

GLOBAL JOURNAL

OF MANAGEMENT AND BUSINESS RESEARCH: B

Economics and Commerce



The Latest Census Data

Demographic Aspects of Illiteracy

Highlights

Illiteracy in Italian Regions

Effect of Entrepreneurial Orientation

Discovering Thoughts, Inventing Future

VOLUME 25 ISSUE 1 VERSION 1.0

© 2001-2025 by Global Journal of Management and Business Research, USA



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: B
ECONOMICS AND COMMERCE

GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: B
ECONOMICS AND COMMERCE

VOLUME 25 ISSUE 1 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

© Global Journal of
Management and Business
Research. 2025

All rights reserved.

This is a special issue published in version 1.0
of "Global Journal of Science Frontier
Research." By Global Journals Inc.

All articles are open access articles distributed
under "Global Journal of Science Frontier
Research"

Reading License, which permits restricted use.
Entire contents are copyright by of "Global
Journal of Science Frontier Research" unless
otherwise noted on specific articles.

No part of this publication may be reproduced
or transmitted in any form or by any means,
electronic or mechanical, including
photocopy, recording, or any information
storage and retrieval system, without written
permission.

The opinions and statements made in this
book are those of the authors concerned.
Ultraculture has not verified and neither
confirms nor denies any of the foregoing and
no warranty or fitness is implied.

Engage with the contents herein at your own
risk.

The use of this journal, and the terms and
conditions for our providing information, is
governed by our Disclaimer, Terms and
Conditions and Privacy Policy given on our
website [http://globaljournals.us/terms-and-condition/
menu-1463/](http://globaljournals.us/terms-and-condition/menu-1463/)

By referring / using / reading / any type of
association / referencing this journal, this
signifies and you acknowledge that you have
read them and that you accept and will be
bound by the terms thereof.

All information, journals, this journal,
activities undertaken, materials, services and
our website, terms and conditions, privacy
policy, and this journal is subject to change
anytime without any prior notice.

Incorporation No.: 0423089
License No.: 42125/022010/1186
Registration No.: 430374
Import-Export Code: 1109007027
Employer Identification Number (EIN):
USA Tax ID: 98-0673427

Global Journals Inc.

(A Delaware USA Incorporation with "Good Standing"; Reg. Number: 0423089)

Sponsors: Open Association of Research Society

Open Scientific Standards

Publisher's Headquarters office

Global Journals® Headquarters
945th Concord Streets,
Framingham Massachusetts Pin: 01701,
United States of America

USA Toll Free: +001-888-839-7392

USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Global Journals Incorporated
2nd, Lansdowne, Lansdowne Rd., Croydon-Surrey,
Pin: CR9 2ER, United Kingdom

Packaging & Continental Dispatching

Global Journals Pvt Ltd
E-3130 Sudama Nagar, Near Gopur Square,
Indore, M.P., Pin:452009, India

Find a correspondence nodal officer near you

To find nodal officer of your country, please
email us at local@globaljournals.org

eContacts

Press Inquiries: press@globaljournals.org
Investor Inquiries: investors@globaljournals.org
Technical Support: technology@globaljournals.org
Media & Releases: media@globaljournals.org

Pricing (Excluding Air Parcel Charges):

Yearly Subscription (Personal & Institutional)
250 USD (B/W) & 350 USD (Color)

EDITORIAL BOARD

GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH

Dr. John D. Theodore

American Military University
JDT Management Consultants, President.
D.B.A., Business Economy
University of South Africa
Ph.D. Aristotelian University
Business Administration
Ph.D. Administration, University of Kansas
USA

Dr. R. Allen Shoaf

B.A., M.A., Ph.D. Cornell University
Cornell University, Teaching Assistant in the English
Department,
University of Florida, US

Dr. Mehdi Taghian

Senior Lecturer
Faculty of Business and Law
BL Deakin Business School
Melbourne Burwood Campus
Australia

Dr. Agni Aliu

Ph.D. in Public Administration,
South East European University, Tetovo, RM
Asociater profesor South East European University,
Tetovo, Macedonia

Dr. Wing-Keung Won

Ph.D., University of Wisconsin-Madison,
Department of Finance and
Big Data Research Center
Asia University,
Taiwan

Prof. Moji Moatamedi

Honorary Vice Chair
Ph.D., at The University of Sheffield,
MBA, Manchester Business School
University of Manchester
UK

Professor Maura Sheehan

Professor, International Management
Director, International Centre
for Management & Governance Research (ICMGR)
Ph.D. in Economics
UK

Dr. Carl Freedman

B.A., M.A., Ph.D. in English, Yale University
Professor of English, Louisiana State University, US

Dr. Tsutomu Harada

Professor of Industrial Economics
Ph.D., Stanford University, Doctor of Business
Administration, Kobe University

Dr. Xiaohong He

Professor of International Business
University of Quinipiac
BS, Jilin Institute of Technology; MA, MS, Ph.D.,
(University of Texas-Dallas)

Dr. Carlos García Pont

Associate Professor of Marketing
IESE Business School, University of Navarra
Doctor of Philosophy (Management),
Massachusetts Institute of Technology (MIT)
Master in Business Administration, IESE, University of Navarra
Degree in Industrial Engineering,
Universitat Politècnica de Catalunya
Web: iese.edu/aplicaciones/faculty/facultyDetail.asp

Dr. Bassey Benjamin Esu

B.Sc. Marketing; MBA Marketing; Ph.D Marketing
Lecturer, Department of Marketing, University of Calabar
Tourism Consultant, Cross River State Tourism
Development Department
Co-ordinator, Sustainable Tourism Initiative, Calabar,
Nigeria

Dr. Ivona Vrdoljak Raguz

University of Dubrovnik,
Head, Department of Economics and Business
Economics,
Croatia

Dr. Charles A. Rarick

Ph.D.
Professor of International Business
College of Business
Purdue University Northwest
Hammond, Indiana US

Dr. Albrecht Classen

M.A. (Staatsexamen), Ph.D. University of Virginia,
German
Director, Summer Abroad Program, Medieval Europe
Travel Course

Dr. Söhnke M. Bartram

Department of Accounting and Finance
Lancaster University Management School
Ph.D. (WHU Koblenz)
MBA/BBA (University of Saarbrücken)
Web: lancs.ac.uk/staff/bartras1/

Dr. Dodi Irawanto

Ph.D., M.Com, B.Econ Hons.
Department of Management
Faculty of Economics and Business
Brawijaya University
Malang, Indonesia

Dr. Yongbing Jiao

Ph.D. of Marketing
School of Economics & Management
Ningbo University of Technology
Zhejiang Province, P. R. China

Yue-Jun Zhang

Business School,
Center for Resource and
Environmental Management
Hunan University, China

Dr. Brandon S. Shaw

B.A., M.S., Ph.D., Biokinetics, University of Johannesburg,
South Africa
Professor Department of Sport and Movement Studies
University of Johannesburg, South Africa

CONTENTS OF THE ISSUE

- i. Copyright Notice
 - ii. Editorial Board Members
 - iii. Chief Author and Dean
 - iv. Contents of the Issue
-
- 1. Demographic Aspects of Illiteracy in Italian Regions through the Latest Census Data. *1-10*
 - 2. The Effect of Entrepreneurial Orientation on Entrepreneurial Intention. *11-32*
 - 3. Analysis of the Financial and Economic Profitability of Rice Production in the Far North of Cameroon: The Case of SEMRY. *33-42*
 - 4. The Effect of SMEs on Social Development in Zimbabwe: A Case Study of Zimbabwe's Home Industries. *43-57*
-
- v. Fellows
 - vi. Auxiliary Memberships
 - vii. Preferred Author Guidelines
 - viii. Index



Demographic Aspects of Illiteracy in Italian Regions through the Latest Census Data

By Giuseppe De Bartolo

University of Calabria, Italy

Abstract- The level of education is becoming more and more important in order to explain the variations in the demographic phenomena. In fact, many studies have shown that women with a high level of education have fewer children; higher education is associated with lower mortality and better health. These evidences are already consolidated in the recent international literature and, according to many scholars, the variable education will be at the center of the social demography of the 21 st century. In this context the analysis of illiteracy would allow to grasp some critical issues related to the transformations taking place in society. We recall that in Italy the community of statisticians and demographers, apart a brief interlude in the fifties and sixties of the last century, gave little importance to the study of illiteracy, considering it a residual element of the social development of the country. Instead, pedagogues and linguists, because of their direct involvement, have shown that in Italy illiteracy and functional illiteracy are in various ways widely spread and cause social marginalization.

At national level these phenomena are widely investigated thanks also to international surveys involving Italian country, such as the International Adult Literacy Survey coordinated by Statistics Canada and those conducted by the OECD.

Keywords: *demography, illiteracy, Italian censuses.*

GJMBR-B Classification: *LCC Code: HB1543*



Strictly as per the compliance and regulations of:



Demographic Aspects of Illiteracy in Italian Regions through the Latest Census Data

Giuseppe De Bartolo

Abstract - The level of education is becoming more and more important in order to explain the variations in the demographic phenomena. In fact, many studies have shown that women with a high level of education have fewer children; higher education is associated with lower mortality and better health. These evidences are already consolidated in the recent international literature and, according to many scholars, the variable education will be at the center of the social demography of the 21 st century. In this context the analysis of illiteracy would allow to grasp some critical issues related to the transformations taking place in society. We recall that in Italy the community of statisticians and demographers, apart a brief interlude in the fifties and sixties of the last century, gave little importance to the study of illiteracy, considering it a residual element of the social development of the country. Instead, pedagogues and linguists, because of their direct involvement, have shown that in Italy illiteracy and functional illiteracy are in various ways widely spread and cause social marginalization.

At national level these phenomena are widely investigated thanks also to international surveys involving Italian country, such as the International Adult Literacy Survey coordinated by Statistics Canada and those conducted by the OECD. Going down to the Italian regional level, the immediately available data are those provided by the censuses which, however, have the limit of not explicitly bringing out these new forms of lack of adequate education, because only "illiterate being able to read or write. In the census, illiterate and unskilled literates are labeled as those with no educational" and "alphabets but without a qualification" are detected. In the analysis developed here these two categories have been grouped because in this way we believe we could estimate some important features of functional illiteracy at regional level, a phenomenon that is largely underestimated today.

Keywords: *demography, illiteracy, Italian censuses.*

I. INTRODUCTION

Education is becoming increasingly important as a crucial variable in explaining changes in demographic phenomena. Indeed, numerous research studies have shown, for example, that women with high educational attainment have fewer children, and higher education is often associated with lower mortality and better health (Samir and Lentzner 2010, pp. 201-236; James et al. 2012). This evidence is already well-established in the most recent international literature, and according to some authors, the education variable will be at the center of demography in the 21st century (Lutz 2010, pp. 9-16). This is due to the significant changes in today's world, but especially to

new ways of interpreting these changes. In this context, the analysis of illiteracy would allow us to capture some critical issues related precisely to the transformations taking place in our society. Limiting ourselves to the terminology in use in the Italian literature on illiteracy, we list its most important definitions below, recalling the difficulty of comparing the phenomenon from country to country and even over time due to the lack of uniform criteria by which the various surveys are carried out.

Literate is one who has no educational qualification but is at least able to read; literates without educational qualifications, defined as such by the population census, are those who reported being able to read and write, even though they did not have an elementary school leaving certificate; illiterate is one who has no educational qualification and can neither read nor write; instead illiterates surveyed by the population census, on the other hand, are those who reported not being able to read or write. In the census, illiterate and unskilled literates are labeled those with no educational qualification. Returning literates are the literate who, without the exercise of alphanumeric skills, regress by losing the ability to use written language to formulate and understand messages; a functional illiterate is defined as one who, although having developed the ability to read and write, is unable to fully comprehend the meaning of the passage read and unable to use writing in order to be understood by other possible readers (Schettini 2005; Vågvolgyi et al. 2016, pp. 1-13).

II. DEMOGRAPHICS AND ILLITERACY

In Italy, the community of statisticians and demographers, apart from a brief interlude in the 1950s-1960s, gave little importance to the study of illiteracy, considering it a residual element in the country's social development. It was not until the 1990s that interest in this topic returned through original research by Pezzulli and Lombardo on youth illiteracy in light of 1991 census data (Pezzulli and Lombardo 1995, pp. 15-28). Pedagogists and linguists, on the contrary, through their direct involvement, have pointed out that in Italy illiteracy, but especially return illiteracy and functional illiteracy, are in various ways widespread and of concern because they are a cause of social marginalization (De Mauro 1995).

