

#### INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Review Article

### Research trends on ICT integration in Education: A bibliometric analysis >

Issah Baako & W. K. Abroampa

Article: 2281162

Published online: 06 Dec 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(3.8 MB\)](#) | [EPUB](#)

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#### HIGHER EDUCATION



Article

### Analysis of factors influencing students' choice of business studies in Ghana: Mixed methods research >

Karim Abu, Samuel Marfo & Frederick Ngmenkpleo

Article: 2287913

Published online: 06 Dec 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(1.8 MB\)](#) | [EPUB](#)

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#### EDUCATIONAL LEADERSHIP & MANAGEMENT



Article

### Does vocational passion matter? Minority case of Indonesian Christian educators >

Jonathan Gozal & Martinus Tukiran

Article: 2280311

Published online: 05 Dec 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(1.2 MB\)](#) | [EPUB](#)

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## HIGHER EDUCATION



Article

### Use and adoption of ICTs oriented to university student learning: Systematic review using PRISMA methodology >

Jerri Alejandro López-Sánchez, Juan Camilo Patiño-Vanegas, Alejandro Valencia-Arias & Jackeline Valencia

Article: 2288490

Published online: 04 Dec 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(3.5 MB\)](#) | [EPUB](#)

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## INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

### The digital defence against cyberbullying: A systematic review of tech-based approaches >

Chan Nee Nee, Nadia Samsudin, Ho Meng Chuan, Mohd Ikhran Bin Mohd Ridzuan, Ooi Pei Boon, Ani Munirah Binti Mohamad & Herbert Scheithauer

Article: 2288492

Published online: 04 Dec 2023

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## EDUCATION POLICY



Article

### A floating concept and blurred teacher responsibilities: Local interpretations of health promotion work in Swedish upper secondary schools >

Zofia Hammerin, Disa Bergnehr & Goran Basic

Article: 2287884

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## TEACHER EDUCATION & DEVELOPMENT



Review Article

### In the pursuit of "Quality Education": From ancient times to the digital era, can there be a consensus? >

Marianthi Karatsiori

Article: 2286817

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## EDUCATIONAL PSYCHOLOGY & COUNSELLING



Review Article

### Effectiveness of the flipped classroom on self-efficacy among students: A meta-analysis >

YunLin Sun, XingYu Zhao, XiaoMing Li & FengQiong Yu

Article: 2287886

Published online: 30 Nov 2023

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## EDUCATION POLICY



Article

### Academic integrity in the time of contradictions >

Annemarie Davis

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## EDUCATIONAL ASSESSMENT & EVALUATION



Article

### Did quality of education exist during the COVID-19 pandemic? A study of integrated total quality management of high schools in Aceh, Indonesia >

Nasir Usman, Murniati Abdurrahman, Niswanto, Uifah Irani Zakaria & Yunisrina Qismullah Yusuf

Article: 2282222

Published online: 29 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(1.1 MB\)](#) | [EPUB](#) | [Supplemental](#)

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## STUDENT LEARNING, CHILDHOOD & VOICES



Article

### Educators' relationships and its impacts on students' educational outcomes in higher educational institutions of Pakistan >

Muhammad Rashid Ali, Muhammad Aamad Uppal, Peneluppi Jr Jose Renato, Haroon Qasim, Ahsan Shafi & Wazir Arif Hussain

Article: 2282802

Published online: 29 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(1.6 MB\)](#) | [EPUB](#) | [Supplemental](#)

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Article

### A study on the current status and suggestions of students' character development education in secondary vocational school >

Jing Zhao & Xinyi Liu

Article: 2287890

Published online: 29 Nov 2023

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## CURRICULUM & TEACHING STUDIES



Article

### Towards transdisciplinarity in global integrated science-arts practices in education? A Janus approach >

Oded Ben-Horin, Menelaos Sotiriou, Magne Espeland & Giedrė Strakšienė

Article: 2287895

Published online: 29 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(2.6 MB\)](#) | [EPUB](#) | [Supplemental](#)

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Article

### Engineers' self-perceived employability by gender and age: Implications for higher education >

Sara María Yepes Zuluaga & Willer Ferney Montes Granada

Article: 2287928

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## INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

### Utilizing AI models to optimize blended teaching effectiveness in college-level English education >

Lizhen Shi, Arshad Muhammad Umer & Yanting Shi

Article: 2282804

Published online: 27 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(4.6 MB\)](#) | [EPUB](#) | [Supplemental](#)

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## INTERNATIONAL & COMPARATIVE EDUCATION



Article

**Content analysis of Biology textbooks across selected educational boards of Asia for misconceptions and elements of conceptual change towards learning 'Cell Structure' >**

J. Parthasarathy

Article: 2283640

Published online: 27 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(6.8 MB\)](#) | [EPUB](#) | [Supplemental](#)

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## Sociology of Education



Editorial

**Brief thoughts on the sociology, and sociologists, of education in the twenty-first century >**

Reza Gholami

Article: 2283868

Published online: 27 Nov 2023

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## STUDENT LEARNING, CHILDHOOD & VOICES



Article

**Javanese (Indonesia) indigenous education in a children's literature novel at Vorstenlanden in 1937 >**

Apri Damai Sagita Krissandi, Andayani Andayani & Atikah Anindyarini

Article: 2284542

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## EDUCATIONAL PSYCHOLOGY & COUNSELLING



Article

**Strategies of enhancing students' mathematics perception and self-efficacy to improve their mathematics achievement >**

Enkosa Terefe Shone, Fisseha Mikre Weldemeskel & Berhanu Nigussie Worku

Article: 2285642

Published online: 27 Nov 2023

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## EDUCATION POLICY



Article

**Japanese surveillance in colonial Korea: Analysis of Japanese language textbooks for Korean students during the colonial era >**

Hai Suk Kim & Dong Bae Lee

Article: 2286415

Published online: 27 Nov 2023

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## CURRICULUM & TEACHING STUDIES



Article

**Implementing moral and character education policy through music integration: Perspectives of school leaders in Hong Kong >**

Fanny Ming-Yan Chung

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## INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

### Adoption and use of eLearning platforms by universities in developing countries: Evidence from Zimbabwe >

Alexander Maune

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## HIGHER EDUCATION



Article

### Poor learning-related resource management and psychological inflexibility as predictors of procrastination in first-year university students >

Martinié Marie-Amélie & Rebecca Shankland

Article: 2287907

Published online: 27 Nov 2023

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## EDUCATIONAL LEADERSHIP & MANAGEMENT



Article

### Exploring the acceptance of online learning among students in technical and non-technical programmes at a higher education institution >

Shafie Mohamed Zabri, Yaaqub Mohammad Abakar & Kamilah Ahmad

Article: 2284552

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## INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

### Experiences and perceptions of cybercrime victims in Ghana: The Perspective of digital consumers of agricultural produce >

Ronald Osei Mensah, Pius Mensah & Daniel Opoku

Article: 2285623

Published online: 22 Nov 2023

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## EDUCATIONAL ASSESSMENT & EVALUATION



Article

### The influence of online learning on student professionalism Teacher professional Education Program: Studies in Islamic higher Education in Indonesia >

Musthofa Musthofa, Nasikhin, Mahfud Junaedi & Silviatul Hasanah

Article: 2276025

Published online: 21 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(3.3 MB\)](#) | [EPUB](#)

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Article

### Towards developing classroom assessment literacy: Exploring teachers' approaches to assessment across cultures >

Daniel Asamoah, Masitah Shahrill & Siti Norhedayah Abdul Latif

Article: 2280301

Published online: 21 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(961.2 KB\)](#) | [EPUB](#)

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INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

**Development of a web application for flowering phenology observation and its applicability to climate-related learning in elementary schools** >

Kazuhiko W. Nakamura, Kirie Miyajima, Akio Fujiwara & Kaoru Saito

Article: 2277045

Published online: 20 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(6.3 MB\)](#) | [EPUB](#)

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Article

**Change from face-to-face teaching and learning to online learning: A case of a cross-sectional study in a Kazakhstani medical University** >

Valeriya Burmistrova & Tsediso Michael Makoelle

Article: 2282800

Published online: 20 Nov 2023

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EDUCATION POLICY



Article

**Neoliberalism, privatisation and marketisation: The implications for legal education in England and Wales** >

Anil Balan

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EDUCATIONAL PSYCHOLOGY & COUNSELLING



Article

**Determine the impact of Emotive Intelligent Spaces on children's behavioural and cognitive outcomes** >

Shiyi Chen, Minyoung Cerruti, Mona Ghandi, Ling-Ling Tsao & Rebecca Sermeno

Article: 2281850

Published online: 18 Nov 2023

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PROFESSIONAL EDUCATION & TRAINING



Article

**Cabin crew aero medicine and first aid training in China** >

Wenwen Xu, Nurfaradilla Mohamad Nasri, Khairul Azhar Jamaludin & Kai Jin

Article: 2282312

Published online: 18 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(1.8 MB\)](#) | [EPUB](#)

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INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

**Transitioning from online teaching to blended teaching in the post-pandemic era: What has COVID-19 taught us?** >

Joseph Kee-Ming Sia, Wei Lee Chin, Mung Ling Voon, Adamu Abbas Adamu & Sylvester Chun Kiat Tan

Article: 2282313

Published online: 18 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(357 KB\)](#) | [EPUB](#) | [Supplemental](#)

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## INCLUSIVE AND SPECIAL EDUCATION



Article

### Leadership evaluation and effective learning in an inclusive high school in Padang, Indonesia >

Damri Damri, Ristapawa Indra, Antoni Tsaputra, Ediyanto Ediyanto & Tata Gading Jatningsivi

