International Journal of Religion
2024
Volume: 5| Number 11 | pp. 2574 – 2580
ISSN: 2633-352X (Print) | ISSN: 2633-3538 (Online)
ijor.co.uk
DOI: https://doi.org/10.61707/ad5s2y33

Models For Motor Creativity Based on Strategies to Solve Problems

Hernán Oscar Cortez Gutiérrez[1], Milton Milciades Cortez Gutiérrez[2], César Miguel Guevara Llacza[3], Miguel Angel Gil Flores[4], Liv Jois Cortez Fuentes Rivera[5], Cesar Angel Durand Gonzales[6], Lucio Arnulfo Ferrer Peñaranda[7], Braulio Pedro Espinoza Flores[8] and Girady Iara Cortez Fuentes Rivera[9]

Abstract

This study investigates the relationship between problem solving and motor creativity, two essential cognitive and motor abilities that are crucial for innovation and problem-solving in various contexts. The study employed a correlational design, analyzing the correlations between variables and developing a linear model to test the validity of the relationship between problem solving and motor creativity. Four questionnaires were administered to assess the ability to solve problems with different objects (ball, hoop, newspaper, and wooden stick). The results show a significant correlation between the dimensions of problem solving and motor creativity, indicating that individuals who are better at solving problems are also more creative in their motor abilities. The linear model of motor creativity based on problem solving dimensions was found to be valid, with a coefficient of correlation R=0.8 (p=0) and coefficient of determination exceeding 60% for the explanation of motor creativity with odds ratio (OR)= 8 (IC=2,27): students with appropriate problem-solving skills are eight times more likely to develop motor activity compared to students with inappropriate problem-solving skills. These findings suggest that problem solving is a crucial component of motor creativity and that developing problem-solving skills can enhance motor creativity. The study contributes to the understanding of the relationship between problem solving and motor creativity, highlighting the importance of integrating these abilities in educational and professional settings.

Keywords: *Motor Creativity, Problem Solving, Linear Regression, Coefficient of Determination, Odds Ratio.*

INTRODUCTION

As a developing country, Malaysia has achieved tremendous progress in socioeconomic growth. Rapid economic expansion and the creation of microenterprises have contributed to this accomplishment. In today's economy, sustainable development is a crucial goal; hence policymakers must find characteristics that can improve individuals' economic conditions and support national economic growth. Microfinance institutions offer various financial and non-financial services that assist clients in developing their human capital capabilities, improving financial management, and enhancing their entrepreneurial competencies. These factors enable micro-enterprises to gain a competitive edge over their rivals and achieve better entrepreneurial performance (Abdullah, Zainudin, Ismail, & Zia-Ul-Haq, 2022).

Saving literacy is a challenge for some individuals, particularly those in microenterprises despite having a high net income, many microenterprises owners struggle to set aside money for savings or investment purposes. Saving literacy is critical for making informed decisions in the future and achieving financial security for micro-enterprise owners. However, many struggle to save despite having a surplus in business turnover. This limitation can be attributed to various financial issues, including low saving literacy, low income, and high levels of debt (Tarisha, Ardi, Fatkhurrahman, & Margaretha, 2021).

[1] Facultad de Ciencias de la Salud, Universidad Nacional del Callao, Email: hocortezg@unacvirtual.edu.pe

[2] Universidad Nacional de Trujillo, Email: mcortezgutierrez@yahoo.es

[3] Universidad Nacional del Callao, Email: cmguevaral@unac.edu.pe
[4] Universidad Nacional del Callao, Email: magilf@unac.edu.pe

[5] Universidad Nacional Mayor de San Marcos, Email: livjoisc@gmail.com

[6] Facultad de Ciencias de la Salud, Universidad Nacional del Callao, Email: cadurandg@unac.edu.pe

[7] Facultad de Ciencias de la Salud, Universidad Nacional del Callao, Email: laferrerp@unac.edu.pe

[8] Facultad de Ciencias de la Salud, Universidad Nacional del Callao, Email: bpespinozaf@unac.edu.pe

[9] Facultad de Ciencias de la Salud, Universidad Nacional del Callao, Email: gicortezf@unac.edu.pe

LITERATURE REVIEW

Microenterprises are crucial in fostering economic growth, especially in developing countries. Sawad (2022) states that examing critical entrepreneurial abilities related to entrepreneurial aptitudes, such as saving literacy, entrepreneurial acumen competitiveness, and recognizing micro-enterprise benefits, assure the company's sustainability. Understanding the factors that influence micro entrepreneurs' ability to repay debt is vital for promoting their financial sustainability and overall business success. This study explores the potential impact of saving literacy and knowledge transfer on microenterprises' ability to meet their loan obligations.