At the national level, these phenomena are widely studied thanks also to international surveys that have seen and see our country involved. We recall in this regard the International Adult Literacy Survey (IALS),

Author: University of Calabria, Italy.
e-mail: giuseppe.debartolo@unical.it

a sample survey coordinated by Statistics Canada, conducted between 1994 and 1998, which was the first large-scale comparative survey supported by the OECD and designed to identify and measure a set of adult skills in order to assess the impact of education on the economy in the 20th century. The results of this survey represent an important asset for studying and evaluating adult skills in twenty two countries including Italy, which joined in 1998. It was followed in 2003 by the Adult Literacy and Life Skill Study and in 2012 by the Program for the International Assessment of Adult Competencies (PIAAC), which in our country is edited by the National Institute for Public Policy Analysis-INAPP. Recall again that the PIAAC survey measures the skills of adults aged 16-65 on *Literacy, Numeracy and Problem solving*.

The results of the first round of the PIAAC survey, which took place between 2011 and 2012 and in which 38 countries took part, show a gap between Italian participants and the OECD average in both *Literacy* and *Numeracy*; moreover, at the geographical level, the average scores recorded in the South and Islands are lower than the rest of the country (Invalsi Open 4/12/2020).

For a more detailed analysis regarding the so-called *low skilled*, who emerge from the data of the 2014 OECD-PIAAC survey country report with respect to socio-demographic characteristics and other variables for the 16-24 and 25-34 age groups, please refer to the study by Di Francesco et al. (2016, pp. 53-67). Here we highlight only a few features of this study, such as that the problem of the *low skilled* is a feature shared by all the countries that participated in the first round of the PIAAC survey; that in Italy citizens in the 16-65 age group with very low levels of *literacy* are just under 11million, the highest percentage among the participating countries. The *low skilled* tend to be concentrated in the older ages, although important percentages are found in the 16-24 age group (9.6 percent) and the 25-34 age group (15 percent). In addition, there is not an even distribution throughout the country of people with low skill levels as the South and Northwest have the highest percentages (60 percent). People with low levels of competence are in the vast majority low-schooled (75 percent), which confirms that educational qualification is one of the main "predictors" of the level of competence expressed by individuals. In any case, it is not insignificant that 20.9 percent of these people hold a diploma and 4.1 percent even hold a bachelor's degree.

The results of the association of age with educational qualification highlight an important feature: the *low-skilled* with an educational qualification equal to a high school diploma are predominantly in the 25-34 age group (28 percent) and in the 35-44 age group (26 percent). This finding confirms a trend of the existence in our country of a significant number of young adults

who are functionally illiterate despite possessing a college degree, which was already highlighted in the previously cited research by Pezzulli and Lombardo (1995, pp. 15-28) on census data from 1991.

III. LIFE EXPECTANCY BY GENDER AND LEVEL OF EDUCATION IN ITALY

The mortality table is the tool that allows a very accurate statistical analysis of human survival. Its invention played a fundamental role in the history of demography (J.et M. Dupâquier, 1985, Ch. 6). Until recently, mortality tables have been constructed exclusively by age, sex, and territory, whereas many studies conducted on inequality in morbidity and mortality indicate that there is strong heterogeneity in survival associated with socioeconomic factors such as education, income, employment status, and social class (Kuhn, Prskawetz and Sunde 2014).

From these evidences, observed in many European countries, arose by Istat the need to study also for Italy, with a special project, the inequalities on mortality linked to socio-economic factors, choosing the educational qualification as a symptomatic variable of this condition; variable that is also related to the social condition of the family of origin, lifestyles and opportunities for access to care. Subsequently, the survival analysis was extended by Istat to the regional level, thus making available for the first time in Italy regional mortality tables by level of education (high, medium, low) of the resident population at the 2011 Census classified by gender and also by birth cohort (Istat, 2018).

These new tables highlight the existence of significant territorial inequalities in survival at birth, estimated at 3.0 years for the male sex (between Bolzano and Campania) and 2.6 years for the female sex (again between Bolzano and Campania) with Calabria, Sicilia and Campania always occupying the last places in these rankings. The gap widens even more when education level is also taken into consideration. Considering the difference between high and low levels of education, there is even a 6.1 year difference for men and a 4 year difference for women, differences again recorded between the province of Bolzano and Campania. The latter region is also the most disadvantaged in life expectancy at birth for both less educated women and less educated men (82.9 and 77.5 years of life expectancy at birth, respectively) (Table 1).

Variation in inequality in life expectancy by educational attainment is a constant feature at the territorial level but with some differences that we point out here: Marche and Umbria have smaller differentials than other Italian regions for both sexes, while Emilia-Romagna and Calabria have lower differentials only among men (Table 1).

Table 1: Life Expectancy at Birth by Region, Gender and Educational Level of the Census Population in Italy in 2011
Period 2012-2014

| Regions/Provinces | Males | | | | Regions/Provinces | Females | | | |
|-------------------|-----------------|--------|------|------|-------------------|-----------------|--------|------|------|
| | Education level | | | | | Education level | | | |
| | Low | Medium | High | All | | Low | Medium | High | All |
| Bolzano | 80.4 | 82.3 | 83.6 | 81.7 | Bolzano | 85.5 | 86.6 | 86.9 | 86.0 |
| Trento | 80.0 | 81.5 | 83.0 | 81.1 | Trento | 85.4 | 86.8 | 86.4 | 85.9 |
| Marche | 80.5 | 81.2 | 82.3 | 81.1 | Umbria | 85,5 | 85,5 | 86,0 | 85,6 |
| Toscana | 79,9 | 81,6 | 82,8 | 81,0 | Marche | 85.5 | 85.5 | 86.2 | 85.6 |
| Umbria | 80.0 | 81.6 | 82.1 | 81.0 | Lombardia | 84.9 | 85.8 | 86.5 | 85.4 |
| Emilia-Romagna | 80.0 | 81.4 | 82.5 | 80.9 | Veneto | 85.1 | 85.8 | 86.4 | 85.4 |
| Lombardia | 79.5 | 81.3 | 82.9 | 80.8 | Toscana | 85.0 | 85.6 | 86.3 | 85.4 |
| Veneto | 79.4 | 81.3 | 82.7 | 80.6 | Molise | 84.8 | 85.6 | 86.7 | 85.3 |
| Puglia | 79.8 | 81.3 | 82.5 | 80.6 | Sardegna | 85.0 | 85.8 | 86.3 | 85.3 |
| Molise | 79.3 | 81.0 | 83.2 | 80.5 | Emilia-Romagna | 84.8 | 85.2 | 86.0 | 85.2 |
| Abruzzo | 79.4 | 80.7 | 82.2 | 80.4 | Basilicata | 84.7 | 85.7 | 86.7 | 85.0 |
| Piemonte | 79.1 | 80.8 | 82.3 | 80.3 | Liguria | 84.2 | 85.1 | 86.3 | 84.9 |
| Liguria | 78.8 | 80.7 | 82.2 | 80.3 | Friuli-Venezia G. | 84.5 | 84.9 | 86.0 | 84.9 |
| Italia | 79.2 | 80.9 | 82.3 | 80.3 | Lazio | 84.2 | 85.1 | 86.0 | 84.9 |
| Valle d'Aosta | 79.1 | 80.4 | 82.8 | 80.1 | Puglia | 84.5 | 85.5 | 86.2 | 84.9 |
| Friuli-Venezia G. | 78.7 | 80.3 | 82.2 | 80.1 | Italia | 84.5 | 85.3 | 86.0 | 84.9 |
| Basilicata | 79.3 | 80.4 | 82.2 | 80.1 | Piemonte | 84.4 | 85.1 | 85.8 | 84.8 |
| Sardegna | 78.8 | 80.9 | 82.3 | 80.0 | Valle d' Aosta | 84.3 | 85.4 | 85.7 | 84.8 |
| Calabria | 78.8 | 80.5 | 81.4 | 79.8 | Calabria | 84.2 | 85.3 | 85.5 | 84.6 |
| Sicilia | 78.6 | 80.2 | 81.5 | 79.5 | Sicilia | 83.3 | 84.5 | 85.3 | 83.8 |
| Campania | 77.5 | 79.4 | 81.0 | 78.7 | Campania | 82.9 | 84.0 | 85.1 | 83.4 |

Source: Istat, *Tavole regionali di mortalità per genere e livello d'istruzione, 2018*

IV. ILLITERACY AND CENSUSES

In early population censuses, partly because of the low rate of schooling, little space was devoted to educational system. From 1861 to 1931 the only information that was collected referred to the ability to read and/or write. At the 1936 census, data on education was not collected. In 1951, for the first time, it is asked to specify in a free-text field the highest educational qualification attained. Beginning in 1971, the question is restructured, providing for some precoded modes (literacy, elementary and middle school graduation) but leaving open the question on the description of upper secondary and college degrees. In the 1981 and 1991 censuses this survey mode remains roughly unchanged. In the 2001 census, the "Education and Training" section of the questionnaire was entirely redesigned in terms of content to adapt it to changes in the education system and the no longer insignificant presence of foreign nationals. In subsequent censuses, the survey strategy has remained very similar to that of 2001.

The definition of illiterates has also varied over time. In the censuses from 1861 to 1881 and 1901 to 1931, those who could not read are considered illiterate, and from 1951 to 2001, both those who can neither read nor write and those who can either only read or only write are considered illiterate. In 2011 and subsequent censuses, those who stated that they had no educational qualification and could not read or write are detected as illiterate. With the start of the permanent censuses, the minimum age of detection is also increased from 6 to 9 years. The changes in the methods of surveying educational attainment, which we described earlier, lead us to look with some caution, however, at the long-term statistics of illiteracy captured through this survey instrument, even though there has been a picture of actual contraction of the phenomenon since Unity (Table 2).

Table 2: Illiterates detected at censuses from 1861 to 2022. Absolute values and percentages

| Censuses | Illiterates | % | Censuses | Illiterates | % |
|----------|-------------|------|----------|-------------|-----|
| 1861 | 16,999,701 | 78.0 | 1971 | 2,547,217 | 5.2 |
| 1871 | 19,553,792 | 73.0 | 1981 | 1,608,212 | 3.1 |
| 1881 | 19,141,157 | 67.3 | 1991 | 1,145,612 | 2.1 |
| 1901 | 18,186,353 | 56.0 | 2001 | 782,342 | 1.5 |
| 1911 | 16,107,173 | 46.7 | 2011 | 593,523 | 1.1 |
| 1921 | 13,888,556 | 35.8 | 2018 | 346,616 | 0.6 |
| 1931 | 7,458,909 | 21.0 | 2020 | 306,923 | 0.6 |
| 1951 | 5,456,005 | 12.9 | 2022 | 260,247 | 0.5 |
| 1961 | 3,796,834 | 8.3 | | | |

Sources: G. Genovesi, *Storia della scuola in Italia dal Settecento ad oggi*, Laterza, 2010; Istat, *L'Italia in 150 anni. Sommario di statistiche storiche 1861-2010, year 2011; censuses 2018, 2020 and 2022*

V. FUNCTIONAL ILLITERACY AT THE REGIONAL LEVEL. EVIDENCE FROM THE 2011, 2018 AND 2020 CENSUS DATA

As illustrated above, at the national level illiteracy, but especially return illiteracy and functional illiteracy, are widely studied thanks also to international surveys involving our country. Going down instead to the regional level, the results immediately available are census results, which, however, have the limitation of not explicitly bringing out these new forms of lack of adequate education since only illiterate people and those who are literate but lack a qualification are surveyed. In the analysis that follows, these two categories have been grouped by us because we believe that we are thus approaching the concept of functional illiteracy, a phenomenon that is largely underestimated today¹.

Since Unification, the great advances in schooling and in Italian society as a whole have resulted in a significant reduction in overall and gender illiteracy. The educational institution participated on two levels in the building of the state structure, both by combating illiteracy and by making people acquire a series of values essential for the construction of a national identity such as fatherland, flag, family, authority, etc. This work of the school continued in the Fascist period, obviously with a strong ideological conditioning, and after World War II in the climate of new found democratic coexistence, changing, under the pressure of the social and technological changes that were gradually taking place, its original function from a school of education and instruction to a school of training (Trebisacce 2012, pp. 219-231). This evolution has caused the level of illiteracy in our country from the value of 78 percent in 1861 to gradually decrease to the value of 0.5 percent in 2022 (Table 2).