Article: 2282807

Published online: 18 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(512.1 KB\)](#) | [EPUB](#)

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## EDUCATIONAL LEADERSHIP & MANAGEMENT



Article

### Strategic dependence on external funding in Finnish higher education >

Vuokko Kohtamäki

Article: 2282816

Published online: 18 Nov 2023

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## INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

### Hybrid Flexible (HyFlex) learning space design and implementation at graduate level: An iterative process >

David Santandreu Calonge, Mark Thompson, Leisa Hassock & Mohammad Yaqub

Article: 2277001

Published online: 17 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(13.5 MB\)](#) | [EPUB](#)

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## EDUCATION POLICY



Article

### Junior high schools teachers' perceptions and practice of constructivism in Ghana: The paradox >

Ernest Nyamekye, John Zengulaaru & Akromah Conrad Nana Frimpong

Article: 2281195

Published online: 17 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(465.5 KB\)](#) | [EPUB](#)

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## EDUCATIONAL LEADERSHIP & MANAGEMENT



Article

### The impact of financial literacy and financial behavior in entrepreneurial motivation – evidence from Indonesia >

Rapina Rapina, Meythi Meythi, Dien N. Rahmatika & Mardiana Mardiana

Article: 2282827

Published online: 17 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(721.9 KB\)](#) | [EPUB](#)

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## Research article



Article

### Exploring the opportunities and challenges of social media use in teaching and learning processes at public universities in Ethiopia >

Yohannes Ayalew Awoke & Mekonnen Hailemariam Zikargae

Article: 2277558

Published online: 16 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(486.2 KB\)](#) | [EPUB](#)

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## EDUCATION POLICY



Article

### Cultural competence and global pharmacy commitment in Caribbean pharmacy education: Cuba, Dominican Republic, and Haiti >

Alina de las Mercedes Martínez Sánchez

Article: 2277570

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## INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

### Undergraduate students' preference between online test and paper-based test in Sub-Saharan Africa >

Douglas Yeboah

Article: 2281190

Published online: 15 Nov 2023

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## TEACHER EDUCATION & DEVELOPMENT



Article

### Early childhood student teachers engaging in a scenario-based professional program: The case of early mathematics >

Maha Saad Alsaeed & Aida Deeb Abdallah Mohammad

Article: 2281747

Published online: 15 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(359.4 KB\)](#) | [EPUB](#) | [Supplemental](#)

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## PROFESSIONAL EDUCATION & TRAINING



Review Article

### A review of collaboration through intercultural competencies in higher Education >

Nicia Guillén-Yparrea & María Soledad Ramírez-Montoya

Article: 2281845

Published online: 15 Nov 2023

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## HIGHER EDUCATION



Article

### Student incivility in higher education of Afghanistan: Lecturers' perspectives >

Sayeed Naqibullah Orfan

Article: 2282302

Published online: 15 Nov 2023

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## INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

### What is worth retaining from the COVID-19 experience on remote online education in the prospective teacher education? >

Mateja Ploj Virič, Kosta Dolenc & Andrej Šorgo

Article: 2282308

Published online: 15 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(365.5 KB\)](#) | [EPUB](#)

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## HIGHER EDUCATION



Article

**Exploring the synergy of digital competence and photo-driven reflection: A pilot study on reflective thinking skill development in business education** >

Chamindika Weerakoon

Article: 2282304

Published online: 14 Nov 2023

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## TEACHER EDUCATION & DEVELOPMENT



Article

**Investigating female learners' attitude and challenges towards mathematics at the department of mathematics, Injibara college of teachers' education, Injibara, Ethiopia** >

Workineh Kebede

Article: 2256202

Published online: 12 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(421.5 KB\)](#) | [EPUB](#) | [Supplemental](#)

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## PROFESSIONAL EDUCATION & TRAINING



Article

**Assessing the knowledge of elementary school teachers on universal design for learning in Saudi Arabia** >

Nouf Almutairi & Ayman Alsuwayl

Article: 2270295

Published online: 12 Nov 2023

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## EDUCATION POLICY



Review Article

**A review of interventions for children and youth with severe disabilities in inclusive education** >

Shakila Dada, Jenny Wilder, Adele May, Nina Kiang & Mershen Pillay

Article: 2278359

Published online: 12 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(773.5 KB\)](#) | [EPUB](#)

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## INTERNATIONAL & COMPARATIVE EDUCATION



Article

**Second-language writing anxiety and its correlates: A challenge to sustainable education in a post-pandemic world** >

Arifi Waked, Khadija El Alaoui & Maura A. E. Pilotti

Article: 2280309

Published online: 12 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(347.6 KB\)](#) | [EPUB](#)

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## EDUCATIONAL ASSESSMENT & EVALUATION



Article

**Take on me-asurement (take measurement on): Teaching measurement and coding with one-hit wonders** >

David A.M. Peterson

Article: 2280308

Published online: 10 Nov 2023

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## INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Review Article

### Digital learning in Sciences education: A literature review >

Manal Abdul Karim Al Momani, Kawther Aboud Alharahasheh & Mohammad Alqudah

Article: 2277007

Published online: 09 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(4 MB\)](#) | [EPUB](#)

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## CURRICULUM & TEACHING STUDIES



Article

### Understanding the factors contributing to low enrollment of science students in undergraduate programs >

Sadef Khan, Maria Shiraz, Gulzar Shah & Maham Muzamil

Article: 2277032

Published online: 08 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(377.1 KB\)](#) | [EPUB](#)

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## EDUCATION POLICY



Article

### Examining the impact of the free senior high school policy and women empowerment on secondary school enrolment in Ghana: The bounds test approach >

Frank Gyimah Sackey, Richard Kofi Asravor, Isaac Ankrah & Lilian Arthur

Article: 2277575

Published online: 06 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(510.3 KB\)](#) | [EPUB](#)

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## CURRICULUM & TEACHING STUDIES



Article

### Helping low-achieving students to comprehend the area of basic geometric shapes using an enclosing-rectangle scaffold via computer-assisted instruction >

Chun-Yi Lee, Kin Hang Lei, Ming-Jang Chen, Chia-Rong Lee & Chao-Chi Chen

Article: 2277576

Published online: 06 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(1.2 MB\)](#) | [EPUB](#)

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## HIGHER EDUCATION



Article

### COVID-19 and social inequality: Lessons from a higher and tertiary education institution in Zimbabwe >

Mavis Thokozile Macheke

Article: 2272828

Published online: 05 Nov 2023

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## EDUCATIONAL ASSESSMENT & EVALUATION



Article

### Mediating effect of hardiness in the nexus of service quality and students' satisfaction of public universities in Ghana >

Isaac Amoako, Eric Anane & Andrews Cobinnah

Article: 2276273

Published online: 05 Nov 2023

[Abstract](#) | [Full Text](#) | [References](#) | [PDF \(887.2 KB\)](#) | [EPUB](#)

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## EDUCATIONAL LEADERSHIP & MANAGEMENT



Article

### Exploring the influence of leader emotional intelligence on faculty engagement in Ethiopian higher education >

Anteneh T. Asmamaw & Tesfaye Semela

Article: 2277547

Published online: 05 Nov 2023

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## STUDENT LEARNING, CHILDHOOD & VOICES



Article

### Competency-based practice in conducting natural science research and presenting its results in primary classes: A case study >

Daiva Jakavonytė-Staškuvienė & Jovita Ponomarioviene

Article: 2267962

Published online: 03 Nov 2023

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## INFORMATION & COMMUNICATIONS TECHNOLOGY IN EDUCATION



Article

### Psychosocial role of social media use within the learning environment: Does it mediate student engagement? >

Bekalu Tadesse Moges, Yalalem Assefa, Shouket Ahmad Tilwani, Yibeltal Aemro Azmera & Workineh Birhanu Aynalem

Article: 2276450

Published online: 03 Nov 2023

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# The impact of financial literacy and financial behavior in entrepreneurial motivation – evidence from Indonesia

Rapina Rapina, Meythi Meythi, Dien N. Rahmatika & Mardiana Mardiana

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## EDUCATIONAL LEADERSHIP & MANAGEMENT | RESEARCH ARTICLE

# The impact of financial literacy and financial behavior in entrepreneurial motivation – evidence from Indonesia

Rapina Rapina<sup>1\*</sup>, Meythi Meythi<sup>1</sup>, Dien N. Rahmatika<sup>2</sup> and Mardiana Mardiana<sup>3</sup>

**Abstract:** Entrepreneurship has been viewed as a catalyst for economic growth because it creates jobs and offers solutions to social issues. The government is trying to make entrepreneurship popularized among the public, especially in students in universities. This analysis aims to ascertain how financial behavior and literacy, particularly among accounting students who are the sample of this study at West Java universities, affect entrepreneurial motivation. In addition, this research also examined the level of financial literacy and the level of financial behavior in accounting students in West Java, Indonesia. This research employs a quantitative approach and the data were collected using a survey questionnaire. Partial Least Square Structural Equation Modelling (PLS-SEM) method were used to analyze data of 252 respondents of accounting students from universities in West Java, Indonesia. The study discovered a significant positive association between financial literacy and accounting students' financial behavior and their willingness to start their own business. The research also assessed the degree of financial literacy and financial behavior among participants who achieved a relatively strong overall outcome, along with the level of drive for entrepreneurship among respondents with a similarly elevated average performance. This research contributes to educators and educational institutions that it is very important to design an integrated educational curriculum to strengthen the entrepreneurial motivation of accounting students who are the sample of this study at West Java universities in Indonesia.