A strong foundation in saving literacy can significantly enhance micro entrepreneurs' capacity to manage debts effectively. By knowing about savings mechanisms and planning for future financial needs, entrepreneurs are better equipped to allocate resources (Carlos, Mejía, Gutierrez, & Rodríguez, 2023) efficiently towards debt repayment and business expenses. According to research by (Bernard, 2020) increased savings through proper budgeting positively influences debt servicing rates among low-income households - a finding that can be extended to microenterprise owners.

Knowledge transfer refers primarily to educational interventions aimed at equipping individuals with relevant skills necessary for managing finances efficiently within an entrepreneurial context. Providing training programs focused on budgeting techniques, cash flow management methods, risk assessment strategies, or even accounting principles offers invaluable insights into effective debt repayment practices (Megan Lang, 2022). Empowering micro-entrepreneurs with such transferrable knowledge has been found to be beneficial in reducing default rates and encouraging responsible borrowing behaviour throughout their entrepreneurship journey.

The extremely low level of personal savings paired with the high levels of personal debt among individuals raises concerns because personal savings are the main source of finance entrepreneurs use to launch and expand their businesses. Savings and personal debt are two important factors in determining good personal financial management. Savings significantly encourage investment and boost economic growth (Bernard, 2020).

It is crucial to comprehend whether financial education influences saving literacy and the best educational programs. There is conflicting empirical evidence about the impact of financial education and information provided on saving literacy (Lusardi, 2004). Furthermore, even when studies show a considerable benefit of financial education on savings, the route behind this effect is frequently poorly understood (Anne Karani Iswan, Dr. Robert Arasa, 2020).

METHODOLOGY

The current trend in mainstream research on micro-enterprises is that there have been a few studies on saving literacy and how well they work in micro-enterprises.

Filling a gap in the literature and adding empirical evidence from a developing country are the main goals of this study. It will test three hypotheses about how saving literacy and knowledge transfer as a mediator affect small businesses ability to pay their debts.

THEORETICAL FRAMEWORK

Therefore, this study expects the following hypotheses:

H1: There is a significant positive relationship between saving literacy and micro enterprises ability to repay debt.

H2: There is a significant positive relationship between saving literacy and knowledge transfer.

H3: Knowledge transfer has a significant mediating role in micro enterprises' ability to repay debt.

Sample

This research investigates micro-enterprises in the services industry in Klang Valley. According to the study's findings, 63% of those surveyed were female, while 37% were male. It indicates the sample has more females than males.

The majority of respondents declared their ages ranged between 18 and 30 years, followed by 29.9% who claimed their ages ranged between 31 and 40 years, 26% between 41 and 50 years, and only a few beyond 61 years, 7.9% and 5.5 percent said their ages ranged between 51 and 60 years.

According to data, the majority of micro-enterprise owners were relatively young. The statistics also revealed that respondents had a good background, with 46.5 percent holding a bachelor's degree, 29.3 percent holding a college degree, and 13.4 percent holding a college certificate. 7.3 percent hold a Master's degree, and 3.9% hold a Ph.D. The degree of education has been identified as a significant factor in assisting businesses in surviving and managing challenging situations and increasing profitability (Hammawa & Bappi, 2019).

In the study's entrepreneur ethnic composition findings, Malay ethnic groups lead 96.9% of micro-enterprise enterprises, while other ethnic groups lead only 3.1%.

According to data, 44.9 percent of businesses participate in the food and beverage market, while 28.3 percent provide other services. Wholesale, finance, and insurance account for 11% and 8.7%, respectively. Government services and information and communication contribute the least from small and micro businesses in this survey, with 2.4 percent and 4.7 percent, respectively.