Despite this exceptional progress, the persistence of the education deficit that is also captured through the tool of recent censuses represents an element of backwardness for Italy that is not easily removed: 2,138,024 functional illiterates in 2022 (3.9 percent) (Table 3).

¹ We remind that functional illiteracy are those who can read and write, but have difficulty understanding simple texts and lack many skills useful in daily life.

Table 3: Illiterates, Unskilled Literates, and Functional Literates at the 2011, 2018, 2020 and 2022 Censuses. Percentages of Resident Population Aged 9 Years and Older²

| | Absolute values | | | | % | | | |
|--|-----------------|-----------|-----------|-----------|------|------|------|------|
| Censuses | 2011 | 2018 | 2020 | 2022 | 2011 | 2018 | 2020 | 2022 |
| Illiterates | 591,22 | 346,616 | 306,923 | 260,247 | 1.10 | 0.60 | 0.60 | 0.50 |
| Alphabets without educational qualifications | 2,812,433 | 2,265,127 | 2,074,583 | 1,877,777 | 5.20 | 4.10 | 3.80 | 3.40 |
| Functional illiterates | 3,403,653 | 2,611,743 | 2,381,506 | 2.138.024 | 6.30 | 4,7 | 4.30 | 3.90 |

Source: Istat Censuses 2018, 2020 and 2022 and estimated values from 2011 census

These data being aggregated, however, hide in first place the Calabria region (illiteracy rate 1.5 the considerable territorial variability that sees the percent and functional illiteracy 5.7 percent) (Table 4). southern regions the most penalized and among them

Table 4: Functional Illiterates and Illiterates in Italian Regions Year 2022. Percentage Values of the Resident Population Aged 9 years and Older.

| Regions | Illiterates | % | Functional Illiterates | % |
|---------------------|-------------|------|------------------------|------|
| Piemonte | 14,830 | 0.37 | 136,100 | 3.42 |
| Valle d'Aosta | 609 | 0.53 | 3,851 | 3.34 |
| Liguria | 3,855 | 0.27 | 41,164 | 2.90 |
| Lombardia | 34,226 | 0.37 | 315,342 | 3.40 |
| Trentino Alto Adige | 2,415 | 0.24 | 30,478 | 3.08 |
| Veneto | 12,870 | 0.28 | 148,909 | 3.29 |
| Friuli- Venezia G. | 2,304 | 0,21 | 30,083 | 2.68 |
| Emilia-Romagna | 14,793 | 0.36 | 154,024 | 3.72 |
| Toscana | 14,514 | 0.42 | 124,889 | 3.64 |
| Umbria | 2,991 | 0.37 | 30,821 | 3.84 |
| Marche | 3,998 | 0.29 | 56,163 | 4.04 |
| Lazio | 17,366 | 0.33 | 187,960 | 3.53 |
| Abruzzo | 4,612 | 0.39 | 47,859 | 4.02 |
| Molise | 1,391 | 0.51 | 11,459 | 4.19 |
| Campania | 33,335 | 0.64 | 225,096 | 4.35 |
| Puglia | 27,454 | 0.75 | 188,059 | 5.16 |
| Basilicata | 5,022 | 1.00 | 27,204 | 5.40 |
| Calabria | 21,324 | 1.25 | 97,063 | 5.67 |
| Sicilia | 35.164 | 0,79 | 217.637 | 4.89 |
| Sardegna | 7,174 | 0.48 | 63,863 | 4.28 |
| Italia | 260,247 | 0.47 | 2,138,024 | 3.89 |

Source: elaborations on 2022 census data

² In calculating the indices the age groups resulting from the 2011 census were corrected to make them uniform with those from subsequent censuses.

VI. FUNCTIONAL ILLITERACY BY REGIONS AND AGE GROUPS AT THE 2020 CENSUS

Istat's dissemination of census data by level of education and age makes it possible to make more in-depth comparisons through the calculation of specific ratios that, compared with generic ratios of level of education, are not affected by the interference of the demographic structure³. Because of these characteristics, the specific quotients can be compared both with the corresponding values of another

population and with those of the same population over time, especially if they are summarized in some way, for example, by calculating an average value.⁴ index that could thus be accepted as a value of *educational inefficiency* of the area under consideration. Following this methodology, Table 5 shows the absolute values of functional illiterates by age groups resulting from the 2022 census, and Table 6 the specific quotients derived from them.

Table 5: Functional Illiterates by Age Group in Italian Regions. Year 2022. Absolute Values

| Regions | 9-24 years old | 25-49 years old | 50- 64 years old | 65 years old and + | 9 years old and + |
|---------------------|----------------|-----------------|------------------|--------------------|-------------------|
| Piemonte | 73,730 | 12,413 | 9,401 | 40,556 | 136,100 |
| Valle d'Aosta | 2,257 | 335 | 372 | 887 | 3,851 |
| Liguria | 23,380 | 4,204 | 2,998 | 10,582 | 41,164 |
| Lombardia | 188,416 | 37,133 | 25,889 | 63,904 | 315,342 |
| Trentino Alto Adige | 22,632 | 2,506 | 2,070 | 3,270 | 30,478 |
| Veneto | 87,552 | 14,651 | 11,573 | 35,133 | 148,909 |
| Friuli - Venezia G. | 20,013 | 2,484 | 1,54 | 6,046 | 30,083 |
| Emilia-Romagna | 80,368 | 14,684 | 13,462 | 45,51 | 154,024 |
| Toscana | 63,132 | 14,349 | 10,38 | 37,028 | 124,889 |
| Umbria | 14,757 | 1,828 | 1,612 | 12,624 | 30,821 |
| Marche | 25,936 | 4,744 | 3,163 | 22,32 | 56,163 |
| Lazio | 106,314 | 18,156 | 11,016 | 52,474 | 187,96 |
| Abruzzo | 21,789 | 3,094 | 2,386 | 20,590 | 47,859 |
| Molise | 4,292 | 646 | 519 | 6,002 | 11,459 |
| Campania | 99,783 | 21,31 | 19,061 | 84,942 | 225,096 |
| Puglia | 66,832 | 11,684 | 12,435 | 97,108 | 188,059 |
| Basilicata | 8,238 | 1,546 | 1,198 | 16,222 | 27,204 |
| Calabria | 31,666 | 8,023 | 7,529 | 49,845 | 97,063 |
| Sicilia | 84,500 | 13,649 | 20,549 | 98,939 | 217,637 |
| Sardegna | 23,987 | 2,701 | 3,620 | 33,555 | 63,863 |
| Italia | 1,049,574 | 190,14 | 160,773 | 737,537 | 2,138,024 |

Source: elaborations on 2022 census data

More specifically, an examination of Table 5 shows that functional illiteracy is most concentrated both in the older classes 34.5 percent (737,537 functional illiterates aged 65 and older, out of total functional illiterates of 2,138,024) and in the younger classes ((9-24 years of age) whose weight is even higher (1,049,574 out of 2,138,024). The latter values represent a further confirmation of the persistent inefficiency of our education system.

³ Such as, for example, the illiteracy index, which is obtained by dividing the number of illiterates to the population aged 9 and older.

⁴ It is actually the application of the concept of direct standardization (Wunsch and Termote, (1978), p. 53-60; an exemplification of the various standardization methods can be found in De Bartolo (1997, Ch. IV) .

Table 6: Specific Rates of Functional Illiteracy by Age Group in Italian Regions. Year 2022 Values %

| Regions | 9-24 years old | 25-49 years old | 50-64 years old | 65 years old and + | 9 years old and + |
|---------------------|----------------|-----------------|-----------------|--------------------|-------------------|
| Piemonte | 11.9 | 1.0 | 0.9 | 3.6 | 3.4 |
| Valle d'Aosta | 11.8 | 1.0 | 1.2 | 2.9 | 3.3 |
| Liguria | 11.4 | 1.0 | 0.8 | 2.4 | 2.9 |
| Lombardia | 12.1 | 1.2 | 1.1 | 2.7 | 3.4 |
| Trentino Alto Adige | 12.4 | 0.8 | 0.8 | 1.44 | 3.1 |
| Veneto | 11.7 | 1.0 | 1.0 | 3.0 | 3.3 |
| Friuli-Venezia G. | 11.7 | 0.7 | 0.5 | 1.9 | 2.7 |
| Emilia-Romagna | 12.1 | 1.1 | 1.3 | 4.2 | 3.7 |
| Toscana | 11.9 | 1.3 | 1.2 | 3.9 | 3.6 |
| Umbria | 11.8 | 0.7 | 0.8 | 5.5 | 3.8 |
| Marche | 11.7 | 1.1 | 0.9 | 5.8 | 4.0 |
| Lazio | 12.2 | 1.0 | 0.8 | 4.0 | 3.5 |
| Abruzzo | 11.7 | 0.8 | 0.8 | 6.4 | 4.0 |
| Molise | 10.4 | 0.7 | 0.8 | 7.8 | 4.2 |
| Campania | 10.2 | 1.2 | 1.5 | 7.4 | 4.3 |
| Puglia | 10.7 | 1.0 | 1.4 | 10.4 | 5.2 |
| Basilicata | 10.2 | 1.0 | 0.9 | 12.1 | 5.4 |
| Calabria | 10.8 | 1.4 | 1.8 | 11.5 | 5.7 |
| Sicilia | 10.7 | 0.9 | 1.9 | 9.0 | 4.9 |
| Sardegna | 11.2 | 0.6 | 0.9 | 8.1 | 4.3 |
| Italia | 11.5 | 1.1 | 1.2 | 5.2 | 3.9 |

Source: elaborations on census data 2022

In order to complete the picture of the analysis, we have reported in Table 7 the regional summary indices of *school inefficiency* as of 2022 compared with similar indices calculated at the 2001 census. The comparison shows the remarkable recovery of the southern regions (Calabria, Basilicata, Puglia, Sicilia, Campania and Sardegna) even though values of school inefficiency still persist in these territories far above the Italian average.

We recall that the synthetic indices of educational inefficiency for each Italian region were estimated by us by making the arithmetic mean of the specific quotients calculated in each age class (9-24 years; 25-49 years; 50-64 years; 65 years and over), that is, by relating the number of functional illiterates in each age class to the resident population belonging to the same class. Some corrections had to be made to the population structure by educational attainment of the 2001 census, which had as its initial age 6 years, to make it congruent with that of the 2022 census, which instead has as its initial age 9 years.



Table 7: Regional Rankings of School Inefficiency. Years 2001, 2022. Values %

| Regions | 2001 Census | 2022 Census | Differences |
|----------------------|-------------|-------------|-------------|
| Piemonte | 6.0 | 4.4 | -1.6 |
| Valle d'Aosta | 5.0 | 4.2 | -0.8 |
| Liguria | 5.3 | 3.9 | -1.4 |
| Lombardia | 5.3 | 4.3 | -1.0 |
| Trentino- Alto Adige | 3.7 | 3.8 | 0.1 |
| Veneto | 6.7 | 4.2 | -2.5 |
| Friuli - Venezia G. | 5.1 | 3.7 | -1.4 |
| Emilia-Romagna | 7.6 | 4.7 | -2.9 |
| Toscana | 7.3 | 4.6 | -2.7 |
| Umbria | 9.3 | 4.7 | -4.6 |
| Marche | 9.3 | 4.9 | -4.4 |
| Lazio | 7.5 | 4.5 | -3.0 |
| Abruzzo | 11.2 | 4.9 | -6.3 |
| Molise | 13.3 | 4.9 | -8.4 |
| Campania | 13.1 | 5.1 | -8.0 |
| Puglia | 18.1 | 5.9 | -12.2 |
| Basilicata | 16.4 | 6.0 | -10.4 |
| Calabria | 16.4 | 6.4 | -10.0 |
| Sicilia | 22.0 | 5.6 | -16.4 |
| Sardegna | 15.3 | 5.2 | -10.1 |

Source: elaborations on 2001 and 2022 census data.