### ABOUT THE AUTHOR



Rapina Rapina

Rapina Rapina graduated from Maranatha Christian University in Indonesia in 2007 with a bachelor's degree in accounting as her major. She pursued her education at Padjadjaran University in Indonesia in 2006 to earn a Master of Science degree and a Doctor of Philosophy from that institution in 2017. Rapina Rapina is a lecturer and currently serving as the Director of the Graduate Accounting Program at Maranatha Christian University in Indonesia.

**Subjects: Accounting Education; Management Education; School Leadership, Management & Administration**

**Keywords: financial literacy; financial behavior; entrepreneurial motivation; an accounting student; West Java universities**

## 1. Introduction

Entrepreneurship is crucial for creating new prospects for economic growth because it creates jobs and offers solutions to social issues (Kimmit & Munoz, 2017; Urbano & Aparicio, 2015; Zarnadze et al., 2022), so that entrepreneurship education in tertiary institutions needs to be developed and taught to students effectively. Unfortunately, there are number of factors that hinder the development of entrepreneurial potential among Indonesian youth, one of which is the lack of financial literacy in individuals (Napitupulu, 2021; Prasetyo, 2020). Developing nations like Indonesia encourage students to engage in entrepreneurship and think about it as a career, because the emergence of entrepreneurship is significantly influenced by students (Karimi et al., 2014). Indonesia itself is a vast archipelago country where Java Island is one of the largest and most populous islands in Indonesia and even in the world. It is not surprising that Java Island is the center of economics and politics in Indonesia, and even the capital city of Indonesia itself is in Java Island (Dsikowitzky et al., 2019; Setyaningrum, 2022), so it is necessary to examine the entrepreneurial motivation of students on Java Island for Indonesia's economic development.

For their business to succeed, entrepreneurs need to have a solid understanding of finance. Entrepreneurs are defined as those who start enterprises, employ resources, take risks, and actively participate in business choices (Vodă & Florea, 2019). Successful business owners must possess strong money management abilities (Ahmad et al., 2021). As previously explained that individual financial literacy is important in supporting entrepreneurship where financial literacy is knowledge or education in relation to money, assets, bank accounts, investments, credit, insurance, taxes, and how to use this financial information when making individual financial plans effectively. Financial competency can be increased through financial literacy, which also influences personal financial behavior (Akca et al., 2018; Te'eni-Harari, 2016). Developing individual financial literacy requires a long process because it requires a lot of effort from the individual himself and from the institution surrounding the individual (Çera et al., 2021). Those that are financially literate will exhibit healthy financial behavior, such as when making long-term decisions like purchasing a new home or creating retirement plans (Blue et al., 2014). The entrepreneur's obligations in terms of business finance, investment, cash flow, and planning are tied to individual financial conduct (Jappelli & Padula, 2013). According to several studies, financial literacy influences individual financial behavior, and as a person's financial literacy increases, their ability to manage finances effectively also improves (Akca et al., 2018; Arofah et al., 2018).

Entrepreneurs must understand finance and possess financial skills prior to engage in business activities. The knowledge and abilities gained through education result in responsible financial behavior that can ultimately contribute to the successful operation of a business (Ahmad et al., 2021). The government has also paid special attention to improving the quality of entrepreneurship in Indonesia, for example through the school curriculum which has added lessons on entrepreneurship (Saptono et al., 2020). Unfortunately, in real life, there are many young entrepreneurs fail to manage their business. The success rate of young entrepreneurs was previously reported to be low (Fatoki, 2014). In addition, the study revealed that financial management practices were neglected while business production and marketing were given top priority (Fuller et al., 2018), and there are barriers to financing young entrepreneurs face (Musie, 2015). Apart from that, there is research that states that gender influences financial literacy where men have greater financial capabilities than women and women are more likely to be consumptive than men, so there is a significant difference in financial literacy between men and women (Lladós-Masllorens & Ruiz-Dotras, 2022; Upa et al., 2019). These gender differences will also appear in entrepreneurial motivation, so there must be differences in providing financial literacy education for men and

women. Those who do not have entrepreneurial motivation will face obstacles in maintaining and developing their business, so entrepreneurial motivation is an important thing that must be increased even though people are financially literate (Upa et al., 2019).

Even though financial behavior and financial literacy are important components in running a business, there are still many entrepreneurs who cannot run a business well in Indonesia (Napitupulu, 2021; Prasetyo, 2020). This was recorded in the news on CNBC Indonesia (Bestari, 2022), namely that many start-up companies failed in Indonesia which was caused by several factors related to financial literacy and poor financial behavior. One example of business failure is caused by lack of funds, this means that people who have entrepreneurial abilities may not have the knowledge to obtain funding while starting the business (Li & Qian, 2020). Therefore, this research examines the level of financial literacy and level of financial behavior in accounting students who are the sample of this study in West Java, Indonesia and also re-examines the relationship between financial literacy, financial behavior and entrepreneurial motivation in entrepreneurs, who in this context are accounting students in West Java, Indonesia. Indonesia is a developing country that strongly encourages entrepreneurship programs to support economic development, however most of the research in the field of entrepreneurial intentions that explores factors such as education, psychological factors and financial literacy has not been researched adequately (Aldi et al., 2019). To the best of the researcher's knowledge, although there is some literature that discusses this matter, it is believed that there is still a scarcity of research in this field (Alshebami & Al Marri, 2022) and there has been no research that directly links these three variables in one study and was conducted in Indonesia, especially on the island of Java. According to Mauch and Park (2003:12) in their book entitled "Guide to the successful thesis and dissertation", it is said that originality does not mean that the research question or hypothesis is completely new, so replication of previous research can also be said to meet the criteria for originality. Departing from these references, the novelty in this research lies in the mediating effect of Financial Behavior on Financial Literacy on Entrepreneurship Motivation which has not been tested in previous research, also this research uses a different data processing method from previous research.

This research has a significant contribution, both theoretically and practically. From a theoretical point of view, this research can help identify the key factors in financial literacy that have the most significant impact on entrepreneurial motivation. This can enable the development of literacy programs that are more focused and effective in encouraging interest in entrepreneurship. From a practical standpoint, this research can also help entrepreneurs make wiser decisions in managing their business finances. This can have an impact on reducing business risk and increasing the chances of success. The results of this research can provide a better understanding to the government and related institutions regarding how increasing financial literacy can support the growth of the entrepreneurial ecosystem. Policies that focus on financial education can create a more conducive environment for aspiring entrepreneurs.

## 2. Literature review

The theory of reasoned action proposed by Fishbein and Ajzen (1977) has been used for the past two decades to study individual desires and behavior. This theory says that individuals have the intention or desire to perform an action that results in that individual's behavior. When someone already has high financial knowledge, he will tend to have good financial behavior and ultimately generate motivation for entrepreneurship. This is in accordance with the theory mentioned above, namely that a person's motivation arises from a person's intention to behave or the actual intention produces motivation to perform the action (Zarnadze et al., 2022). In this study, the concept of financial literacy is broken down into three distinct dimensions: financial knowledge, financial attitude, and financial behavior. However, for the purposes of this research, only two of these dimensions, namely financial knowledge (referred to as financial literacy) and financial behavior, were examined. This decision was made based on the understanding that attitudes and behaviors in the realm of finance are intricately interconnected (Çera et al., 2021). Therefore, the researchers chose to amalgamate these dimensions into a single variable, which is referred to as financial behavior.

This research also uses capability theory (Sen, 1993) where capability requires the freedom that individuals have to live their lives and get the opportunities they want (Çera et al., 2020). This also refers to the concept that individuals who have certain abilities can shape and influence their level of motivation, in this case individuals who have financial abilities will influence their motivation for entrepreneurship. The financial capabilities possessed by individuals come from the knowledge they obtain either from their family environment or from their school education environment. These financial abilities include financial literacy and financial behavior which will ultimately increase their motivation to create a business (Khan et al., 2022). Capability theory emphasizes the importance of developing individual abilities. When someone feels capable of mastering the skills and knowledge necessary for entrepreneurship, they tend to be more motivated to start their own business, this is because they feel they have sufficient foundation to succeed. Apart from individuals having reliable financial capabilities, it should be noted that there are external factors that need to support this, one of which is access to finance to start a new business (Çera et al., 2020).

### **2.1. Financial literacy and financial behavior**

Financial literacy is considered as a combination of knowledge, skills and self-efficacy and the decision-making process is influenced by individual knowledge which enables a person to transform knowledge into behavior (Çera et al., 2021). Financial knowledge is defined as an understanding of personal finance and the economy which includes knowledge of savings and investment, banking and insurance, taxes and debt (Khan et al., 2022). Through financial literacy, individuals learn to make long-term monetary choices, such as buying an unused domestic or making retirement plans, so monetary proficiency comprises of terms and data instructed for the monetary advancement of each person (Blue et al., 2014). Financial decision-making and financial management behavior includes things like creating budgets, paying bills on time, and appropriately managing savings (Bhushan & Medury, 2014; Kalekye & Memba, 2015). It can be seen that individual financial knowledge is an important component to improve individual behavior in making financial decisions. Further exploration also revealed that financial knowledge influences individual financial behavior and decision making by individuals so that they are related to one another (Allgood & Walstad, 2016; Kalmi, 2018).