The number of employees involved in this study was 70.1 percent among those with fewer than five employees, compared with 29.9 percent among those with 5-10 employees. None of them had between 11 and 35 employees. 44.9 percent of the top responses were entrepreneurs who had worked between one and five years, and 23.6 percent had worked between six and ten years. About 27.6 percent were those who had operated for 11 to 15 years. 80.3 percent of the small, medium-sized firms in the sample earned less than RM300,000 a year. Only 19.7 percent had annual RM300,000 to RM3 million in sales or revenues. 56.7 percent of medium-sized small businesses are sole proprietors. 24.4 percent and 18.9 percent are partnerships and other business kinds, respectively.

In accordance with the data, 59.8 percent of respondents took extra courses, financial education, or program disciplines, while 40.2 percent did not. It demonstrates that the majority of entrepreneurs have the financial knowledge to run their enterprises.

RESULT AND FINDINGS

The model was tested with Partial Least Square-Structural Equation Model (PLS-SEM). A convergent validity assessment was the first step in the process. Hair et al. (2018) suggested using factor loadings, composite reliability, and average variance to verify convergent validity. They also recommend an external load of 0.7. Hair et al. (2019), on the other hand, recommend that social scientists investigate the influence of eliminating markers ranging from 0.40 to 0.70 on average variance extracted (AVE) and composite dependability and keep the reflected indicator if eliminating the external load doesn't improve the measurement above the threshold. There should not be outside load signals lower than 0.40 (Hair et al., 2018). Table I shows that the loading was over 0.7 after removing several items (Hair et al., 2019). Dependability scores ranged from 0.711 to 0.908, well over the minimum of 0.7 needed. For the latent construct indicators, the AVE was 0.567 and 0.632, which is above the needed 0.5 (Hair et al., 2019).

Table 1: Result of the measurement model (Outer loading)

Constructs	Items	Loading	AVE	CR	Deleted due to low loading
Saving Literacy	A3	0.731	0.567	0.926	A1
	A4	0.897			A2
	A5	0.838			
	A6	0.724			
	A7	0.883			
	A8	0.745			
	A9	0.871			
	A3	0.731			
	A4	0.897			
	A5	0.838			
	A6	0.724			
	A10	0.819			
Knowledge transfer	B1	0.820	0.632	0.944	B2
	B3	0.810			
	B4	0.827			
	B5	0.854			
	B6	0.773			
	B7	0.855			
	B8	0.895			
	B9	0.773			
	B10	0.799			
Ability to repay debt	C3	0.798	0.598	0.970	C1
	C4	0.711			C2
	C5	0.848			C6
	C7	0.788			C9
	C8	0.737			C17
	C3	0.798			
	C10	0.882			
	C11	0.763			
	C12	0.860			
	C13	0.899			
	C14	0.780			
	C15	0.791			
	C18	0.875			
	C19	0.908			
	C20	0.841			
	C21	0.769			
	C22	0.818			
	C23	0.830			

Note: Loadings > 0.7, AVE>0.5, CR>0.7.

Discriminant Validity of Construct

A discriminant validity test followed, comparing the construct to other constructs (Hair et al., 2019). For discriminant validity, the initial cross-loadings of the items must be higher than the other constructs. In Table 2, Discriminant validity shows that all of the notions are sufficiently distinct. Table 2 shows sufficient discriminant validity because all extracted square roots of average variance were higher than the row and column correlations. A good convergent and discriminant validity was found for the measurement model overall.

Cross Loading Value

There is an alternate method to the AVE called cross-loading, which can be used to determine the effectiveness of the reflection model. No indicator variable should have a higher correlation with another latent variable than its own. A wrong model has been supplied if this is the case (Garson, 2016).

Table 2: Discriminant Validity of Construct

	Ability to repay debt	Knowledge transfer	Saving literacy
Ability to repay debt	0.819		
Knowledge transfer	0.866	0.824	
Saving literacy	0.664	0.671	0.816

Note: Diagonals represent the square roots of the AVE while the off diagonal represents the correlations.