VII. CONCLUDING REMARKS

Relevant and robust international studies have highlighted the importance of education in explaining changes in many socio-demographic variables, so much so that many now believe that education will be at the center of social demography in the 21st century. In this framework, the analysis of illiteracy would allow us to capture some critical issues related precisely to the transformations taking place in society. In Italy, the community of statisticians and demographers, apart a brief interlude in the 1960s, have always given little importance to the study of illiteracy, considering it a residual element in the development of our country. Pedagogues and linguists, on the other hand, through their direct involvement, have made it clear that in Italy illiteracy *tout court* and functional illiteracy are in various ways widespread and of concern because they are a cause of social marginalization.

Starting on the previous considerations-after a brief *excursus* of the main international surveys in which our country has participated, surveys aimed at identifying and measuring a set of adult skills - our analysis focused on illiteracy and functional illiteracy, the latter estimated through data from the latest population censuses and in particular that of 2022. While we are

aware that the estimation of illiteracy through census data has critical issues related to the way in which the phenomenon is surveyed, a way that has changed over time not marginally, the study focused more specifically on the regional level analysis of the relationship between life expectancy, gender and level of education, using the 2018 Istat regional tables by gender and level of education. This analysis highlighted how spatial differences in survival are amplified when spatial data and education level are taken into account. In addition, it showed that functional illiteracy is more concentrated in southern regions, in the youth (9-24) and older (65+) classes. Furthermore, it was found that the youth classes weigh as much as 46.2 percent of the total functional illiterates and the older classes (50-64) 38.4 percent. These latter features of the phenomenon, which were partially grasped as early as the 1991 census statistics, are indicative of a persistent deficit in our education system that can now be monitored in a timely manner through the annual data provided by the permanent censuses, also using a symptomatic indicator of school inefficiency proposed in this research.

BIBLIOGRAPHY

1. De Bartolo G., Elementi di analisi demografica e demografia applicata, Centro Editoriale e Librario, Università della Calabria, 1997.
2. De Mauro T., *Idee per il Governo. La scuola*, Bari, Laterza, 1995.
3. Di Francesco G., Amendola M., Mineo S., *The low skilled in Italy. Evidenza dall'indagine sulle competenze degli adulti*, Osservatorio Isfol, n. 1-2, 2016, pp. 53-67.
4. Dupâquier J. et M., *Histoire de la Démographie*, Perrin, Paris, 1985.
5. Genovesi G., *Storia della scuola in Italia dal Settecento ad oggi*, Laterza, 2010.
6. Invalsi Open 4/12/2020: <https://www.invalsiopen.it/competenze-adulti-indagine-ocse-piaac/>.
7. Istat, *L'Italia in 150 anni. Sommario di statistiche storiche 1861-2010*, anno 2011.
8. Istat, *Diseguaglianze nella speranza di vita per livello d'istruzione*, aprile 2016.
9. Istat, *Diseguaglianze nella speranza di vita per livello d'istruzione*, giugno 2017.
10. Istat, *Diseguaglianze regionali nella speranza di vita per livello d'istruzione*, aprile 2018.
11. Istat, *Tavole regionali di mortalità per genere e livello d'istruzione*, 2018.
12. James K.S., Skirbekk V., Van Bavel J., *Education and the Global Fertility Transition*, Vienna Yearbook of Population Research 2012, (Vol. 10).
13. Kuhn M., Prskawetz A. and Sunde U. (Guest Editors), Health, education and retirement over the prolonged life cycle, Vienna Yearbook of Population Research 2014, (Vol. 12).
14. Lutz W., *Education will be at the heart of 21st century demography*, Vienna Yearbook of Population Research 2010, (Vol. 8), pp. 9-16.
15. Pezzulli S., Lombardo, E., L'analfabetismo giovanile alla luce dell'ultimo censimento della popolazione. Un indicatore globale dell'efficienza scolastica?, CADMO, n. 9, Dicembre 1995, pp. 15-28.
16. Samir K.C, Lentzner H., *The effect of education on adult mortality and disability: a global perspective*, Vienna Yearbook of Population Research 2010, (Vol. 8), pp. 201-236.
17. Schettini B., Tanti analfabetismi anche oggi, INDIRE, 19 luglio 2005.
18. Trebisacce G., *Scuola e Mezzogiorno in 150 anni di storia unitaria*, in F. Cambi and G. Trebisacce (a cura di), I 150 anni dell'Italia unita. Per un bilancio pedagogico, ETS, Pisa, 2012, pp. 219-231.
19. Vågölgyi R., Coldea, A., Dresler Th., Schrader J., Nuerk, H. C., *A Review about Functional Illiteracy: Definition, Cognitive, Linguistic, and Numerical Aspects*, Frontiers in Psychology, Vol. 7, Nov. 2016, pp. 113.
20. Wunsch G. J and Termote M. G., *Introduction to Demographic Analysis*, Plenum Press, 1978, pp. 53-60.





This page is intentionally left blank



The Effect of Entrepreneurial Orientation on Entrepreneurial Intention

By Mohamed Abo Zaid, Dr. Shymaa Farid, Mohamed A. Ragheb
& Prof. Dr. Alaa El-Gharbawy

Alexandria University

Abstract- Objective: This study aims to investigate the influence of entrepreneurial orientation (innovativeness, pro-activeness, and risk-taking) on entrepreneurial intention through the mediating variables of family business involvement, personal attitudes, social norms, and perceived behavioral control.

Design/methodology/approach: Primary data were collected using questionnaires. This study analyzed 445 valid responses from Egyptian enterprises. The hypotheses were analyzed through correlation and structural equation modeling.

Findings: The results of the analysis fully support the relationship between entrepreneurial orientation and personal attitude, family business involvement and entrepreneurial intention, personal attitude and entrepreneurial intention, and social norms and entrepreneurial intention. In addition, the results partially support the relationship between entrepreneurial orientation, family business involvement, social norms, perceived behavioral control, and between entrepreneurial orientation and intention.

Keywords: *entrepreneurial orientation, entrepreneurial intention, family business involvement, personal attitude, social norm, perceived behavioral control.*

GJMBR-B Classification: LCC Code: HB615



Strictly as per the compliance and regulations of:



The Effect of Entrepreneurial Orientation on Entrepreneurial Intention

Mohamed Abo Zaid ^α, Dr. Shymaa Farid ^σ, Mohamed A. Ragheb ^ρ & Prof. Dr. Alaa El-Gharbawy ^ω

Abstract- Objective: This study aims to investigate the influence of entrepreneurial orientation (innovativeness, proactiveness, and risk-taking) on entrepreneurial intention through the mediating variables of family business involvement, personal attitudes, social norms, and perceived behavioral control.

Design/methodology/approach: Primary data were collected using questionnaires. This study analyzed 445 valid responses from Egyptian enterprises. The hypotheses were analyzed through correlation and structural equation modeling.

Findings: The results of the analysis fully support the relationship between entrepreneurial orientation and personal attitude, family business involvement and entrepreneurial intention, personal attitude and entrepreneurial intention, and social norms and entrepreneurial intention. In addition, the results partially support the relationship between entrepreneurial orientation, family business involvement, social norms, perceived behavioral control, and between entrepreneurial orientation and intention. However, the analysis did not support the relationship between perceived behavioral control and entrepreneurial intention. Regarding the mediating roles, family business involvement, personal attitude, and social norms were proved to have a partially mediating role between entrepreneurial orientation and entrepreneurial intention, while the mediating role of perceived behavioral control is not proven.

Implications: The findings suggest that fostering these traits can significantly boost entrepreneurial intentions. Policymakers and educators should focus on promoting these qualities to strengthen the entrepreneurial ecosystem.

Funding Statement: The study was supported by a grant from the Arab Academy for Science, Technology, and Maritime Transport (AASTMT), Alexandria branch of the Foundation of Basic Research. This work was carried out under the research program Graduate School of Business of the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) in Egypt.

Ethical Compliance: All procedures performed in studies involving human participants followed the ethical standards of the institutional and national research committee and with the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) and its later amendments or comparable ethical standards.

Plain Language Summary: This paper used proofreading techniques to ensure clarity of the text, which in turn provided clarity regarding the topic of the paper. Grammarly was also

used to refine grammar, spelling, and style, enhancing the overall quality of writing.

Keywords: *entrepreneurial orientation, entrepreneurial intention, family business involvement, personal attitude, social norm, perceived behavioral control.*

1. INTRODUCTION

Entrepreneurship is expected to play a significant role in propelling economic growth in an unsteady industrial world. Entrepreneurship fosters knowledge sharing, the creation of new jobs, the provision of a wide range of innovative goods and services, and a rise in market competition (Selim, 2021). Therefore, investing in the education, coaching, and training of aspiring entrepreneurs is essential for fostering sustainable community development, job creation, and economic progress (Galvão et al., 2020). Similarly, young people are always interested in entrepreneurship as a professional path, but they still want education and practical skills to assist them in preparing for any obstacle (Efrata et al., 2021).

Advancements in technology, operations, and regulations impact corporate growth and competitiveness (Kubitskyi et al., 2024). Entrepreneurial Orientation, in particular, continues to find family-owned enterprises desirable, despite these shifts both domestically and internationally (Upadhyay et al., 2023). The impact of family company engagement on entrepreneurial inclinations has been the subject of several studies, as it is referred to as the nursery for future entrepreneurs (Wang et al., 2018). Arzubagi et al. (2018) confirmed that the link between entrepreneurial orientation (EO) and performance is stronger in firms with lower levels of family involvement and higher levels of gender diversity by collecting data from 230 family firms in Spain using a questionnaire. Glowka et al. (2021) proved that CEO tenure and family involvement in Austrian Small and Medium Family Enterprises significantly mediate the relationship between risk management and performance. Similarly, Kalali (2022) found that long-term orientation positively influenced innovativeness and proactiveness, but negatively affected risk-taking, suggesting that a long-term perspective benefits EO in family businesses from a stewardship standpoint in Iran's science and technology parks. However, Dos Santos et al. (2022) proved EO's impact on family involvement through a literature review.

Author ^σ: e-mail: S.farid@dau.edu.sa

Author ^ρ: Dean of Cardiff Programs, AAST.
e-mail: raghebbmm@aast.edu

Author ^ω: Professor of Marketing, Alexandria University.

Moreno-Menéndez et al. (2022) examined whether family enterprises' EO remains unaltered, strengthens, or diminishes following a crisis. Based on an evaluation of a database of 151 family businesses gathered between 2004 and 2017, the findings show that compared to enterprises with higher pre-crisis EO levels, those with lower levels had greater growth post-crisis. In contrast to the latter group, the former could sustain pre-crisis levels, even after the crisis. Similarly, Jovic et al. (2023) discovered support for the mediated model, with the underlying characteristics of families varying in their effect on EO, which in turn influences a range of innovative outcomes, using a worldwide sample of family enterprises. Moreover, Keen et al. (2024) proved that family businesses with greater levels of entrepreneurship are more likely to recognize and seize international business prospects. The moderating influence of family social suggests that this relational family-specific asset promotes organizational performance and stability. In a similar context, Sultan et al. (2024) show that the performance of Palestinian family owned enterprises in 2022 is significantly improved by risk-taking, inventiveness, and pro activeness.

Other important factors that could affect entrepreneurial intention are personal attitude, social norms, and perceived behavioral control (Dinc and Budic, 2016). Several previous literature discussed the relationship between these variables in different contexts. Ekpe and Mat (2012) collected the primary data by surveying female students in the final year of three University Business Schools in Nigeria. The results indicate a significant positive relationship between EO and social norms, besides, the significance of social norms as moderators in this relationship. Conversely, Awang et al. (2016) proved that proactive personality and risk-taking have a significant impact on PBC and social norms among students at a public university in Malaysia. The results also showed that PBC and social norms can be used as moderators in the relationship between EO and EI. The survey conducted by Munir et al. (2019), to collect data from seven universities in China and nine universities in Pakistan, showed that the effect of TPB was positive in both countries. The results also showed a stronger influence of personality traits (risk-taking propensity, proactive personality, and internal locus of control) among Chinese students when personality traits were used as antecedents of TPB. Finally, the results proved that personality traits significantly impact entrepreneurial behavior.

Zollo et al. (2021) indicated that Entrepreneurial passion is a substantial predictor of EO, which has a considerable effect on strategic entrepreneurship behavior. Furthermore, entrepreneurs' linear thinking style moderates the association between EO and strategic entrepreneurship behavior, but not the link between passion and EO. However, a nonlinear thinking style positively moderates the association between

passion and EO, but not between EO and strategic entrepreneurship activity. Similarly, Hwang et al. (2021) highlighted the significant positive effect of innovativeness on personal attitudes within the context of 321 food delivery service companies in Korea. By conducting a quantitative method, with questionnaires distributed to five universities in Indonesia, Bagis (2022) proved that a spiritual workplace might counter-productively regulate students' intentions to develop EO. Subjective standards appear to have the most significant impact on students' intentions. Furthermore, Perez et al. (2024) demonstrated that innovativeness, proactivity, and risk-taking were fostered by entrepreneurship education programs among 1,423 undergraduate students from Ecuador and Colombia.

