash *inflow* activities (DV)

Literacy score and cash <i>inflow</i> activities	Sum of Squares	df	Mean Square	F	Sig*.
Raising progress invoices (DV)*					
Business tax literacy score [#]	.013	1	.013	.012	.911 ^b
Financial statement literacy score [#]	.380	1	.380	.367	.546 ^b
CAS literacy score [#]	4.129	1	4.129	4.138	.046 ^b
Invoicing in Advance (DV) *					
Business tax literacy score [#]	.144	1	.144	.096	.758 ^b
Financial statement literacy score [#]	.506	1	.506	.336	.563 ^b
CAS literacy score [#]	.592	1	.592	.394	.532 ^b
Providing direct debit payment options (DV) *					
Business tax literacy score [#]	1.151	1	1.151	.578	.449 ^b
Financial statement literacy score [#]	4.273	1	4.273	2.188	.143 ^b
CAS literacy score [#]	1.315	1	1.315	.671	.416 ^b
Contacting customers regarding outstanding invoices (DV) *					
Business tax literacy score [#]	7.905	1	7.905	8.158	.005 ^b
Financial statement literacy score [#]	5.269	1	5.269	5.688	.019 ^b
CAS literacy score [#]	7.873	1	7.873	9.332	.003 ^b
Negotiating shorter trading terms with customers (DV) *					
Business tax literacy score [#]	1.272	1	1.272	1.063	.306 ^b
Financial statement literacy score [#]	7.725	1	7.725	6.967	.010 ^b
CAS LS [#]	1.514	1	1.514	1.394	.242 ^b
Always having enough stock on hand to satisfy customer orders (DV) *					
Business tax literacy score [#]	.346	1	.346	.305	.583 ^b
Financial statement literacy score [#]	0.46	1	.046	.040	.842 ^b
CAS literacy score [#]	.989	1	.989	.901	.347 ^b

*DV = dependent variable, #IV = independent variable

When testing was carried out for ‘raising progress invoices’ and ‘negotiating shorter trading terms with customers’, a linear relationship was found to exist between the CAS literacy score (.046) and the financial statement literacy score (.010). Business tax literacy scores when compared to these two variables, were not found to be significantly related.

For cash inflow activities of ‘invoicing in advance’, ‘providing direct debit payment options’ and ‘having enough stock on hand to satisfy customer orders’, the test outcomes imply that service SBO literacy has no relationship with carrying out these activities: Table 6.

These test outcomes suggest that other than ‘contacting customers regarding outstanding invoices’, the implementation of cash *inflow* activities in business is predominantly not influenced by the literacy of service SBOs. This could demonstrate that service SBOs implement cash inflow activities due to other business factors.

The relationship between the implementation of cash *outflow* activities and service SBO literacy was also examined: Table 7. Simple linear regression was tested at a level of .05 significance between the literacy scores and each of the cash outflow activities. The cash *outflow* activity with the largest number of significant results was to ‘always have enough cash to pay suppliers’. From the test outcomes, it can be inferred that a significant relationship exists with all literacy scores (apart from financial statement literacy score), as a result of $p < .05$ was achieved. The test outcome for business tax literacy score was the strongest at .019 and then CAS literacy score at .020. This could suggest that the decisions to pay suppliers on time are not related on financial statement literacy.

Table 7: Service SBO literacy (IV) and cash outflow activities (DV) implemented by the business.

Literacy score and cash flow outflow activities	Sum of Squares	df	Mean Square	F	Sig*.
Negotiate extended trading terms with suppliers (DV)*					
Business tax literacy score [#]	.067	1	.067	.040	.842 ^b
Financial statement literacy score [#]	6.393	1	6.393	4.009	.049 ^b
CAS literacy score [#]	.285	1	.285	.208	.650 ^b
Make use of early settlement discounts (DV)*					
Business tax literacy score [#]	.986	1	.986	1.252	.266 ^b
Financial statement literacy score [#]	.382	1	.382	.481	.490 ^b
CAS literacy score [#]	.244	1	.244	.341	.561 ^b
Always have enough cash to pay suppliers (DV)*					
Business tax literacy score [#]	4.325	1	4.325	5.668	.019 ^b
Financial statement literacy score [#]	.876	1	.876	1.100	.297 ^b
CAS literacy score [#]	4.689	1	4.689	5.593	.020 ^b

*DV = dependent variable, #IV = independent variable

Table 7 demonstrates that none of the literacy scores are significantly related to ‘making use of early settlement discounts’. Only one significant relationship regarding ‘negotiating

extended trading terms with suppliers’ was found for the financial statement literacy score (.049).