Table 3: Fornell-Larcker Criterion & HTMT

Variables	Average Variance Extracted (AVE)	Fornell-Larcker Criterion	HTMT
Ability to repay debt	0.598	0.819	
Knowledge transfer	0.632	0.824	0.897
Saving literacy	0.567	0.816	0.684

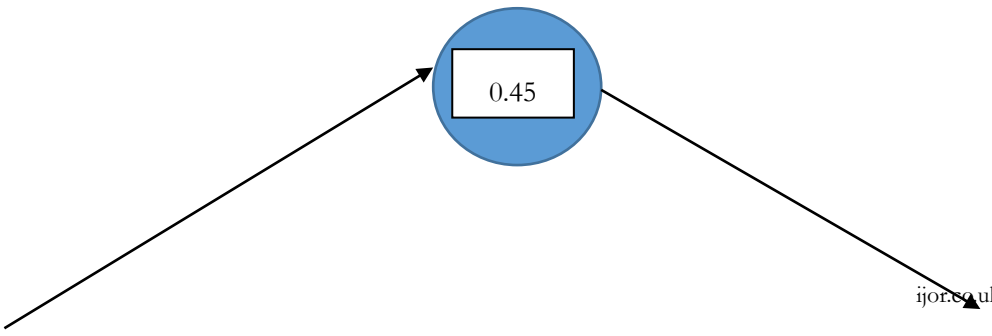
Table 3 shows all variables are unique from one another since their Fornell-Larcker values surpass the average value of each variable. AVE should be greater than the squared correlation between a factor's correlations with all other components in the model, according to Fornell-Larcker's theory. In addition, HTMT is a method for estimating factor correlation (more to be precise, it is an upper limit). HTML should be significantly smaller than 1 to clearly contrast the two variables. Cross-loading should be evaluated to ensure that indications are not inappropriately given to the factors that are not appropriate (Benitez et al., 2020).

The theories were sorely tested using a structural model evaluation. The hypotheses were tested using the bootstrapping method. Table 3 shows that H1 and H2 are supported. The ability of small firms to repay their debt is positively correlated with the quality of their saving literacy and the transmission of their knowledge. The ability to repay debt has an R2 value of 0.762, which means that 76.2% of the variance in the dependent variable can be attributed to saving literacy.

Table 4: Hypothesis Testing

Hypotheses	Relationships	Std Beta	Std Error	t-value	p-value	Decisions
H1	Saving literacy => Ability to repay debt	0.152	0.152	2.579	0.01	Supported
H2	Saving literacy => Knowledge Transfer	0.671	0.672	12.29	0.00	Supported
H3	Knowledge Transfer -> Ability to repay debt	0.764	0.766	16.157	0.00	Supported

Note: *t-value < 1.96, p-value<0.05. Hypotheses are supported.