The financial knowledge of students, aged 18 and over, is very important because students at this age begin to lead an independent life, especially in terms of finances. Financial knowledge becomes essential when these students start spending their own money (Ahmad et al., 2021). Most students struggle to manage their money when they are entering college, they are beginning to live independently, and are getting their first taste of handling their own money (Shaari et al., 2013). College students' financial actions appear to have an impact on their future, which suggests that someone with inadequate financial literacy will experience financial difficulties in the future. Student's academic achievement, financial hardship, and capacity to find employment after graduation can all be affected by economic ignorance (Ahmad et al., 2021). Financial conduct is significantly affected by financial literacy. Research demonstrates that financial knowledge significantly affects financial behavior, which is a crucial component of financial literacy (Trunk & Dermal, 2015). According to Xiao et al. (2014), sound financial management is what leads to financial security and a promising future. As a result, it is crucial for students to arm themselves with financial knowledge.

Thus, this research hypothesises that:

**H1:** Financial literacy is positively related to the financial behavior of accounting students.

## **2.2. Financial behavior and entrepreneurial motivation**

Entrepreneurship is an important matter that has received attention from the government because it can make an extraordinary contribution to the advancement of the economy, expansion of economic potential, and enhancement of societal well-being (Saptono et al., 2020). Entrepreneurship is encouraged among the younger generation, such as students from various universities. Entrepreneurial activities are related to financial activities in business where good financial behavior is needed in a business. Entrepreneurs that have strong financial management abilities promote business expansion. Entrepreneurs must therefore be backed by financial competence, one of which is the financial behavior required of them to manage their businesses successfully (Suparno & Saptono, 2018). The obligations of the entrepreneur in terms of business finance, investing, cash flow, and planning are related to behavioral finance. One of the financial skills necessary for the success and expansion of entrepreneurial businesses is behavioral finance. Education-based knowledge and skills enable responsible financial behavior (Jappelli & Padula, 2013).

Behavioral finance is about how a person makes financial decisions including financial planning, saving, budgeting, investing, and paying off debt (Çera et al., 2021; Greenberg & Hershfield, 2019). Financial behavior reveals the degree to which the entrepreneur is in control of the company's finances and budgeting, and sound financial behavior makes it easier to make wise choices, whereas bad business management can be a hindrance in doing business. Entrepreneurs that practice effective financial conduct may comprehend comprehensive impact of financial choices on business outcomes (Saifurrahman & Kassim, 2021). Therefore, having good financial knowledge and good financial behavior can also affect the younger generation to become entrepreneurs (Ahmad et al., 2021).

Based on the above description, this research hypothesises that:

**H2:** Financial behavior is positively related to entrepreneurial motivation of accounting students.

## **2.3. Financial literacy and entrepreneurial motivation**

Over the past decade, entrepreneurship has grown in importance as a social and economic issue and a world-renowned research topic. Entrepreneurship is becoming a very relevant instrument for increasing economic growth and development in various countries. Entrepreneurial activities are introduced to the younger generation, especially students at universities. They are given financial competence to manage a business effectively (Saptono et al., 2020).

Our country is also starting to promote and disseminate knowledge about entrepreneurship more broadly. Starting from school to tertiary institutions, it is targeted to provide motivation and knowledge about the importance of entrepreneurship. This is so that when they graduate and immediately enter society, they will no longer be awkward in facing the business world or jobs that are hard to come by. Financial literacy is an important factor in this entrepreneurship (Utami & Wahyuni, 2022).

Educational institutions can develop fundamental entrepreneurial abilities to encourage student's entrepreneurial enthusiasm. This education gives financial knowledge and skills, improves student's financial literacy, and direct students to appropriate financial behaviors. This education encourages students to have high entrepreneurial motivation (Israr & Saleem, 2018; Suparno & Saptono, 2018). Insufficient understanding of financial matters creates challenges in making finance-related choices, and since entrepreneurs are obligated to make such decisions, it becomes imperative for them to possess financial literacy. Consequently, having a grasp of financial concepts positively influences business growth (Zhao & Li, 2021).

Based on the above description, this research hypothesises that:

**H3:** Financial literacy is positively related to the entrepreneurial motivation of accounting students

#### **2.4. Financial literacy and entrepreneurial motivation mediated by financial behavior**

Financial literacy and financial behavior influence student's interest in entrepreneurship. These supporting factors are needed to foster student motivation for entrepreneurship (Ahmad et al., 2021). A person with good financial literacy will also tend to have good financial behavior and this will result in increased motivation for entrepreneurship, so that entrepreneurial motivation has a partial relationship with financial literacy because financial knowledge cannot be significantly related to entrepreneurial intentions without being transformed into finance-related behaviors or attitudes (Solesvik, 2013). Entrepreneurs who have received entrepreneurship education exhibit higher motivation compared to entrepreneurs without entrepreneurship education (Ahmad et al., 2021). Studying financial topics can improve financial attitudes and behavior (Cera et al., 2021) which in turn can create entrepreneurial motivation.

Research conducted by Alshebami and Al Marri (2022) says the same thing, namely financial literacy has an impact on financial behavior which ultimately increases people's intention to become entrepreneurs. Financial literacy significantly impacts various factors, including individual saving behavior (Shafinar et al., 2015). This means that the greater one's financial literacy, the greater one's level of savings, and the greater one's financial well-being (Gilenko & Chernova, 2021). Furthermore, due to individual financial literacy, savings increase, enabling people to start new businesses or expand existing businesses (Alshebami & Al Marri, 2022).

Based on the above description, research hypothesises can be seen at Figure 1 below:

**H4:** Financial literacy has a positive relationship with accounting students' entrepreneurial motivation which is mediated by financial behavior

### **3. Methodology**

#### **3.1. Participants**

This research employed a quantitative research design and survey questionnaire was used to collect the data. This research was conducted between November 2022 and March 2023. Students studying accounting from the University of Java Island in Indonesia made up the study's population. Purposive sampling was the method of sampling utilized in this study, and the target respondents were those who met specific practical requirements, such as proximity to the study's location and willingness to participate. Researchers asked lecturers at the university for permission to distribute questionnaires to students at the university. Researchers also entrusted questionnaires to known lecturers or to students, then they helped distribute the questionnaires at their respective universities. The respondents collected were 252 accounting students and all respondents gave consent that the data provided would be published for scientific purposes. These respondents were final year students who had better financial literacy than other students. The

**Figure 1. Research Model.**



sample of students is also considered the most relevant to this study because based on their understanding of finance and business, students are regarded as a prospective entrepreneurial population (Ahmad et al., 2019).

### **3.2. Instrumentations**

A structured questionnaire with four components was used to gather primary information for the independent and dependent variables. The first part deals with the respondent's profile, the second part deals with financial literacy, the third part deals with financial behavior and the fourth part deals with entrepreneurial motivation. All questions used a 5-point Likert scale from "strongly disagree" (1) to "strongly agree" (5).

The questionnaire survey used in this study was adopted from the OECD report (2011) as well as Atkinson and Messy (2012) to quantify financial literacy and financial behavior, while to quantify entrepreneurial motivation was adopted from Ahmad et al. (2021). Questionnaires were distributed online to students with consideration of the ease of obtaining data at the end of 2022 which is a pandemic transition period.

### **3.3. Validity and reliability**

The study instrument was already validated by the previous research. Validity testing is carried out by testing convergent validity and discriminant validity to ensure that the indicators used to measure constructs are valid. Convergent validity was measured using AVE (average variance extracted). An AVE value of more than 0.50 indicates that on average, the construct explains more than half of the variance of the indicators. Discriminant validity is the degree to which a construct is completely different from a construct based on empirical standards. The method for testing discriminant validity is based on cross loadings of indicators, with of acceptable outer loading value is greater than 0.7. Consistency reliability testing uses the Cronbach's alpha value and the composite reliability value where the Cronbach's alpha value is at least 0.7 and the composite validity value is at least 0.7 (Hair et al., 2014).

### **3.4. Data analysis**

The analysis uses structural equation modeling with an alternative partial least square method. The reason for using structural equation modeling is because the variables being studied are not measured directly but are measured through several indicators. The Structural Model used as a data assessment in the first PLS-SEM by measuring collinearity to predict endogenous constructs or indicators with a determination assessment ( $R^2$ ) (Hair et al., 2014).

### **Data availability**

#### **Underlying data**

Figshare: Dataset survey on Accounting Students from 252 respondents. <https://doi.org/10.6084/m9.figshare.22331161.v1> (Rapina et al., 2023).

This project contains the following underlying data:

- Questionnaire results from 252 accounting students.

### **4. Results**

Based on the results of distribution and collection of questionnaires, it can be seen the demographic profile of respondents among accounting students in West Java, Indonesia, which describes the characteristics of respondents regarding gender, age, and whether the respondent has received courses regarding financial knowledge and entrepreneurship. In Table 1 below you can see the characteristics and distribution of respondent profiles. The proportion of male respondents is less than female. Furthermore, regarding age characteristics, it can be seen that the

majority of respondents are in the age range of 21 to 25 years, this is in line with the researchers' expectations in obtaining information because students at this age are final year students have a high level of financial literacy and understanding in the fields of finance and business, also students in this age range are considered a potential entrepreneurial candidate. Furthermore, in relation to courses on financial knowledge and entrepreneurship, it can be seen in Table 1 that the majority of respondents had attended a course on finance and had attended an entrepreneurship course.

#### 4.1. Descriptive analysis

Interpretation of data from respondents' responses can be used to enrich the discussion, through pictures of respondents' responses it can be seen how the condition of each variable indicator being studied. In order to make it easier to interpret the variables being studied, the average score of the respondents' answers was calculated. Below are the descriptive results of the analysis in this study.