Overall, the results indicate that service SBO literacy has little effect on whether service SBOs implement cash flow activities. For cash *inflow* activities, those that appear to have a relationship with service SBO literacy include ‘contacting customers regarding outstanding accounts’ (relevant to all scores), ‘raising progress invoices’ (related to CAS literacy score) and ‘negotiating shorter trading terms with customers’ (related to financial statement literacy score). Similar results were found when investigating cash *outflow* activities: only two statements across all literacy areas were found to be significantly related to service SBO literacy. ‘Having enough cash to pay suppliers’ was linearly related to the business tax literacy score and CAS literacy score, whereas ‘negotiating extended trading terms with suppliers’ was significantly related to the financial statement literacy score. The findings suggest that, when service SBOs decide to implement cash *inflow* and *outflow* activities to effectively manage cash flow, their decision does not appear to be heavily reliant on the level of literacy that they have obtained in understanding business tax, financial statements or using CAS. Therefore, it could be suggested that enacting cash inflow and outflow activities could be influenced by other factors in the business environment such as industry norms, or reliance on others, including both internal and external stakeholders, to decide what activities will be used.

Overall, to measure if SBO literacy has an impact on the financial performance of businesses, the research incorporated RBT, which suggests that business with superior internal resources, when compared to their competitors, will achieve a higher level of financial performance. In terms of RBT, SBO literacy was considered as an internal resource. In order to measure the relationship between internal resources and financial performance, the literacy scores were compared to net income and annual revenue. The findings suggest that SBOs with higher business tax and CAS literacy score will realise a level of financial performance superior to that of their competitors, indicating that SBO levels of literacy can have an impact on cash flow stability. This would tend to suggest that efforts to improve business tax literacy could overall increase the performance of the business for service SBOs.

The implementation of cash flow activities was then compared to the literacy scores of the service SBOs to determine whether employing these activities is motivated by service SBO literacy. The outcome of testing principally suggests that employing cash flow activities cannot be predicted by service SBO literacy. For cash inflow activities, the strongest relationship existed for contacting customers regarding outstanding invoices, which was linearly related to all literacy scores. This could highlight that SBOs know the importance of not just billing but making sure that clients do pay. With respect to cash outflow activities, business tax literacy score and CAS literacy score were found to have a linear relationship to ‘always having enough cash to pay suppliers’. It appears that literacy does relate to having surplus/excess cash (liquidity) to pay suppliers. This liquidity factor is extremely important for SBOs generally.

IV RECOMMENDATIONS

The findings of the research have emphasised that improving internal resources (particularly SBO literacy) could result in improved business performance and assist SBOs to manage their cash flow. Given that there appears to be a positive relationship between the literacy of SBOs, in terms of business tax and CAS, and the performance of their business (as measured by gross annual revenue and net income) this would add support to initiatives to try to enhance the literacy of SBOs. This evidence adds more weight to recommendations to improve business tax literacy for SBOs. These initiatives could include a requirement could be made for new SBOs to undertake a series of education modules prior to business registration for an ABN or within the first 12 to 18 months of operation;¹¹² to provide a tax rebate for \$1,000 to \$5,000 when the business lodges its first tax return if it has completed relevant education modules,¹¹³ as well as subsidised education when businesses start to engage employees.¹¹⁴

Even in terms of prompting the importance of improved literacy in these areas, the results of this study about the link to improved business performance could be used as an endorsement as to why SBOs should try to increase their literacy. The findings of this study could be used by small business advisors and government agencies to promote the importance of their learning activities. This is important as the motivation of the SBO could be a key factor as to whether they will seek to improve their knowledge or not.