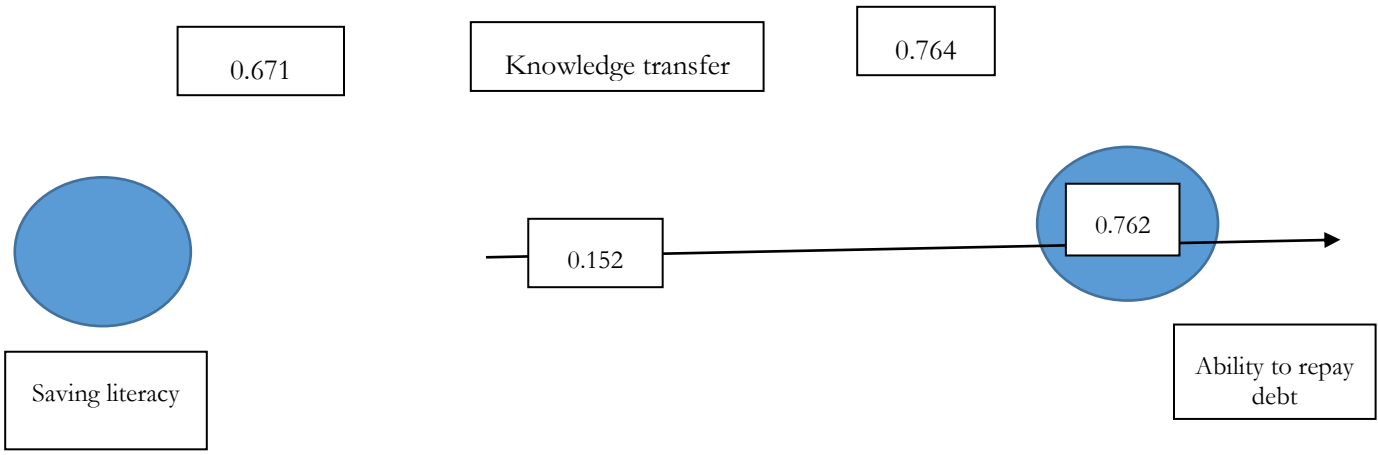


Figure 1: Structural Model

Saving literacy has a positive relationship with micro-companies' ability to repay debt, with a beta value of 0.152, a t-value of 2.579, and a p-value of 0.01, where a p-value of 0.05 indicates statistical significance. As with finance, saving literacy is positively significant to knowledge transfer, as evidenced by the beta value of 0.671, the t-value of 12.29, and the p-value of 0.00, all of which are less than 0.05 in magnitude. Furthermore, knowledge transfer is positively significant to micro-companies' ability to repay debt, with a beta value of 0.764, a t-value of 16.157, and a p-value of 0.00, where a p-value of 0.05 is considered significant.

The findings are in agreement with agreement with past research. The ability of micro companies to repay their debts has been associated in various studies with the performance of saving literacy since it provides essential saving competence in decision-making. The study also found that knowledge transfer helped entrepreneurs establish their companies with confidence, helped them articulate their business ideas clearly, and helped them save money to expand their enterprises.

Savings literacy, according to Kinyua (2012), increased the participants' awareness of the repayment method.

CONCLUSION

In conclusion, saving literacy and knowledge transfer is vital in enhancing microenterprises' ability to repay debt effectively. Building a strong foundation in saving literacy gives entrepreneurs essential skills for budgeting and planning future financial obligations. Additionally, educational interventions focused on knowledge transfer equip micro entrepreneurs with transferrable management skills that positively influence their capacity to meet loan repayment requirements responsibly. By supporting these aspects within the entrepreneurial ecosystem, policymakers can contribute towards fostering sustainable economic growth at the grassroots level.

REFERENCES

Abdullah, W. M. Z. B. W., Zainudin, W. N. R. A. B., Ismail, S. B., & Zia-Ul-Haq, H. M. (2022). The Impact of Microfinance Services on Malaysian B40 Households' Socioeconomic Performance: A Moderated Mediation Analysis. International Journal of Sustainable Development and Planning, 17(6), 1983–1996.

Anne Karani Iswan, Dr. Robert Arasa, D. J. N. (2020). The Role of Financial Literacy in the Growth of Women Owned Micro Enterprises: A Case Study of Busia County, Kenya By. Journal of African Interdisciplinary Studies (JAIS): ISSN 2523-6725, 4(12), 16–27.

Bernard, D. T. K. (2020). Entrepreneurial Success for Women through Microfinance and Effect of Education: Evidence from Sri Lankan. Journal of Economics and Business, 3(3).

Carlos, J., Mejía, U., Gutierrez, L. H., & Rodríguez, P. (2023). Financial inclusion and business practices of microbusiness in Colombia. Eurasian Business Review, (0123456789).

Hair, Joe F, Risher, J. J., Sarstedt, M., & Ringle, C. M. (2018). The Results of PLS-SEM Article information. European Business Review, 31(1), 2–24.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24.

Hammawa, Y. M., & Bappi, U. (2019). Towards Improving the Performance of Women Entrepreneurs in Micro Enterprise in Nigeria, 3(1), 47–65.

Megan Lang, J. S. (2022). The Economics of Women's Entrepreneurship, 1–45.

Sawad, B. (2022). Effect Of Microfinance On Entrepreneurship Development: A Case Study Of Kanchanpur District By:, (8.5.2017), 2003–2005.

Tarisha, A., Ardi, K. H., Fatkhurrahman, I. N., & Margaretha, F. (2021). Financial Literacy on Saving Behavior in MSMEs with Social Influence as an Intervening Variable. Oktober, 5(2), 24–37.