Most accounting students who are the sample of this study at universities spread across Java Island already have good financial literacy with an average total score of 3.90 on a scale of 1–5, that can be seen at Table 2. The highest financial literacy is regarding the importance of investment, with a typical rating of 4.22. This shows accounting students who are the sample of this study understand that investing their money wisely can generate potential growth and increased financial security over time. Conversely, the lowest financial literacy is regarding the importance of insurance for future protection, with a typical overall rating of 3.64. Accounting students who are the sample of this study are not yet aware of the importance of insurance because they lack personal experience that emphasizes the importance of insurance and lack of education or campaigns about the importance of insurance.

In general, accounting students at universities spread across Java Island who are the sample of this study already have good financial behavior with a typical overall rating of 3.65 on a scale of 1–5, that can be seen at Table 3. The best financial behavior is in terms of preparing a budget every month, with a typical rating of 3.97. Accounting students who are the sample of this study are aware of the importance of making a budget for their finances, this implies that they have an understanding of finances and they control expenses so they can avoid excessive spending. On the other hand, the worst financial behavior is in monitoring one's own financial affairs continuously,

**Table 1. The demographic profile of respondents**

Variable	Frequency (n)	Percentage (%)
<b>Gender</b>		
Male	59	23
Female	193	77
<b>Age</b>		
16–20 years old	74	29
21–25 years old	156	62
26–30 years old	15	6
>30 years old	7	3
<b>Attended Financial Course</b>		
Yes	231	92
No	21	8
<b>Attended Entrepreneurship Course</b>		
Yes	231	92
No	21	8



**Table 2. Financial literacy descriptive Statistics**

Code of indicator	Indicator	N	Mean
FL_01	I understand my current financial situation.	252	3,91
FL_02	I understand the risk of using a credit card.	252	3,69
FL_03	All types of investment are profitable.	252	3,66
FL_04	Buying insurance is important for protection in the future.	252	3,64
FL_05	I am certain about where my money is spent.	252	4,02
FL_06	Investment is important.	252	4,22
FL_07	I set long-term financial goals and strive to achieve them.	252	3,91
FL_08	I tend to do financial planning for my financial well-being.	252	4,09
FL_09	I am prepared to risk some of my own money when making an investment.	252	3,90
FL_10	I find it more satisfying to save money for future undertakings.	252	4,01
<b>Overall</b>			<b>3,90</b>

with a typical overall rating of 3.27. Accounting students who are the sample of this study lack constant monitoring of their financial condition because doing so is time-consuming, tiring and can create undue anxiety.

In general, accounting students who are the sample of this study at universities spread across Java Island already have high entrepreneurial motivation with a typical overall rating of 3.78 on a scale of 1–5, that can be seen at Table 4. The highest motivation is in terms of the habit of budgeting and planning financial resources to run a business, with a typical rating of 4.31. Accounting students who are the sample of this study are highly motivated by the idea of adopting the habit of budgeting and planning financial resources to run a business. Conversely, the lowest motivation is in terms of the habit of dealing with funding or debt for businesses, with a typical rating of 3.21. Accounting students who are the sample of this study do not understand business financing or debt due to a lack of education and understanding of business funding and debt management strategies as well as a lack of experience in this matter.

#### 4.2. Verification analysis

To prove whether financial literacy and financial behavior affect entrepreneurship motivation, a test is carried out using structural equation modeling with an alternative partial least square method. In SEM-PLS there are two sub-models, namely the outer model and the inner model.

##### 4.2.1. Outer model

The outer model or measurement model is a model that connects latent variables with manifest variables. In this study there were 3 latent variables with a total of 30 manifest variables (indicators). The following is the result of analysis of data processing using Warp PLS 7.0 along with an explanation of the convergent validity and discriminant validity tests.

**Table 3. Financial behavior descriptive Statistics**

<b>Code of indicator</b>	<b>Indicator</b>	<b>N</b>	<b>Mean</b>
FB_01	I have a life insurance policy.	252	3,79
FB_02	I prepare a budget every month.	252	3,97
FB_03	I maintain adequate financial records.	252	3,35
FB_04	I contribute to an investment account.	252	3,62
FB_05	I keep track of my expenses on a regular basis.	252	3,86
FB_06	I get cash advances from my debit card.	252	3,28
FB_07	I plan and implement a regular savings programme.	252	3,96
FB_08	I compare prices when shopping for purchases.	252	3,76
FB_09	I keep a close personal watch on my financial affairs.	252	3,27
FB_10	I read to increase my financial knowledge.	252	3,62
<b>Overall</b>			<b>3,65</b>

**Table 4. Entrepreneurship motivation descriptive Statistics**

<b>Code of indicator</b>	<b>Indicator</b>	<b>N</b>	<b>Mean</b>
EM_01	Instill entrepreneurial motivation.	252	3,60
EM_02	Preparing financial reports.	252	3,70
EM_03	Managing working capital.	252	3,67
EM_04	Preparing sufficient cash flows.	252	4,28
EM_05	Solving financial problems.	252	3,98
EM_06	Dealing with financial debts.	252	3,21
EM_07	Understanding financial reports.	252	3,58
EM_08	Estimating cost of a product.	252	3,61
EM_09	Allocating financial resources.	252	3,85
EM_10	Budgeting and planning financial resources.	252	4,31
<b>Overall</b>			<b>3,78</b>

In Table 5, the indicators have loading factors that are less than 0.7 is advised to be removed from the model (Hair et al., 2014). With the removal of the indicator from the model with a loading factor of less than 0.7, the outcomes of the new outer model are as follows.

In Table 6, all indicators have a loading factor greater than 0.7 and are declared valid. The composite reliability (CR) of each latent variable is also greater than 0.7 indicating that these indicators are reliable for gauging the corresponding latent variables.

In the financial literacy latent variable, the FL04 indicator (purchasing essential insurance for future protection) has the greatest loading factor. This information demonstrates that the latent variable of financial literacy is most strongly reflected by the importance of insurance for future protection. On the other hand, the FL10 indicator (more satisfied to save money for a business or activity in the future) is the weakest in reflecting the latent variable of financial literacy. The average variance extracted (AVE) value of 0.584 indicates that the latent variable financial literacy can reflect, on average, 58.4% of the data from each indicator.

In the financial behavior latent variable, the FB08 indicator (likes to compare prices or price surveys when shopping) has the greatest loading factor. This data shows that comparing prices or price surveys when shopping is the most strongly in reflecting financial behavior variables. On the other hand, the FB07 indicator (planning and implementing a regular savings program) is the weakest in reflecting latent financial behavior variables. The average variance extracted (AVE) value of 0.669 indicates that on average 66.9% of the information contained in each indicator can be reflected through financial behavior latent variables.

In the entrepreneurship motivation latent variable, the EM07 indicator (understanding business-related financial reports) has the greatest loading factor. This data shows that understanding of financial statements related to effort is strongest in reflecting entrepreneurship motivation. On the other hand, the EM05 indicator (accustomed to solving financial problems) is the weakest in reflecting the latent variable entrepreneurship motivation. The average variance extracted (AVE) value of 0.687 indicates that on average 68.7% of the information contained in each indicator can be reflected through the latent variable entrepreneurship motivation.

The next test is discriminant validity through cross loading, according to Hair et al. (2014) the presence of cross loading which is greater than outer loading indicates a discriminant validity problem. In Table 5, the loading factor values of each construct (latent variable) with their own indicators are higher than the indicators on other latent variables. This data shows that there is no discriminant validity's problem, because each indicator has a stronger relationship with its own construct than with other constructs.

In addition, researchers have also examined the problem of multicollinearity between the indicators used in this study and the result is that there is no multicollinearity between indicators in the variables used. Statistical results show that the Average VIF (AVIF) value in this study is 2,668. AVIF value of 5 or more indicates a critical collinearity problem between the indicators of the formatively measured constructs. However, collinearity problems can also occur at VIF values lower than 3. Ideally, VIF values should be close to 3 and lower (Hair et al., 2019). It can be concluded that in this study there is no multicollinearity problem.

#### 4.2.2. Inner model

The inner model is a model that links exogenous latent variables with endogenous latent variables, or the relationship between endogenous variables and other endogenous variables. In this study, the exogenous variables were Financial Literacy (FL) and Financial Behavior (FB), while the endogenous variables in this study were Entrepreneurship Motivation (EM). The inner model relationship in this study can be seen in Figure 2 below.

**Table 5. Loadings factor of each latent variable indicator**

Latent Variable	Loadings Factor (Indicator)										CR	CA	AVE
	1	2	3	4	5	6	7	8	9	10			
FL	0,770	0,773	0,821	0,829	0,748	0,755	0,729	0,781	0,720	0,711	0,933	0,921	0,584
FB	0,566	0,620	0,674	0,846	0,673	0,733	0,739	0,857	0,761	0,857	0,922	0,905	0,546
EM	0,845	0,842	0,861	0,810	0,726	0,587	0,903	0,855	0,751	0,830	0,948	0,938	0,649