Regarding the relationship between Family Involvement and Entrepreneurial Intentions, Wang et al. (2018) gathered secondary data from business family offspring businesses in China in 2010. The findings supported that perceived parental entrepreneurial rewards are positively related to EI, and this relationship is partially mediated by entrepreneurial self-efficacy and family business involvement weakens the positive impact of perceived parental entrepreneurial rewards on entrepreneurial intentions but strengthens the effect of entrepreneurial self-efficacy. On the contrary, Zaman et al. (2020) claim that family business involvement did not have a direct effect on EI by surveying 367 university students in Pakistan. Still, it had an indirect effect through the full mediating role of institutional forces between them.

Using the idea of planned behavior, Onjewu et al. (2022) analyzed several variables of family exposure on entrepreneurial implementation intention in Nigeria. Data were collected from five public Nigerian universities. The findings indicate that entrepreneurial exposure in the form of parents, family members, and job engagement has different and significant effects on implementation intention, to the degree that entrepreneurial self-efficacy, attitudes, and subjective norms are differentially influenced. Similarly, Xu et al. (2023) collected data from 202 business oriented students at a prominent institution in eastern China. Affective family-work enrichment is favorably associated with EI through the mediating influence of ESE. Individuals with lower degrees of work-home segmentation preferences have a substantially stronger link. Similarly, Chaudhuri et al. (2023) found that gender moderated the association between government assistance, technology use, and EI in family businesses by incorporating both the resource-based perspective and the dynamic capability view theory, as well as the literature on family business entrepreneurship.

Over the last decade, female entrepreneurship played an important role in economic growth. In this regard, Dinc and Budic (2016) showed a positive impact of perceived behavioral control and personal attitude on

EI of women in the Federation of Bosnia and Herzegovina by distributing a questionnaire to two large cities in Bosnia. By collecting the primary data using a questionnaire of participants from the region of Catalonia in northeastern Spain, Miralles et al. (2017) showed a positive relationship between entrepreneurial behavior and EI, but only when the individual's age was considered. Saeed et al. (2019) showed that both PBC and social norms had a statistically significant relationship with EI among undergraduate students in Yemen, however, Personal attitude had no significant relationship with entrepreneurial intention. Additionally, EI has a strong positive correlation with PA, PBC, and social norms. Similarly, Al-Jubari et al. (2019) investigated the relationship between entrepreneurial behavior (PA, social norms, and PBC) and EI by gathering primary data from 600 students from four public Malaysian universities. The findings show a significant relationship between entrepreneurial behavior and entrepreneurial intention. The findings also show that both TPB and SDT provide complementary explanations for entrepreneurial motivational processes.

Moreover, Gieure et al. (2020) gathered primary data by distributing questionnaires among 74 universities in 34 countries for fourth-year students with a master's degree in business and management. The results proved that there is a significant relationship between entrepreneurial behavior (PA and social norms) and EI. These results were consistent with the results of Jena (2020) which confirmed that PA has a positive effect on EI in 509 business management students in the higher education sector in India. Similarly, Zovko et al. (2020) surveyed 160 students at the Faculty of Economics, Business, and Tourism, University of Split, Croatia. The results showed that attitudes had a positive effect on EI. However, behavioral control and social norms failed to produce a significant effect on EI. Regarding university students in Indonesia, Kusumawardhany and Dwiarta (2020) proved that PA had a positive effect on EI examined the impact of PA on EI. Additionally, Cynthia et al. (2020) revealed that PBC has a substantial influence on the intention to become an entrepreneur at selected postsecondary institutions in Kogi. Vamvaka et al. (2020), on the contrary, proved the link between attitude, perceived behavioral control, and EI using a cross-sectional investigation included 441 Greek tertiary education undergraduate computer technology students. The same results were concluded by Tausif et al. (2021) by conducting a comparative study between two countries: Saudi Arabia and India. The findings showed that attitude and PBC had a significant effect on EI in both countries. However, social norms were significant in explaining EI only in India.

Previous literature focused also on the relationship between entrepreneurial orientation and entrepreneurial intention. Mandongwe and Jaravaza

(2020) show that innovativeness and risk taking have a significant relationship with EI by distributing questionnaires to prospective women entrepreneurs in the rural markets of Manicaland Province, Zimbabwe. However, there was no significant relationship between pro-activeness and EI. Additionally, Wathanakom et al. (2020) confirmed that innovativeness can effectively predict EI among undergraduate students, by conducting a survey targeting 330 undergraduate students from public universities. In the same context, Chafloque-Cespedes et al. (2021) revealed that variables such as the entrepreneur's position, employment status, country, and gender significantly moderated the relationship between entrepreneurial attitude and EI among university students from Latin American business schools using an inductive quantitative method via questionnaires.

In the Egyptian context, Hassan et al. (2021) confirm that entrepreneurship education promotes both individual EO and entrepreneurial motives, as well as has a favorable relationship with EI. Additionally, Efrata et al. (2021) surveyed 255 management and university business students who completed an entrepreneurship education program. The results found that only innovativeness significantly predicted EI, whereas personal pro-activeness and risk-taking showed no significant impact. However, Twum et al. (2021) conducted a study investigated how Entrepreneurial Orientation (EO) dimensions (innovativeness, pro-activeness, and risk-taking) affect Entrepreneurial Intention (EI) among students from private and public universities in Ghana. Using data collected through an online survey of 720 participants, they found significant influences of all three EO dimensions on EI. Singh and Mehdi (2022) surveyed students studying entrepreneurship in northern Indian academic institutions. The research focused on the interaction between openness to experience and EO, demonstrating significant impacts on EI.

Despite extensive research on the impact of entrepreneurial orientation on business outcomes, there is a notable gap in evaluating the relationship between Entrepreneurial Orientation elements on Entrepreneurial Intention through Family Business Involvement, Personal Attitude, Social Norms, and Perceived Behavioral Control in Egypt, as there is no model found to study these variables together in the previous studies. Therefore, the current study addresses these gaps by examining these relationships and mediations, focusing on how innovativeness, pro-activeness, and risk-taking influence these variables. The objectives include providing insights and recommendations for policy-makers and educators to foster a robust entrepreneurial ecosystem in Egypt. Additionally, this study presents a comprehensive study of a group of the most important variables that affect the field of family business in Egypt, which has a great impact on the development of this



sector in the Egyptian economy, as no previous study has examined these variables in the Arab Republic of Egypt.

II. METHODS

The methodology of this study depends on positivism philosophy because positivism is based on evaluating assumed causal relationships in phenomena and utilizes a deductive method of research design. The main processes are precisely depicted in the observation and experimentation stages, followed by the formulation of hypotheses regarding various relationships. Accordingly, quantitative approaches are widely used in research. This technique uses numerical data collection and analysis to quantify relationships, patterns, and trends. Statistical techniques are often

The current research conceptual framework is illustrated in Figure 1,

used to analyze data and draw conclusions. Collecting original data directly from the source is known as primary data collection. Surveys are often used to gather information from a large group of respondents (Smith, 2018). Therefore, quantitative data were collected through questionnaires to test the impact of innovativeness, pro-activeness, risk-taking and family business involvement, personal attitude, social norms, and perceived behavioral control on entrepreneurial intention as follows:

Dependent variable: Entrepreneurial Intention.

Independent variable: Entrepreneurial Orientation Dimensions.

Mediator: Family Business Involvement, Personal Attitude, Social Norm and Perceived Behavioral Control.

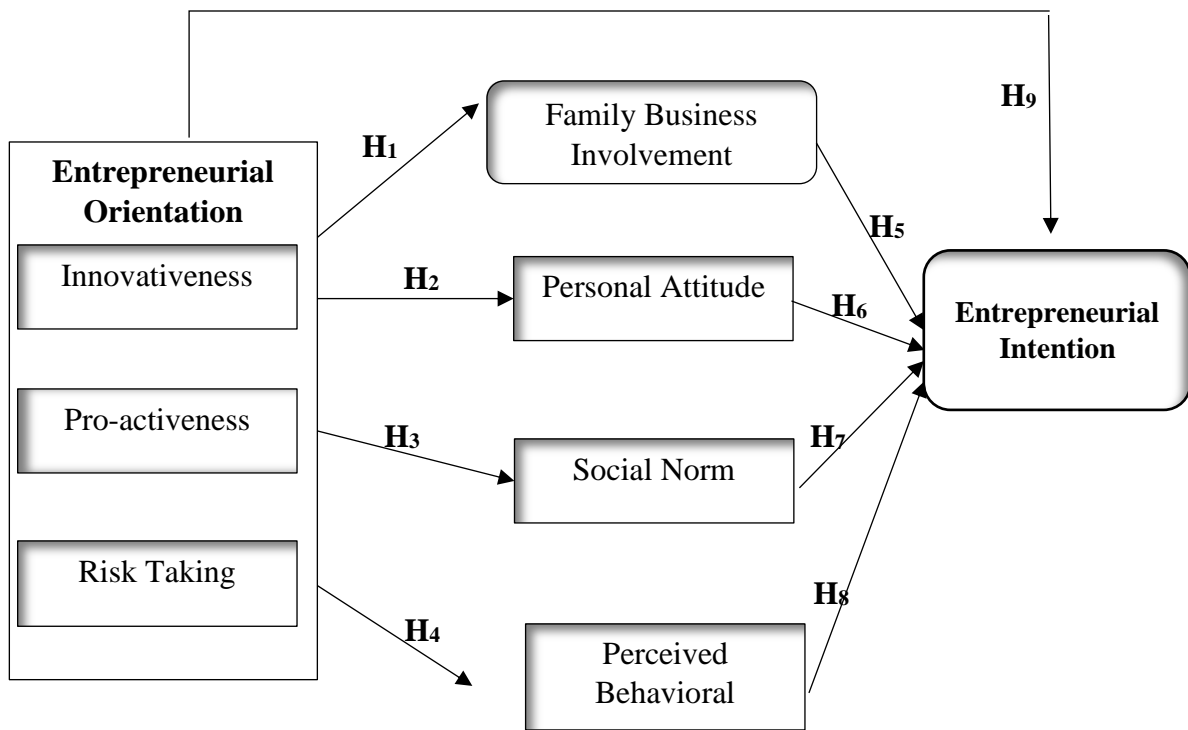


Figure 1: Research Framework

According to Figure 1, the research hypotheses are stated as follows:

H1: There is a significant relationship between Entrepreneurial Orientation and Family Business Involvement.

H2: There is a significant relationship between Entrepreneurial Orientation and Personal Attitude.

H3: There is a significant relationship between Entrepreneurial Orientation and Social Norm.

H4: There is a significant relationship between Entrepreneurial Orientation and Perceived Behavioral Control.

H5: There is a significant relationship between Family Business Involvement and Entrepreneurial Intention.

H6: There is a significant relationship between Personal Attitude and Entrepreneurial Intention.

H7: There is a significant relationship between Social Norm and Entrepreneurial Intention.

H8: There is a significant relationship between Perceived Behavioral Control and Entrepreneurial Intention.

H9: There is a significant relationship between Entrepreneurial Orientation and Entrepreneurial Intention.

H10: Family Business Involvement significantly mediates the relationship between Entrepreneurial Orientation and Entrepreneurial Intention.

H11: Personal Attitude significantly mediates the relationship between Entrepreneurial Orientation and Entrepreneurial Intention.

H12: Social Norm significantly mediates the relationship between Entrepreneurial Orientation and Entrepreneurial Intention.

H13: Perceived Behavior Control significantly mediates the relationship between Entrepreneurial Orientation and Entrepreneurial Intention.

According to the above research framework and hypotheses, the research variables were measured according to a questionnaire adopted from the studies of Miralles et al. (2016), Hooi et al. (2016), and Wang et al. (2018), using a 5-point Likert scale, where participants were asked to rate their agreement or disagreement with each statement using a five-point scale, as shown in Table 1.