To encourage SBOs to improve their CAS literacy, the Australian Government should provide an incentive related to CAS knowledge acquisition. This could be in the form of a grant where the government matches a dollar-for-dollar funding amount up to \$1,500. It would be advantageous for this training to be carried out over a period of time, as increases in knowledge have been associated with ongoing exposure to the CAS system.¹¹⁵ Increased CAS literacy could help SBOs evaluate their cash flow position and business performance using up-to-the-minute data available in the business CAS.

V LIMITATIONS AND FUTURE RESEARCH

A limitation of this study was that it only relied on the human capital (SBO literacy) component of RBT to determine whether businesses recognise a competitive advantage over their competitors despite the study including some components of organisational capital (the process and practices implemented for cash flow management). The reason for not evaluating organisational capital was due to the extensive variety of cash flow management activities that could be used in such a diverse group of small businesses. To do so effectively, it was

¹¹² Belle Isle, Freudenberg and Sarker (n 34), 97.

¹¹³ Belle Isle, Freudenberg and Sarker (n 34), 97.

¹¹⁴ Belle Isle, Freudenberg and Sarker (n 34), 101.

¹¹⁵ Masayuki Morikawa, 'Information Technology and the Performance of Japanese SMEs' (2004) 23(3) *Small Business Economics* 171; Julien Pollack and Daniel Adler, 'Skills that improve profitability: the relationship between Project Management, IT Skills, and Small to Medium Enterprise Profitability' (2016) 34(5) *International Journal of Project Management* 831.

thought that all businesses involved in the study would need to be competing in the same market.

A further limitation was that the literacy scores for CAS were calculated based on feedback from service SBOs about whether they created reports and carried out cash flow activities in their CAS. Ideally, a more relevant approach to testing literacy would have been witnessing service SBOs carrying out these tasks or asking the participant to confirm the necessary steps required to successfully complete such a task. However, these alternatives were not possible using the survey method and were also restricted due to the variety of different CAS platforms that could be used by the participants.

The participants completing the survey had on average higher educational levels than the general public, which could mean that the literacy results are higher or not representative of the general SBOs, so this needs to be considered when determining the results. Additionally, the survey data indicate an under-representation of non-employing businesses compared to the Australian population.¹¹⁶ Again, this could mean that the resulting literacy scores are higher than normal as higher literacy scores have been associated with employing more staff.¹¹⁷

Future research could focus on non-service sector small businesses to see whether their literacy has a similar relationship to performance and cash flow management. Also, research could consider how best to improve the literacy of SBOs, as well as their cash flow management practices.

VI CONCLUSION

This article explores whether the literacy of SBOs is related to financial performance and cash flow activities of a business. This is important for small businesses and their operations, as having the ability (or literacy) to recognise when a business is experiencing cash flow constraints could allow the SBO to instigate actions to overcome cash constraints. When literacy as compared to net income and annual revenue, the findings suggest that those SBOs with higher business tax and CAS literacy will realise higher net income and annual revenue than their competitors and in turn have a competitive advantage over their competitors.

The findings also indicate that SBO literacy has minimal (if any) effect on determining which cash flow activities are implemented by service SBOs. However, the important activities of ‘contacting clients for outstanding invoices’ and ‘having enough cash on hand to pay suppliers’ had some relationships to the literacies studies. This could suggest that the reason that cash flow activities are implemented could be influenced by other factors in the business environment like industry norms and/or they could be set by internal or external business stakeholders.

Small businesses are seen as a vital part of the Australian economy, given that it appears that literacy in terms of business tax and CAS can be linked with higher net income and annual

¹¹⁶ Australian Bureau of Statistics (n 24).

¹¹⁷ Freudenberg, Chardon, Brimble and Belle Isle (n 32).

revenue, it is important to consider how these literacies can be enhanced. The findings may help promote the importance for small businesses to improve their literacy in these areas, as it can have a positive effect on business operations and make them more competitive in the marketplace.