**Table 6. Loadings factor and cross loading each latent variable indicator**

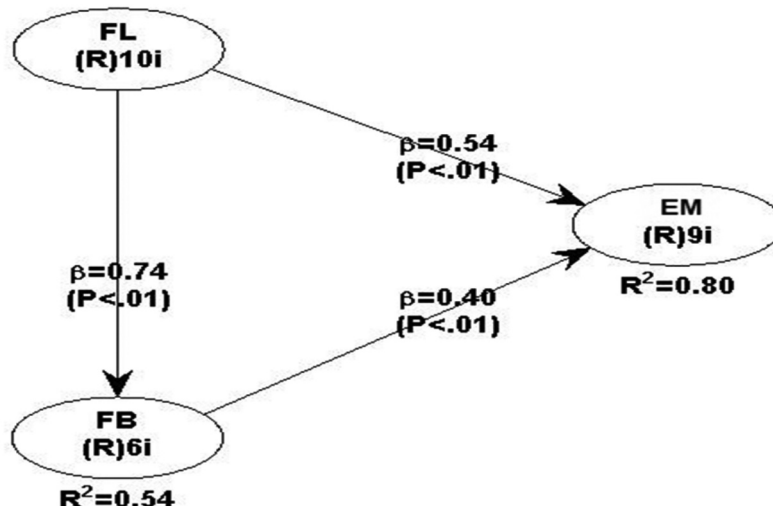
<b>Indicator</b>	<b>FL</b>	<b>FB</b>	<b>EM</b>
FL <sub>01</sub>	<b>0,770</b>	0,555	0,619
FL <sub>02</sub>	<b>0,773</b>	0,675	0,692
FL <sub>03</sub>	<b>0,821</b>	0,580	0,720
FL <sub>04</sub>	<b>0,829</b>	0,684	0,718
FL <sub>05</sub>	<b>0,748</b>	0,579	0,574
FL <sub>06</sub>	<b>0,755</b>	0,426	0,659
FL <sub>07</sub>	<b>0,729</b>	0,433	0,559
FL <sub>08</sub>	<b>0,781</b>	0,548	0,730
FL <sub>09</sub>	<b>0,720</b>	0,487	0,587
FL <sub>10</sub>	<b>0,711</b>	0,588	0,567
FB <sub>04</sub>	0,705	<b>0,847</b>	0,788
FB <sub>06</sub>	0,494	<b>0,790</b>	0,476
FB <sub>07</sub>	0,593	<b>0,717</b>	0,587
FB <sub>08</sub>	0,652	<b>0,899</b>	0,737
FB <sub>09</sub>	0,492	<b>0,801</b>	0,503
FB <sub>10</sub>	0,633	<b>0,843</b>	0,743
EM <sub>01</sub>	0,676	0,657	<b>0,840</b>
EM <sub>02</sub>	0,685	0,787	<b>0,842</b>
EM <sub>03</sub>	0,705	0,703	<b>0,865</b>
EM <sub>04</sub>	0,697	0,468	<b>0,838</b>
EM <sub>05</sub>	0,678	0,600	<b>0,720</b>
EM <sub>07</sub>	0,722	0,737	<b>0,896</b>
EM <sub>08</sub>	0,671	0,730	<b>0,842</b>
EM <sub>09</sub>	0,725	0,608	<b>0,744</b>
EM <sub>10</sub>	0,743	0,568	<b>0,861</b>
<b>CR</b>	<b>0,933</b>	<b>0,924</b>	<b>0,952</b>
<b>CA</b>	<b>0,921</b>	<b>0,900</b>	<b>0,942</b>
<b>AVE</b>	<b>0,584</b>	<b>0,669</b>	<b>0,687</b>

On Table 7 it can be seen through  $R^2$  that financial literacy has an influence of 54.2% on financial behavior. The financial behavior has an influence of 68.5% on entrepreneurship motivation. The  $Q^2$  value is a predictive relevance value, because  $Q^2 > 0.35$  indicates that the structural model obtained has strong predictive usefulness.

*4.2.2.1. The influence of financial literacy on financial behavior.* The first hypothesis to be tested is the effect of financial literacy (FL) on financial behavior (FB). Table 7 demonstrates that the path coefficient of financial literacy on financial behavior has a positive sign with  $t_{\text{statistic}}$  value of 13.143 and a probability value close to zero. Because the  $t_{\text{statistic}}$  is greater than 1.645 and the probability value is  $< 0.05$ , at the 5% error level it is decided to accept the hypothesis. It can be concluded that financial literacy has a positive effect on financial behavior. The results of this study provide empirical evidence that better financial literacy will increase the financial behavior of university accounting students who are the sample of this study spread across Java.

*4.2.2.2. The influence of financial behavior on entrepreneurship Motivation.* The second hypothesis to be tested is the effect of financial behavior (FB) on entrepreneurship motivation (EM). Table 7 demonstrates that the financial behavior path coefficient on entrepreneurship motivation is

Figure 2. Model results.



positive with  $t_{\text{statistic}}$  value of 6.729 and a probability value close to zero. Because the  $t_{\text{statistic}}$  is greater than 1.645 and the probability value is  $< 0.05$ , at the 5% error level it is decided to accept the hypothesis. It can be concluded that financial behavior has a positive effect on entrepreneurship motivation. The results of this study provide empirical evidence that better financial behavior will increase entrepreneurship motivation among university accounting students who are the sample of this study across Java.

4.2.2.3. *The influence of financial literacy on entrepreneurship motivation.* The third hypothesis to be tested is the effect of financial literacy (FL) on entrepreneurship motivation (EM). In Table 7 it can be seen that the path coefficient of financial literacy on entrepreneurship motivation has a positive sign with a statistical value of 9,561 and a probability value close to zero. Because the  $t$  statistic is greater than 1.645 and the probability value is  $< 0.05$ , at the 5% error level it is decided to accept the hypothesis. It can be concluded that financial literacy has a positive effect on entrepreneurship motivation. The results of this study provide empirical evidence that better financial literacy will increase entrepreneurship motivation among university accounting students who are the sample of this study across Java.

4.2.2.4. *The influence of financial literacy on entrepreneurship motivation mediated by financial behavior.* The fourth hypothesis to be tested is the influence of financial literacy (FL) on entrepreneurship motivation (EM) mediated by financial behavior (FB). Table 7 demonstrates that the path coefficient of financial literacy mediated by financial behavior towards entrepreneurship motivation has a positive sign with  $t_{\text{statistic}}$  value of 6.952. The indirect effect of financial literacy on entrepreneurship motivation via financial behavior is 0.292 which is obtained from multiplying the financial literacy path coefficients on entrepreneurship motivation and financial behavior. Based on the calculation results presented in Table 7, it can be seen that the  $p$ -value is 0.00 because the  $p$ -value is smaller than 0.05, so there is an indirect influence from financial literacy to entrepreneurship motivation via financial behavior. This means that the higher the financial literacy, the better the financial behavior and if the financial behavior is good, the entrepreneurship motivation will be better. It can be concluded that financial literacy mediated by financial behavior has a positive effect on entrepreneurship motivation. The results of this study provide empirical evidence that good financial literacy will improve financial behavior and finally increase entrepreneurship motivation among university accounting students who are the sample of this study across Java.

**Table 7. Summary of structural model results**

Hypothesis	Path	Coefficient	Contribution	t-statistics	p-value	R <sup>2</sup>	Q <sup>2</sup>	Decision
H1	FL → FB	0,736	0,542	13,143	<0,001	0,542	0,545	Accepted
H3	FL → EM	0,545	0,468	9,561	<0,001	0,796	0,797	Accepted
H2	FB → EM	0,397	0,328	6,729	<0,001			Accepted
H4	FL → FB → EM	0,292	0,292	6,952	<0,001			Accepted

## 5. Discussion

This study describes the effect of financial literacy and financial behavior on entrepreneurial motivation in accounting students who are the sample of this study in West Java, Indonesia. The study's findings indicate that accounting students who are the sample of this study in West Java have financial literacy that is quite good, above average. The conclusion of this study is in accordance with the findings of Ahmad et al. (2021) which explains that accounting students have a fairly good level of financial literacy compared to students of other majors. The respondent's data shows that good financial literacy can be seen in the awareness of accounting students who consider investment to be important. Students' financial decisions affect their future, and those with inadequate financial literacy will likely experience financial difficulties down the road. This will be different from students who are aware of the importance of investing because by investing, students will have sufficient finances in the future. By investing means they understand the importance of saving, this is in line with what previous research said that individuals with good financial knowledge will have a saving awareness (Bhushan & Medury, 2014; Kalekye & Memba, 2015). According to earlier studies, students who have a strong grasp of finance are more likely to be conscious of their financial situation that investment is good for dealing with financial problems in the future (Ali et al., 2022). However, there are also findings which say that students from accounting or business backgrounds have an understanding of finance that is no better than students from other majors. This implies that financial education still needs to be improved in educational institutions (Ahmad et al., 2019).

Regarding student financial behavior, the respondent's data shows that accounting students who are the sample of this study are aware of the importance of making a budget every month. A good budget or financial plan must be used to achieve long-term financial targets. This is in accordance with research conducted by Greenberg and Hershfield (2019) which says that individuals with good financial behavior will also have the ability to make good financial decisions, one of which is aware of the importance of making a budget. Students are considered to manage their finances well if they have sufficient financial knowledge, so that there is a relationship between financial literacy and financial behavior (Trunk & Dermal, 2015). Hence, when students are aware of and knowledgeable about finances, they may make wise financial judgments. This can be seen in the potential of students in managing their personal finances such as having investments and insurance. This study supports other studies that show how financial literacy affects students' financial behavior (Akca et al., 2018; Arofah et al., 2018; Te'eni-Harari, 2016; Vodă & Florea, 2019). This finding is also in line with the findings of Çera et al. (2021) who said individual financial knowledge is an important component in making decisions in financial matters, so that there is a strong relationship between financial knowledge and financial practice. However, research conducted by Kaiser and Menkhoff (2017) says something different, namely financial literacy does not affect financial behavior in micro-entrepreneurs, especially for those with low incomes.