Table 1: Research Variables Operationalization

| Conceptual Definition | Operational Definition | Statements |
|--|---|---|
| Innovativeness (Hooi et al., 2016) | | |
| The capacity of a company to promote novel concepts, try new things, launch novel goods, and engage in creative processes is referred to as innovative-ness (Hernández-Perlines et al., 2020). | It is measured by the levels of development in the company's products and services, as well as the levels of R&D and technology leadership within it. | My company has many new lines of products or services. |
| | | My company changes in product or service lines have usually been quite dramatic. |
| | | My company strong emphasis on R&D, technological leadership, and innovations. |
| Pro-activeness (Hooi et al., 2016) | | |
| It is the capacity of businesses to devote resources to the introduction of new goods and services before rivals (Hernández-Perlines et al., 2020). | It is measured by the company's priority in introducing new products /services, management methods, and operating technologies, to ensure the company's competitive-ness. | My company is often the first business to introduce new products/services, administrative techniques, operating technologies, etc. |
| | | My company typically adopts a very competitive, “undo-the competitors” posture. |
| Risk taking (Hooi et al., 2016) | | |
| Risk-taking entails the development of audacious acts employing significant resources that are most suitable (Hernández Perlines et al., 2020). | It is measured by how a company engages in new projects and bold, large-scale decisions in order to achieve its goals | My company has a strong proclivity for high-risk projects (with chances of very high returns). |
| | | My company believes that, owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm’s objectives. |
| Conceptual Definition | Operational Definition | Statements |
| | | My company typically adopts a bold, aggressive posture to maximize the probability of exploiting potential opportunities. |
| Family Business Involvement (Wang et al., 2018) | | |
| In these studies, family involvement in the company is | It is measured by the levels of involvement of family | My family used to take me to work with them. |

| | | |
|--|--|---|
| defined in terms of ownership (e.g., the proportion of family stock), governance (e.g., family members on the board of directors), management (e.g., a family member serving as CEO), and succession (e.g., the number of generations of family members working for the company) (Garcia-Castro and Aguilera, 2014). | members of company owners in managing the company and making decisions. | My family used to take me to business meetings. |
| | | My family used to teach me about managing a business. |
| | | My family used to discuss work/business with me. |
| | | My family used to encourage me to get to know their employees and partners. |
| Personal Attitude (Miralles et al., 2016) | | |
| Before making choices that have an impact on one's behavior, people have attitudes regarding the world around them and the situation they find themselves in. People's attitudes are essentially shaped by their underlying values and beliefs (Yildiz et al., 2022). | It is measured by the attitude of the businessman towards their work. | Being an entrepreneur implies more advantages than disadvantages to me |
| | | A career as entrepreneur is attractive for me |
| | | Among various options, I would rather be an entrepreneur |
| Social Norm (Miralles et al., 2016) | | |
| Social norms are accepted standards of conduct among various social groupings. Both explicit | It is measured by the levels of support for entrepreneurship initiatives in your close | I perceive support for entrepreneurial initiatives in your close environment from your close family |
| Conceptual Definition | Operational Definition | Statements |
| rules and laws as well as informal understandings that direct social conduct are examples of social norms (Sinclair and Agerström, 2023). | environment of close family, friends, and colleagues. | I perceive support for entrepreneurial initiatives in your close environment from your friends |
| | | I perceive support for entrepreneurial initiatives in your close environment from your colleagues |
| | | I perceive a positive perception towards entrepreneurial initiatives in your close environment from your close family |
| | | I perceive a positive perception towards entrepreneurial initiatives in your close environment from your friends |
| | | I perceive a positive perception towards entrepreneurial initiatives in your close environment from your colleagues |
| Perceived Behavioral Control (Miralles et al., 2016) | | |
| A person's expectation that he or she has control over how an | It is measured by the level of awareness of the processes | I can control the creation process of a new firm |

| | | |
|--|---|--|
| action is performed is known as perceived behavioral control. Three factors affect intentions in different ways (Hagger et al., 2022). | necessary to start and develop a company, and its success rates. | I know the necessary practical details to start a firm |
| | | I know how to develop an entrepreneurial project |
| | | If I tried to start a firm, I would have a high probability of succeeding. |
| | | I can control the creation process of a new firm |
| Entrepreneurial Intention (Miralles et al., 2016) | | |
| Entrepreneurial intents may be characterized as a | It is measured by entrepreneurs' intentions to | I intend to start a business in the future. |
| Conceptual Definition | Operational Definition | Statements |
| desire to start a firm or work for oneself. As personal inclinations that might result in the formation of businesses, entrepreneurial intents are also taken into consideration (Halizah and Mardikaningsih, 2022). | start a new business, their levels of development in the field of entrepreneurship. | I am obtaining the knowledge and skills needed to start a business. |
| | | I am considering a business plan. |

Regarding the study population, the researcher targeted Egyptian enterprises, where the sample size was chosen according to the Saunders equation. The Saunders equation depends on a 95% confidence level, in which the sample size should not be less than 385 respondents (Saunders et al., 2016). After developing the questionnaire, 800 questionnaires were distributed, and 520 respondents received a response rate of 65%. From the collected responses, only 445 completed questionnaires were valid for the analysis.

III. RESULTS AND FINDINGS

The current section presents the empirical analysis and its main findings, which are presented in the following six sub-sections:

a) *Validity and Reliability Analysis*

In the examination of the validity of this research, two pivotal metrics were considered. The first metric, Average Variance Extracted (AVE), serves as an indicator of the average shared variance among the latent factors. Meeting or exceeding the 0.5 threshold in AVE is considered acceptable validity (Hair et al., 2016). The second metric involves examining the factor loadings, with a minimum requirement of 0.4 or higher for adequate validity (Yong and Pearce, 2013). Conversely, the assessment of reliability relies on the

evaluation of the stability and consistency of each factor by the application of Cronbach's alpha. Falling within a scale of 0 to 1, higher Cronbach's alpha coefficients signify a greater degree of reliability, with coefficients equal to or exceeding 0.7 indicating satisfactory reliability (Taber, 2018).

Table 2 illustrates the validity and reliability tests conducted for the research variables. According to the results, the research variables (innovativeness, proactiveness, risk-taking, family business involvement, personal attitude, social norm, perceived behavioral control, and entrepreneurial intention) were demonstrated to be valid, as the AVE values were above 50% (85.161, 87.097, 84.428, 84.989, 86.293, 82.402, 85.198, and 84.798 respectively). Regarding the KMO values are higher than 0.4 (0.759, 0.500, 0.757, 0.920, 0.761, 0.941, 0.870, and 0.756 respectively). Furthermore, the research variables were reliable as Cronbach's Alpha value exceeded 0.7 indicating satisfactory reliability (0.913, 0.852, 0.908, 0.956, 0.920, 0.957, 0.942, 0.910 respectively).

Table 2: Reliability and Validity Table

| Variables | KMO | AVE % | Cronbach's α | Items | Factor Loading |
|------------------------------|------|--------|---------------------|-------|----------------|
| Innovativeness | .759 | 85.161 | .913 | INN1 | .849 |
| | | | | INN2 | .852 |
| | | | | INN3 | .854 |
| Pro-activeness | .500 | 87.097 | .852 | PAC1 | .871 |
| | | | | PAC2 | .871 |
| Risk-taking | .757 | 84.428 | .908 | RT1 | .841 |
| | | | | RT2 | .851 |
| | | | | RT3 | .841 |
| Family Business Involvement | .920 | 84.989 | .956 | FBIN1 | .858 |
| | | | | FBIN2 | .836 |
| | | | | FBIN3 | .850 |
| | | | | FBIN4 | .846 |
| | | | | FBIN5 | .860 |
| Personal Attitude | .761 | 86.293 | .920 | PAT1 | .876 |
| | | | | PAT2 | .859 |
| | | | | PAT3 | .854 |
| Social Norm | .941 | 82.402 | .957 | SN1 | .825 |
| | | | | SN2 | .809 |
| | | | | SN3 | .837 |
| | | | | SN4 | .833 |
| | | | | SN5 | .815 |
| | | | | SN6 | .825 |
| Perceived Behavioral Control | .870 | 85.198 | .942 | PBC1 | .851 |
| | | | | PBC2 | .854 |
| | | | | PBC3 | .847 |
| | | | | PBC4 | .856 |
| Entrepreneurial Intention | .756 | 84.798 | .910 | EIN1 | .845 |
| | | | | EIN2 | .864 |
| | | | | EIN3 | .835 |

Figure 2 shows the Average Variance Extracted (AVE) percentage of all research variables. As mentioned before, all the AVEs are more than 50% and are considered to have acceptable validity.

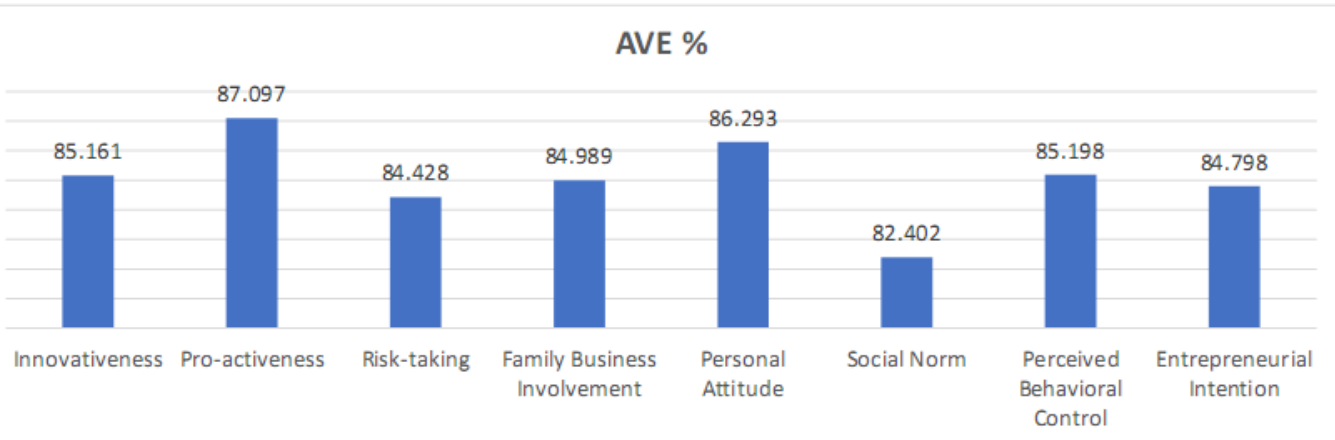


Figure 2: Average Variance Extracted Percentage of the Research Variables

b) Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) precedes the application of structural equation modeling (SEM), it is executed using AMOS 24 software, utilizing the Maximum Likelihood (ML) estimation method to determine factor loadings and assess the overall model fit. The fit indices provide a comprehensive assessment of how well the measurement model aligns with the observed data. The Chi-square/df ratio of 1.106 indicates that the model fits the data reasonably well, especially considering that values close to 1 are desirable. The associated p-value of 0.000 suggests that the model's fit is statistically significant. The Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI) both exceeded 0.90, demonstrating that the model fits the data well, with a GFI of 0.944 and an AGFI of 0.930. These indices measure the proportion of variance in the observed data accounted for by a model.

The Normed Fit Index (NFI), Tucker-Lewis Index (TLI), and Comparative Fit Index (CFI) values, all above 0.90, signify excellent fit. These indices assessed how well the model reproduced the observed covariance structure, with NFI = 0.975, TLI = 0.997, and CFI = 0.998. The Root Mean Square Residual (RMR) of 0.020 indicates a small discrepancy between the observed and predicted covariance matrices, supporting the overall accuracy of the model. The Root Mean Square Error of Approximation (RMSEA) of 0.015, falling below the commonly accepted threshold of 0.05, indicates a close fit of the model to the population covariance matrix. In summary, these fit indices collectively suggest that the measurement model is well-suited to the observed data, demonstrating good overall fit, statistical significance, and accurate reproduction of the covariance structure, Table 3 in this study provides detailed insights.

Table 3: Thresholds and Fit Indices for the Measurement Model

| Measure | Results | Threshold |
|---------------|---------|--|
| Chi-square/df | 1.106 | < 2 excellent; < 3 good; < 5 sometimes permissible |
| P-value | 0.000 | > 0.05 |
| GFI | 0.944 | > 0.90 |
| AGFI | 0.930 | > 0.90 |
| NFI | 0.975 | > 0.90 |
| TLI | 0.997 | > 0.95 |
| CFI | 0.998 | > 0.90 |
| RMR | 0.020 | < 0.08 |
| RMSEA | 0.015 | < 0.05 |

Figure 3 shows the results of the Fit Indices for the Measurement Model, indicating that the measure-

ment model is well-suited to the observed data, demonstrating good overall.