Appendix A

Overview of Survey questions and their relevance to literacy

Question overview	Research area explored
Questions related to the financial year ending 30 June 2018	
Superannuation Guarantee	Literacy – taxation
The rate of Superannuation Guarantee for 2017 is 9.25%	
For employees over the age of 18, Superannuation Guarantee only has to be paid for employees whose income per calendar month is \$450 or more.	
Payment of Superannuation Guarantee is not tax deductible for the employer	
The amount of superannuation contributions to be paid is based on ordinary time earnings and does not include overtime.	
GST	Literacy – taxation
I must hold a tax invoice for all goods or services that I claim GST input tax credits for if they are over the value of \$50 + GST	
Businesses (excluding non-for-profit organisations) should register for GST once their annual turnover is reaches \$100,000.	
Prices for the sale of goods or services to a consumer in Australia should be displayed or quoted as GST exclusive.	
If your receipt for purchasing fuel at a petrol station is \$80, the GST portion of that purchase is \$8.	
FBT	Literacy – taxation
A benefit provided to an employee’s spouse will not be subject to Fringe Benefits Tax (FBT).	
Generally, travel to and from work in an employer’s vehicle is not considered as “private use” by the employee.	
The cost of providing staff with a light lunch whilst at work is exempt from FBT.	
The FBT reporting year runs from 1st July to 30th June	
Income Tax	Literacy – taxation
Individuals can claim a 25% discount on capital gains for assets held > 12 months.	
An immediate deduction can be claimed for the purchase of work equipment for \$30,000 when it is used in the business over a number of years.	
Generally, a deduction for mortgage interest can be claimed by a business operating from a home in accordance to the percentage area of the home that is used for business purposes.	

If your business is GST registered then the business' assessable income for income tax will be excluding GST.	
Income Tax	Literacy – taxation
You can claim an immediate deduction for work clothing that you purchase from a supplier provided that it is made from durable material.	
For a person on a 30% tax rate the 'after tax cost' of a fully deductible work related item of \$1,000 will be \$700.	
For a person on a 30% tax rate who is entitled to a \$1,000 tax offset will save \$700 in tax.	
Income Tax	Literacy – taxation
Paying a PAYG Instalment offsets the final amount of income tax that the business has to pay at the end of the financial year.	
If you are required to pay a PAYG Instalment, you cannot vary the amount raised by the ATO from the assessment of your previous income.	
The company income tax rate of 27.5% is available only for businesses with an aggregated turnover of \$2 million dollars or less in the 2017-2018 year.	
Records should be kept for tax purposes for a minimum of 7 years.	
PAYG Withholding	Literacy – taxation
PAYG Withholding and Payroll Tax are the same tax system.	
If the business employs staff or plans to employ staff it needs to register for PAYG withholding within the first month of paying that employee.	
Employers will never have to collect PAYG Withholding when they engage a contractor.	
CAS reporting	Literacy – CAS
I create the following in the business computer accounting software:	
A Balance Sheet at least every 3 months.	
A Profit and Loss Statement at least every 3 months.	
A Statement of Cash Flows at least every 3 months.	
A Cash Budget at least once a year.	
Reports for taxation at least every 3 months.	
Reports for employee obligations eg. Superannuation and PAYG Withholding.	
CAS activities: Which of the following activities do you regularly carry out in your business computer accounting software?	Literacy – CAS
Automated invoicing .	
Automated invoice reminders.	

Processing invoices on a weekly basis.	
Reconcile transactions monthly	
Financial Statements	Literacy – financial statements
If you wanted to determine the liquidity (or solvency) of your business you would need to use information contained in both the Profit and Loss statement and the Balance Sheet.	
Working capital is calculated by dividing Current Assets by Current Liabilities.	
If you receive full payment for work completed you have made a profit on that job.	
Gross Profit is a better indicator of how your business is performing than Net Profit	
Financial Statements	Literacy – financial statements
Examples of 'Current Assets' include: Cash at Bank, Trade Debtors, Short-term investments, Petty Cash and Stock.	
The Cash Flow Statement can be separated into three areas of cash flow from operations, financing and investment.	
A Cash Flow Forecast or Budget helps businesses to predict cash surpluses or shortages.	