Regarding entrepreneurship, data shows that financial behavior has a significant relationship to entrepreneurial motivation in accounting students who are the sample of this study in West Java. This is consistent with previous findings which state that students with good financial behavior in managing their personal finances will also have high motivation to become entrepreneurs (Ahmad et al., 2021; Jappelli & Padula, 2013). To sustain their business in the future when they become entrepreneurs, students must be prepared with financial knowledge and entrepreneurial abilities (Suparno & Saptono, 2018). Entrepreneurs are described as individuals who create businesses, use assets, take business risks and are active in making business decisions (Vodă & Florea, 2019). To achieve business success, entrepreneurs must also be equipped with good financial management skills (Ahmad et al., 2021). Data shows that the highest motivation for entrepreneurship is in terms of the habit of budgeting and planning financial resources to run a business, how the company's financial resources will be managed, allocated, and utilized to achieve its goals and objectives. This means that students have good financial behavior according to research conducted by Greenberg and Hershfield (2019) which says that those who have good financial behavior will budget well. These findings align with earlier studies which explains that students who have good financial



management skills will be successful in making decisions regarding budgeting and allocating resources in implementing business strategies (Çera et al., 2021; Conneely, 2010). This shows that financial behavior and entrepreneurial motivation are strongly correlated.

Furthermore, financial literacy has a significant relationship with entrepreneurial motivation among accounting students who are the sample of this study which is mediated by financial behavior. Because financial literacy must be translated into financial-related actions to be significantly connected to entrepreneurial aspirations, there is a partial association between entrepreneurial motivation and financial literacy (Ahmad et al., 2021; Solesvik, 2013). Studying financial topics can improve financial attitudes and behavior (Cera et al., 2021) which in turn can create entrepreneurial motivation, so that financial behavior acts as a mediation between financial literacy and entrepreneurial motivation. The findings of this study show that among accounting graduates, financial literacy and entrepreneurial motivation are significantly correlated. Previous research has shown that students with high levels of financial literacy had more entrepreneurial desire than students with low levels of financial literacy, which is consistent with the present conclusion (Valencia et al., 2015). Students with high literacy levels have good financial knowledge and can take effective actions in starting their business. The same thing was stated by Alshebami and Al Marri (2022), namely that students who have good financial knowledge will have supportive financial behavior to start a business. A crucial managerial skill for entrepreneurs in deciding the success of their businesses is financial literacy. The competence of the business owner to manage finances determines the profitability of a company. In this case, entrepreneurs certainly have good knowledge of finance first and then carry out financial management to achieve business success (Akca et al., 2018; Jappelli & Padula, 2013). This is consistent with previous findings which state that students with good financial knowledge will tend to have good business motivation through behaviors or attitudes that support this knowledge (Israr & Saleem, 2018; Suparno & Saptono, 2018).

## **6. Conclusion, implication, limitation, and recommendations for future research**

Accounting students who are the sample of this study in West Java, Indonesia have a fairly good average level of financial literacy where they understand the importance of investment. The data shows that students have an awareness of the importance of making an investment and they can make a financial budget for their financial life quite well. Accounting students who are the sample of this study in West Java, Indonesia also have a fairly high average level of financial behavior where they are aware of the importance of making a budget for their finances, this implies that they have an understanding of finances and they control expenses so they can avoid excessive spending. With a fairly good level of financial literacy and level of financial behavior, students must have high entrepreneurial motivation.

From the results of this study, it can be concluded that financial literacy has a significant relationship with financial behavior, financial behavior has a significant relationship with entrepreneurial motivation, and finally financial literacy has a significant relationship with entrepreneurial motivation through financial behavior. These results are supported by previous research which concluded that financial literacy and financial behavior have a significant relationship to entrepreneurial motivation.

Based on the findings of this study, there are several suggested implications. Young entrepreneurs must develop their financial skills to succeed in company in Indonesia since financial literacy is a crucial component of entrepreneurship among young entrepreneurs and has a significant impact on good financial behavior. Therefore, education in finance and entrepreneurship should be noted in academic institutions. Universities should provide a range of finance courses, seminars, and training sessions that are centered on developing financial management skills and disseminating sound financial advice. Through financial education courses or seminars on financial topics, students of all ages, educational backgrounds, and majors can improve their financial understanding. The data shows that although accounting students who are the sample of this study

have attended several entrepreneurship courses, this experience does not make a significant contribution to entrepreneurial motivation. Universities must therefore update their course offerings to encourage students to start their own businesses. To increase students' entrepreneurial motivation, higher education institutions should design more integrated educational curricula and policymakers should provide efficient policy procedures.

In addition, entrepreneurship education in Indonesia must involve the latest materials that are relevant to the fourth industrial era. This will equip students with superior entrepreneurial knowledge and entrepreneurial mindset. In addition, the entrepreneurship model must use life-based learning, such as inviting entrepreneurs' success stories or company visits, which will improve students' entrepreneurial mindset and intention to become entrepreneurs. Schools also need to bring in successful entrepreneurs to share experiences, from starting up to developing their businesses. For the government and stakeholders, it is necessary to become a mediator for schools in collaboration with the business world and the industrial world. This is an effective way to control and contribute to the birth of new entrepreneurs.

This study has limitations, including the fact that the sample used was limited to university students. Future studies are anticipated to use a wider sample from all Indonesian colleges with accounting departments. Moreover, there were no comparisons between accounting and non-accounting students in this study. Future studies could evaluate financial literacy, financial behavior, and entrepreneurial motivation among accounting students and non-accounting students by including non-accounting students. In addition, subsequent research can use qualitative research design or a mixture of qualitative and quantitative to produce more detailed and complete findings.

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#### References

Ahmad, N. L., Fazil, N. F. M., & Bakar, B. A. (2021).

Entrepreneurship motivation among accounting students: The role of financial literacy and financial behaviour. *Jurnal Pengurusan*. <https://doi.org/10.17576/pengurusan-2021-63-11>

Ahmad, N. L., Yusof, R., Ahmad, A. S., & Ismail, R. (2019).

The importance of financial literacy towards entrepreneurship intention among university students. *The International Journal of Academic Research in Business & Social Sciences*, 9(9), 18–39. <https://doi.org/10.6007/IJARBS/v9-i9/6266>

Akca, N., Sonmez, S., Sener, T., & Akca, C. (2018). An evaluation of the effect of financial literacy education on financial literacy among college students. *International Journal of Humanities and Social Science*, 8(8), 152–158. <https://doi.org/10.30845/ijhsv8n8p17>

Aldi, B. E., Herdjiono, I., & Maulany, G. (2019, August). The influence of financial literacy on entrepreneurial intention. In *3rd International Conference on Accounting, Management and Economics 2018 (ICAME 2018)* (pp. 700–703). Atlantis Press. <https://doi.org/10.2991/icame-18.2019.74>

Alij, M. A. S., Ammer, M. A., & Elshaer, I. A. (2022).

Determinants of investment awareness: A moderating structural equation modeling-based model in the Saudi Arabian Context. *Mathematics*, 10(20), 3829. <https://doi.org/10.3390/math10203829>

Allgood, S., & Walstad, W. B. (2016). The effects of perceived and actual financial literacy on financial behaviors. *Economic Inquiry*, 54(1), 675–697. <https://doi.org/10.1111/ecin.12255>

Alshebami, A. S., & Al Marri, S. H. (2022). The impact of financial literacy on entrepreneurial intention: The mediating role of saving behavior. *Frontiers in Psychology*, 13, 911605. <https://doi.org/10.3389/fpsyg.2022.911605>

Arofah, A. A., Purwaningsih, Y., & Indriayu, M. (2018). Financial Literacy, Materialism and Financial Behavior. *International Journal of Multicultural and Multireligious Understanding*, 5(4), 370–378. <https://doi.org/10.18415/ijmmu.v5i4.171>

Atkinson, A., & Messy, F. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study. *OECD Working*