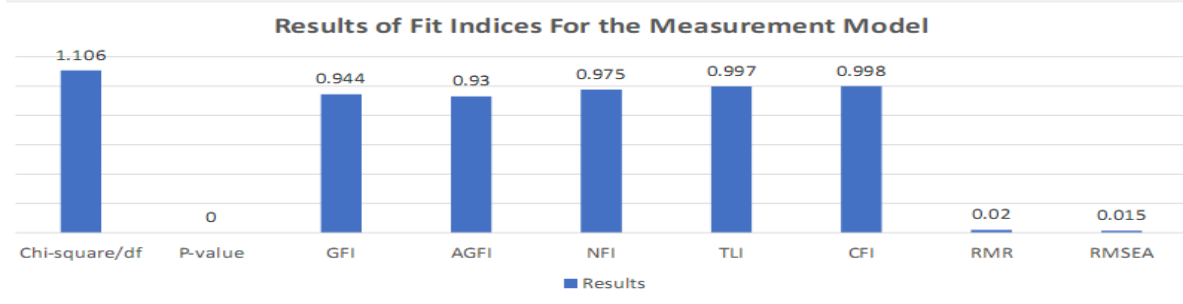


Figure 3: The Results of Fit Indices for the Measurement Model

Figure 4 illustrates the execution of the confirmatory factor analysis, portraying the factor loadings through prominent arrows. The arrows signify

strong factor loadings, with values exceeding the 0.4 threshold.

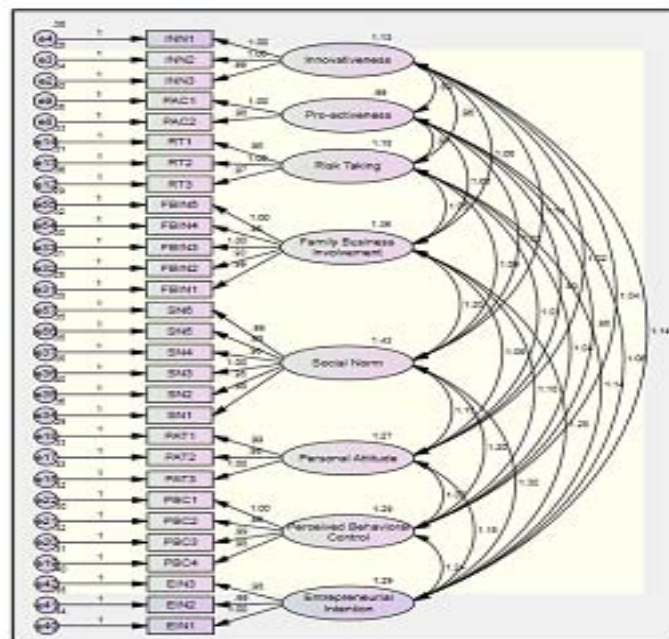


Figure 4: CFA for the Measurement Model

c) Descriptive Analysis

Descriptive statistics is a tool that clarifies and provides a clear overview of the characteristics of a particular data collection by providing concise summaries of the samples and information on how to quantify the data (Vetter, 2017). This section presents a descriptive analysis of the respondents' profiles and research variables.

i. Descriptive Analysis of Respondent Profile

The respondent profile provided valuable insights into the demographics and characteristics of the study participants (Table 5). The respondent profile provides insights into key demographic characteristics, with the results sorted from high to low percentages. In terms of company age, the majority of respondents had a business tenure of five to less than 10 years (42.7%), followed by 15 years or more (18.9%). The largest

proportion of business volume operates in large companies (44.9%), followed by medium (37.3%), and small companies (17.8%). Employee count revealed a distribution with 1000 - Less than 3000 employees being the most dominant (41.3%), followed by Less than 1000 employees (18.7%).

In terms of age distribution, the largest group falls within the 40-less than 50 age range (32.4%), followed by 22-less than 30 (19.6%), and 50-less than 60 (19.6%). The gender distribution indicates a higher percentage of male respondents (58.0%) than female respondents (42.0%). In terms of education, a significant percentage held a bachelor's degree (49.7%), followed by a master's degree (32.1%), while individuals with a doctoral degree constituted a smaller proportion (7.0%). Those with "other" educational backgrounds comprised 11.2% of the respondents.

Table 4: Respondent Profile

| | Frequency (n=445) | Percent % |
|----------------------------|--------------------------|------------------|
| Company Age | | |
| Less than one year | 38 | 8.5 |
| One – less than Five years | 91 | 20.4 |
| Five – less than 10 years | 190 | 42.7 |
| 10 – less than 15 years | 42 | 9.4 |
| 15 years or more | 84 | 18.9 |
| Business Volume | | |
| Small | 79 | 17.8 |
| Medium | 166 | 37.3 |
| Large | 200 | 44.9 |
| Employee Count | | |
| Less than 1000 | 83 | 18.7 |
| 1000 – Less than 3000 | 184 | 41.3 |
| 3000 – Less than 5000 | 92 | 20.7 |
| 5000 – Less than 10000 | 56 | 12.6 |
| 10000 or more | 30 | 6.7 |
| Age | | |
| 22 - Less than 30 | 87 | 19.6 |
| 30- Less than 40 | 83 | 18.7 |
| 40- Less than 50 | 144 | 32.4 |
| 50- Less than 60 | 87 | 19.6 |
| 60 or older | 44 | 9.9 |
| Gender | | |
| Male | 258 | 58.0 |
| | Frequency (n=445) | Percent % |
| Female | 187 | 42.0 |
| Education | | |
| Bachelor's degree | 221 | 49.7 |
| Master's degree | 143 | 32.1 |
| Doctorate degree | 31 | 7.0 |
| Other | 50 | 11.2 |

ii. Descriptive Analysis of Research Variables

The descriptive results for the research variable offer valuable insights into the central tendencies and variations within the dataset, as shown in Table 6. For "innovativeness" the mean was 3.0854, with a standard deviation of 1.20318. "Pro-activeness" has a mean of 3.1551 and a standard deviation of 1.13731. Similarly, "Risk-taking" had a mean of 3.1236, with a standard deviation of 1.14903. "Family Business Involvement" has

a mean of 3.3079 and a standard deviation of 1.30213. "Personal Attitude" shows a mean of 2.9933 with a standard deviation of 1.21827, while "Social Norm" had a mean of 3.0854 and a standard deviation of 1.31069. "Perceived Behavioral Control" has a mean of 2.9910 and a standard deviation of 1.27869. Lastly, "Entrepreneurial Intention" has a mean of 3.4584 with a standard deviation of 1.21411.

Table 5: Descriptive Analysis for the Research Variables

| Research Variable | N | Mean | Std. Deviation | Frequency | | | | |
|------------------------------|-----|--------|----------------|-----------|-----|-----|-----|-----|
| | | | | 1 | 2 | 3 | 4 | 5 |
| Innovativeness | 445 | 3.0854 | 1.20318 | 60 | 79 | 114 | 147 | 45 |
| Pro-activeness | 445 | 3.1551 | 1.13731 | 48 | 73 | 127 | 156 | 41 |
| Risk-taking | 445 | 3.1236 | 1.14903 | 47 | 84 | 125 | 145 | 44 |
| Family Business Involvement | 445 | 3.3079 | 1.30213 | 51 | 88 | 67 | 151 | 88 |
| Personal Attitude | 445 | 2.9933 | 1.21827 | 67 | 84 | 125 | 123 | 46 |
| Social Norm | 445 | 3.0854 | 1.31069 | 58 | 115 | 78 | 119 | 75 |
| Perceived Behavioral Control | 445 | 2.9910 | 1.27869 | 74 | 96 | 82 | 146 | 47 |
| Entrepreneurial Intention | 445 | 3.4584 | 1.21411 | 13 | 121 | 72 | 127 | 112 |

Figure 5 shows the descriptive statistics for the research variables, represented as mean and standard deviation.

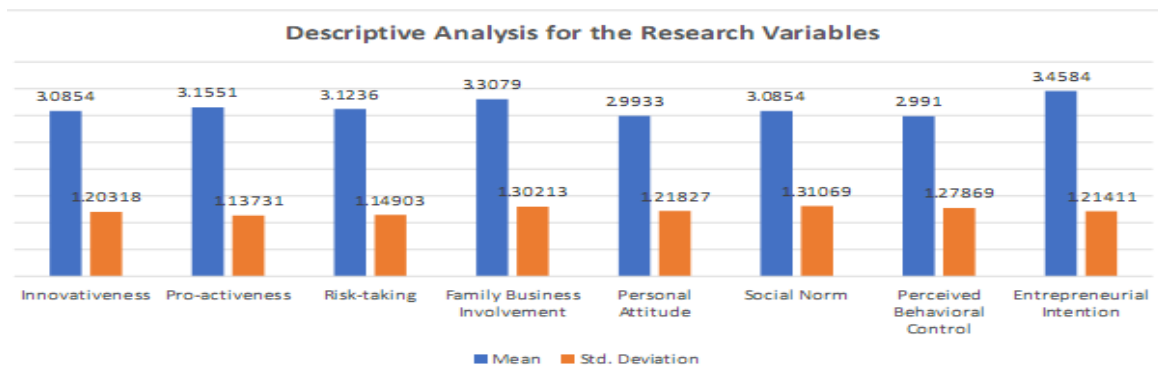


Figure 5: Descriptive Statistics for the Research Variables

d) Normality Testing for the Research Variables

Confirming the normality of the data is a prerequisite before conducting inferential analyses, influencing the choice between parametric and non-parametric tests for hypothesis testing (Demir, 2022). A

widely employed method for assessing normality is the Kolmogorov-Smirnov test, which is especially suited for sample sizes exceeding 50 observations in Table 6. A P-value surpassing the 0.05 threshold indicates the dataset conforms to a normal distribution. This

meticulous evaluation of normalcy is a key aspect of the research process, steering the selection of appropriate

statistical tests for hypothesis testing, thereby fortifying the reliability and validity of the research outcomes.

Table 6: Formal Testing of Normality

| Research Variables | Kolmogorov-Smirnov ^a | | |
|------------------------------|---------------------------------|-----|------|
| | Statistic | Df | Sig. |
| Innovativeness | .208 | 445 | .000 |
| Pro-activeness | .214 | 445 | .000 |
| Risk-taking | .202 | 445 | .000 |
| Family Business Involvement | .240 | 445 | .000 |
| Personal Attitude | .175 | 445 | .000 |
| Social Norm | .193 | 445 | .000 |
| Perceived Behavioral Control | .219 | 445 | .000 |
| Entrepreneurial Intention | .209 | 445 | .000 |

Given the outcomes of the formal tests signaling a departure from a normal distribution in the dataset in Table 7, a supplementary informal assessment was employed to gauge the data's approximate normality. As illustrated in Table 7, this informal

evaluation revealed that both the skewness and kurtosis values exceeded the acceptable range of ± 1 . Consequently, non-parametric tests are considered appropriate for elucidating the relationships among the research variables.

Table 1: Informal Testing of Normality

| | N | Skewness | | Kurtosis | |
|------------------------------|-----------|-----------|------------|-----------|------------|
| | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Innovativeness | 445 | -.282 | .116 | -.894 | .231 |
| Pro-activeness | 445 | -.372 | .116 | -.674 | .231 |
| Risk-taking | 445 | -.270 | .116 | -.767 | .231 |
| Family Business Involvement | 445 | -.358 | .116 | -1.066 | .231 |
| Personal Attitude | 445 | -.145 | .116 | -.936 | .231 |
| Social Norm | 445 | -.056 | .116 | -1.204 | .231 |
| Perceived Behavioral Control | 445 | -.158 | .116 | -1.165 | .231 |
| Entrepreneurial Intention | 445 | -.183 | .116 | -1.267 | .231 |

e) Testing Multicollinearity Assumption

The examination of Variance Inflation Factors (VIFs), detailed in Table 8, for the independent variables in the research model, yields crucial insights into the state of multicollinearity. The results revealed that all VIFs corresponding to the research variables remained

below the predetermined threshold of 5. This observation indicates the absence of noticeable multicollinearity among the independent variables in this analysis, thereby reinforcing the robustness and reliability of the research model.