- Papers on Finance, Insurance and Private Pensions* No. 15. 13–27. <https://doi.org/10.1787/20797117>
- Bestari, N. P. (2022). Kenapa banyak Start-up besar gagal di RI? Ini alasannya. *Kenapa Banyak Startup Besar Gagal di RI? Ini Alasannya* (cnbcindonesia.com)
- Bhushan, P., & Medury, Y. (2014). An empirical analysis of inter linkages between financial attitudes, financial behavior and financial literacy knowledge of salaried individuals. *Indian Journal of Commerce and Management Studies*, 5(3), 58. ISSN: 2240-0310 EISSN: 2229-5674.
- Blue, L., Grootenboer, P., & Brimble, M. (2014). Financial literacy education in the curriculum: Making the grade or missing the mark? *International Review of Economics Education*, 16, 51–62. <https://doi.org/10.1016/j.iree.2014.07.005>
- Çera, G., Khan, K. A., Belas, J., & Ribeiro, H. N. R. (2020). The role of financial capability and culture in financial satisfaction. *Economic Papers: A Journal of Applied Economics and Policy*, 39(4), 389–406. <https://doi.org/10.1111/1759-3441.12299>
- Cera, G., Khan, K. A., Mlouk, A., & Brabenec, T. (2021). Improving financial capability: The mediating role of financial behaviour. *Economic Research-Ekonomika Istraživanja*, 34(1), 1265–1282. <https://doi.org/10.1080/1331677X.2020.1820362>
- Çera, G., Khan, K. A., Rowland, Z., & Ribeiro, H. N. R. (2021). *Financial advice, literacy, inclusion and risk tolerance: The moderating effect of uncertainty avoidance*. <https://doi.org/10.15240/tul/001/2021-4-007>
- Çera, G., Phan, Q. P. T., Androniceanu, A., & Çera, E. (2020). Financial capability and technology implications for online shopping. *E&M Economics and Management*, 23(2), 156–172. <https://doi.org/10.15240/tul/001/2020-2-011>
- Conneely, J. F. (2010). Strategic planning and financial management. *New Directions for Student Services*, 2010(132), 51–61. <https://doi.org/10.1002/ss.375>
- Dsikowitzky, L., Damar, A., Ferse, S. C., Irianto, H. E., Jennerjahn, T. C., Lukas, M. C., & Sumiono, B. (2019). Java Island, Indonesia. In *World seas: An environmental evaluation* (pp. 459–490). Academic Press. <https://doi.org/10.1016/B978-0-08-100853-9.00029-4>
- Fatoki, O. (2014). The financial literacy of micro entrepreneurs in South Africa. *Journal of Social Sciences*, 40(2), 151–158. <https://doi.org/10.1080/09718923.2014.11893311>
- Fishbein, M., & Ajzen, I. (1977). *Belief, attitude, intention, and behavior: An introduction to theory and research*.
- Fuller, B., Liu, Y., Bajaba, S., Marler, L., & Pratt, J. (2018). Examining how the personality, self-efficacy, and anticipatory cognitions of potential entrepreneurs shape their entrepreneurial intentions. *Personality and Individual Differences*, 125, 120–125. <https://doi.org/10.1016/j.paid.2018.01.005>
- Gilenko, E., & Chernova, A. (2021). Saving behavior and financial literacy of Russian high school students: An application of a copula-based bivariate probit-regression approach. *Children and Youth Services Review*, 127, 106122. <https://doi.org/10.1016/j.childyouth.2021.106122>
- Greenberg, A. E., & Hershfield, H. E. (2019). Financial decision making. *Consumer Psychology Review*, 2(1), 17–29. <https://doi.org/10.1002/arc.1043>
- Hair, J. F., Hufit, T. M., Ringle, C. M., & Sarstedt, M. (2014). *Advanced issues in partial least squares structural equation modeling*. SAGE Publications, Inc.
- Israr, M., & Saleem, M. (2018). Entrepreneurial intentions among university students in Italy. *Journal of Global Entrepreneurship Research*, 8(20), 8–12. <https://doi.org/10.1186/s40497-018-0107-5>
- Jappelli, T., & Padula, M. (2013). Investment in financial literacy and saving decisions. *Journal of Banking & Finance*, 37(8), 16–28. <https://doi.org/10.1016/j.jbankfin.2013.03.019>
- Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *The World Bank Economic Review*, 31(3), 611–630. <https://doi.org/10.1093/wber/lhx018>
- Kalekye, P., & Memba, F. (2015). The role of financial literacy on the profitability of women owned enterprises in Kitui Town, Kitui country, Kenya. *International Journal of Science & Research*, 4(6), 2360–2365.
- Kalmi, P. (2018). The effects of financial education: Evidence from Finnish lower secondary schools. *Economic Notes*, 47(2–3), 353–386. <https://doi.org/10.1111/ecno.12114>
- Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., Mulder, M., & Mahdei, K. N. (2014). Understanding role models and gender influences on entrepreneurial intentions among college students. *Procedia - Social & Behavioral Sciences*, 93, 204–214. <https://doi.org/10.1016/j.sbspro.2013.09.179>
- Khan, K. A., Çera, G., & Pinto Alves, S. R. (2022). Financial capability as a function of financial literacy, financial advice, and financial satisfaction. *E&M Ekonomika aManagement*. <https://doi.org/10.15240/tul/001/2022-1-009>
- Kimmit, J., & Munoz, P. (2017). Sensemaking the ‘social’ in social entrepreneurship. *International Small Business Journal: Researching Entrepreneurship*, 36(8), 859–886. <https://doi.org/10.1177/0266242618789230>
- Li, R., & Qian, Y. (2020). Entrepreneurial participation and performance: The role of financial literacy. *Management Decision*, 58(3), 583–599. <https://doi.org/10.1108/MD-11-2018-1283>
- Lladós-Maslloréns, J., & Ruiz-Dotras, E. (2022). Are women’s entrepreneurial intentions and motivations influenced by financial skills?. *International Journal of Gender and Entrepreneurship*, 14(1), 69–94.
- Mauch, J., & Park, N. (2003). *Guide to the successful thesis and dissertation: A handbook for students and faculty* (Vol. 62). CRC Press.
- Musie, L. (2015). The use of financial literacy concepts by entrepreneurs in the small and medium enterprise sector in Mpumalanga Province, South Africa. *Department of Library Services*, 7, 55–62.
- Napitupulu, E. L. (2021). *Kewirausahaan Untuk Mahasiswa Berdampak. Kewirausahaan untuk Mahasiswa Berdampak - Kompas.id*
- Prasetyo, A. (2020). *Kewirausahaan Menjadi Solusi Atasi Pengangguran. Kewirausahaan Menjadi Solusi Atasi Pengangguran - Kompas.id*
- Rapina, R., Meythi, M., Noviany Rahmatika, D., & Mardiana, M. (2023). Survey on accounting students from 251 respondents. *figshare. Dataset*. <https://doi.org/10.6084/m9.figshare.22331161.v1>
- Saifurrahman, A., & Kassim, S. (2021). Islamic financial literacy for Indonesian MSMEs during COVID-19 Pandemic: Issues and importance. *Journal of Islamic Finance*, 10, 045–060.
- Saptono, A., Wibowo, A., Narmaditya, B. S., Karyaningsih, R. P. D., Yanto, H., & Cheng, M. (2020). Does entrepreneurial education matter for Indonesian students’ entrepreneurial preparation: The mediating role of entrepreneurial mindset and knowledge. *Cogent Education*, 7(1), 1836728. <https://doi.org/10.1080/2331186X.2020.1836728>

- Sen, A. (1993). Does business ethics make economic sense? *Business Ethics Quarterly*, 3(1), 53–66. <https://doi.org/10.2307/3857381>
- Setyaningrum, P. (2022). Daftar 5 Pulau Terbesar di Indonesia. *Daftar 5 Pulau Terbesar di Indonesia, Nomor Dua Tempat Ibu Kota Negara Didirikan Halaman all - Kompas.com*
- Shaari, N., Hasan, N., Mohamed, R., & Sabri, M. (2013). Financial literacy: A study among the university students. *Interdisciplinary Journal of Contemporary Research in Business*, 5(2), 279–290.
- Shafinar, I., Arnida, J., Nadiyah, M. A., Rozana, O., Naina, M. R., & Syazwani, K. N. (2015). Determinants of savings behaviour among Muslims in Malaysia: An empirical investigation. In *Islamic perspectives relating to business, arts, culture and communication: Proceedings of the 1st ICIBACC 2014* (pp. 275–283). Springer Singapore. [https://doi.org/10.1007/978-981-287-429-0\\_26](https://doi.org/10.1007/978-981-287-429-0_26)
- Solesvik, M. Z. (2013). Entrepreneurial motivations and intentions: Investigating the role of education major. *Education & Training*, 55(3), 253–271. <https://doi.org/10.1108/00400911311309314>
- Suparno, S., & Saptono, A. (2018). Entrepreneurship education and its influence on financial literacy and entrepreneurship skills in college. *Journal of Entrepreneurship Education*, 21(4), 13–20.
- Te'eni-Harari, T. (2016). Financial literacy among children: The role of involvement in saving money. *Young Consumers*, 17(2), 197–208. <https://doi.org/10.1108/YC-01-2016-00579>
- Trunk, A., & Dermol, V. (2015). EU integration through financial literacy and entrepreneurship. Managing intellectual capital and innovation for sustainable and inclusive society. *Proceedings of the Make Learn and TIIM Joint International Conference*, 2, 27–29.
- Upa, V. A., Santoso, W., & Soeindra, V. (2019, March). Financial literacy and entrepreneurship motivation among micro, small, and Medium enterprises from gender perspective. In *ICEMSS 2018: Proceedings of the 1st International Conference on Emerging Media, and Social Science, ICEMSS 2018*, 7–8 December 2018, Banyuwangi, Indonesia (p. 92). European Alliance for Innovation.
- Urbano, D., & Aparicio, S. (2015). Entrepreneurship capital types and economic growth: International evidence. *Technological Forecasting, and Social Change*, 102, 34–44. <https://doi.org/10.1016/j.techfore.2015.02.018>
- Utami, R. P., & Wahyuni, A. (2022, November). The effect of financial literacy and entrepreneurial motivation on entrepreneurial Interests. In *Proceeding of Annual International Conference on Islamic Economics (AICIE)* (Vol. 1, pp. 102–110). <https://doi.org/10.21154/aicie.v1i0.766>
- Valencia, A., Montoya, I., & Montoya, A. (2015). Influence of perceived behavioral control in entrepreneurial intentions of engineering students. *The Turkish Online Journal of Educational Technology*, 7(1), 341–347.
- Vodă, A. L., & Florea, N. (2019). Impact of personality traits and entrepreneurship education on entrepreneurial intentions of business and engineering students. *Sustainability, MDPI, Open Access Journal*, 11(4), 1–34. <https://doi.org/10.3390/su11041192>
- Xiao, J. J., Ahn, S. Y., Serido, J., & Shim, S. (2014). Earlier financial literacy and later financial behaviour of college students. *International Journal of Consumer Studies*, 38(6), 593–601. <https://doi.org/10.1111/ijcs.12122>
- Zarnadze, G., Dika, I., Çera, G., & Ribeiro, H. N. R. (2022). Personality traits and business environment for entrepreneurial motivation. *Administrative Sciences*, 12(4), 176. <https://doi.org/10.3390/admsci12040176>
- Zhao, J., & Li, T. (2021). Social capital, financial literacy, and rural household entrepreneurship: A mediating effect analysis. *Frontiers in Psychology*, 12, 724605. <https://doi.org/10.3389/fpsyg.2021.724605>