Table 2: VIF values for Research Variables

| Independent Variables | VIF |
|-----------------------|-------|
| Innovativeness | 3.007 |
| Pro-activeness | 2.659 |
| Risk-taking | 2.985 |

f) *Testing Research Hypotheses*

Within this segment, meticulous scrutiny of the research hypotheses transpires through the utilization of correlation analysis and path analysis within the structural equation modeling (SEM) framework. Given the non-normal distribution inherent in the dataset, the preferred analytical method was Spearman's correlation. Table 9 presents the correlation matrix for the variables examined in this study.

Innovativeness is strongly and positively correlated with Family Business Involvement ($r = 0.850$, $p < 0.001$), Personal Attitude ($r = 0.806$, $p < 0.001$), social norms ($r = 0.862$, $p < 0.001$), Perceived Behavioral Control ($r = 0.826$, $p < 0.001$), and Entrepreneurial Intention ($r = 0.898$, $p < 0.001$). Similarly, pro-activeness showed a strong positive correlation with Family Business Involvement ($r = 0.843$, $p < 0.001$), Personal Attitude ($r = 0.781$, $p < 0.001$), social norms ($r = 0.823$, $p < 0.001$), Perceived

Behavioral Control ($r = 0.822$, $p < 0.001$), and Entrepreneurial Intention ($r = 0.880$, $p < 0.001$). Moreover, risk taking was significantly positively correlated with Family Business Involvement ($r = 0.829$, $p < 0.001$), Personal Attitude ($r = 0.804$, $p < 0.001$), social norms ($r = 0.827$, $p < 0.001$), Perceived Behavioral Control ($r = 0.827$, $p < 0.001$), and Entrepreneurial Intention ($r = 0.884$, $p < 0.001$).

Family Business Involvement shows a strong positive correlation with Entrepreneurial Intention ($r = 0.943$, $p < 0.001$). Moreover, Personal Attitude revealed a robust positive correlation with Entrepreneurial Intention ($r = 0.885$, $p < 0.001$). Furthermore, social norms revealed robust positive correlations with Entrepreneurial Intention ($r = 0.927$, $p < 0.001$). Additionally, Perceived Behavioral Control revealed a robust positive correlation with Entrepreneurial Intention ($r = 0.919$, $p < 0.001$).

Table 3: Correlation Matrix for the Research Variables

| | | | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|----------------|--------------------------------|------|--------|--------|--------|--------|-------|----|----|----|
| Spearman's rho | 1. Innovativeness | R | 1.000 | | | | | | | |
| | | Sig. | . | | | | | | | |
| | | N | 445 | | | | | | | |
| | 2. Pro-activeness | R | .776** | 1.000 | | | | | | |
| | | Sig. | .000 | . | | | | | | |
| | | N | 445 | 445 | | | | | | |
| | 3. Risk-taking | R | .806** | .777** | 1.000 | | | | | |
| | | Sig. | .000 | .000 | . | | | | | |
| | | N | 445 | 445 | 445 | | | | | |
| | 4. Family Business Involvement | R | .850** | .843** | .829** | 1.000 | | | | |
| | | Sig. | .000 | .000 | .000 | . | | | | |
| | | N | 445 | 445 | 445 | 445 | | | | |
| | | R | .806** | .781** | .804** | .834** | 1.000 | | | |

| | | | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|--|---------------------------------|------|--------|--------|--------|--------|--------|--------|--------|-------|
| | 1. Personal Attitude | Sig. | .000 | .000 | .000 | .000 | . | | | |
| | | N | 445 | 445 | 445 | 445 | 445 | | | |
| | 2. Social Norm | R | .862** | .823** | .827** | .879** | .837** | 1.000 | | |
| | | Sig. | .000 | .000 | .000 | .000 | .000 | . | | |
| | | N | 445 | 445 | 445 | 445 | 445 | 445 | | |
| | 3. Perceived Behavioral Control | R | .826** | .822** | .827** | .883** | .821** | .867** | 1.000 | |
| | | Sig. | .000 | .000 | .000 | .000 | .000 | .000 | . | |
| | | N | 445 | 445 | 445 | 445 | 445 | 445 | 445 | |
| | 4. Entrepreneurial Intention | R | .898** | .880** | .884** | .943** | .885** | .927** | .919** | 1.000 |
| | | Sig. | .000 | .000 | .000 | .000 | .000 | .000 | .000 | . |
| | | N | 445 | 445 | 445 | 445 | 445 | 445 | 445 | 445 |

Structural equation Modeling (SEM) analysis was used to evaluate the influence of the research variables in Table 10. The SEM results, outlined below, provide valuable insights into the relationships between the variables.

Hypothesis 1, which posits a relationship between Entrepreneurial Orientation and Family Business Involvement, Innovativeness (estimate = 0.337, $p < 0.000$), and pro-activeness (estimate = 0.739, $p < 0.000$), demonstrated a significant positive effect on Family Business Involvement as the P-values were less than 0.05, while, Risk Taking (estimate = 0.053, $p = 0.513$) showed an insignificant effect on Family Business Involvement as the P-value was more than 0.05. The coefficient of determination (R-square) for the dependent variable "Family Business Involvement" was 0.867. This value indicates that approximately 86.7% of the variability in Family Business Involvement can be explained by independent variables in the model.

For Hypothesis 2, which posits a relationship between Entrepreneurial Orientation and Personal Attitude, Innovativeness (estimate = 0.369, $p < 0.000$), pro-activeness (estimate = 0.497, $p < 0.000$), and risk-taking (estimate = 0.177, $p < 0.036$) demonstrated a significant positive effect on Personal Attitude as the P-values were less than 0.05. The coefficient of determination (R square) for the dependent variable "Personal Attitude" was 0.807. This value indicates that

approximately 80.7% of the variability in personal attitudes can be explained by the independent variables in the model.

Hypothesis 3, which posits a relationship between entrepreneurial orientation and social norms, innovativeness (estimate = 0.503, $p < 0.000$), and pro-activeness (estimate = 0.562, $p < 0.000$), demonstrates a significant positive effect on social norms as the P-values are less than 0.05, while, Risk Taking (estimate = 0.083, $p = 0.513$) shows an insignificant effect on social norms as the P-value is more than 0.05. The coefficient of determination (R-square) for the dependent variable "Social Norm" was 0.868. This value indicates that approximately 86.8% of the variability in the Social Norm can be explained by the independent variables in the model.

Hypothesis 4, which posits a relationship between Entrepreneurial Orientation and Perceived Behavioral Control, Innovativeness (estimate = 0.276, $p < 0.000$), and pro-activeness (estimate = 0.745, $p < 0.000$), demonstrates a significant positive effect on Perceived Behavioral Control as the P-values are less than 0.05, while, Risk Taking (estimate = 0.092, $p = 0.247$) showed an insignificant effect on Perceived Behavioral Control as the P-value was more than 0.05. The coefficient of determination (R-square) for the dependent variable "Perceived Behavioral Control" was 0.878. This value indicates that approximately 87.8% of

the variability in Perceived Behavioral Control can be explained by the independent variables in the model.

For Hypothesis 5, which posits a relationship between Family Business Involvement and Entrepreneurial Intention, it could be noted that Family Business Involvement (estimate = 0.277, $p < 0.000$), demonstrates a significant positive effect on Entrepreneurial Intention as the P-value is less than 0.05.

For Hypothesis 6, which posits a relationship between Personal Attitude and Entrepreneurial Intention, it can be noted that Personal Attitude (estimate = 0.108, $p < 0.011$), demonstrates a significant positive effect on Entrepreneurial Intention as the P-value is less than 0.05.

For Hypothesis 7, which posits a relationship between social norms and entrepreneurial intention, it could be noted that social norms (estimate = 0.130, $p < 0.009$), demonstrate a significant positive effect on Entrepreneurial Intention as the P-value is less than 0.05. For Hypothesis 8, which posits a relationship between Perceived Behavioral Control and Entrepreneurial Intention, it could be noted that Perceived Behavioral Control (estimate = 0.107, $p = 0.080$) shows an insignificant effect on Entrepreneurial Intention as the P-value is more than 0.05.

Hypothesis 9, which posits a relationship between Entrepreneurial Orientation and Entrepreneurial Intention, Innovativeness (estimate = 0.503, $p < 0.000$), and risk-taking (estimate = 0.142, $p < 0.022$), demonstrates a significant positive effect on Entrepreneurial Intention as the P-values are less than 0.05, while pro-activeness (estimate = 0.181, $p = 0.176$) shows an insignificant effect on Entrepreneurial Intention as the P-value is more than 0.05. The coefficient of determination (R-square) for the dependent variable "Entrepreneurial Intention" is 0.990. This value indicates that approximately 99% of the variability in Entrepreneurial Intention can be explained by the independent variables in the model.

According to previous findings, family business involvement, social norms, and personal attitudes exert a substantial influence on Entrepreneurial Intention. This implies that family business involvement, social norms, and personal attitudes have a direct impact on entrepreneurial intention. On the other hand, there is a lack of a significant effect of Perceived Behavioral Control on Entrepreneurial Intention, indicating the absence of a direct relationship between behavioral control and Entrepreneurial Intention.

Hypothesis 10, Family Business Involvement mediates the relationship between entrepreneurial orientation and intention. Based on the previous results, it can be noted that there is a significant effect of Innovativeness, and Pro-activeness on Family Business Involvement, which means that Family Business Involvement could mediate the relationship between

Innovativeness, Pro-activeness, and Entrepreneurial Intention.

It could be observed that Family Business Involvement partially mediate the relationship between Innovativeness and Entrepreneurial Intention as the effect still significant at the presence of Family Business Involvement. Moreover, it could be observed that Family Business Involvement fully mediate the relationship between Pro-activeness and Entrepreneurial Intention as the effect turned to be insignificant at the presence of Family Business Involvement.

Hypothesis 11, Personal Attitude mediated the relationship between Entrepreneurial Orientation and Entrepreneurial Intention. Based on the previous results, it could be noted that there is a significant effect of Innovativeness, and Pro-activeness on Personal Attitude, which means that Personal Attitude could mediate the relationship between Innovativeness, Pro activeness, and Entrepreneurial Intention.

It could be observed that Personal Attitude partially mediate the relationship between Innovativeness, Risk Taking, and Entrepreneurial Intention as the effect still significant at the presence of Personal Attitude. Moreover, it could be observed that Personal Attitude fully mediate the relationship between Pro-activeness and Entrepreneurial Intention as the effect turned to be insignificant at the presence of Personal Attitude.

Hypothesis 12, social norms mediate the relationship between Entrepreneurial Orientation and Entrepreneurial Intention. Based on the previous results, it can be noted that there is a significant effect of innovativeness, and pro-activeness on social norms, which means that social norms could mediate the relationship between Innovativeness, Pro-activeness, and Entrepreneurial Intention.

It could be observed that Social Norm partially mediate the relationship between Innovativeness and Entrepreneurial Intention as the effect still significant at the presence of Social Norm. Moreover, it could be observed that Social Norm fully mediate the relationship between Pro-activeness and Entrepreneurial Intention as the effect turned to be insignificant at the presence of Social Norm.

For Hypothesis 12, Perceived Behavioral Control mediates the relationship between Entrepreneurial Orientation and Entrepreneurial Intention. Based on the previous results, it could be noted that there is no direct effect of Perceived Behavioral Control on entrepreneurial intention; therefore, Perceived Behavioral Control could not mediate the relationship between Entrepreneurial Orientation and Entrepreneurial Intention.

Table 4: SEM Analysis for the Research Variables

| | | | Estimate | P | R ² |
|------------------------------|------|------------------------------|----------|------|----------------|
| Family Business Involvement | <--- | Innovativeness | .337 | *** | .867 |
| Family Business Involvement | <--- | Pro-activeness | .739 | *** | |
| Family Business Involvement | <--- | Risk Taking | .053 | .513 | |
| Social Norm | <--- | Innovativeness | .503 | *** | .868 |
| Social Norm | <--- | Pro-activeness | .562 | *** | |
| Social Norm | <--- | Risk Taking | .083 | .282 | |
| Personal Attitude | <--- | Innovativeness | .369 | *** | .807 |
| Personal Attitude | <--- | Pro-activeness | .497 | *** | |
| Personal Attitude | <--- | Risk Taking | .177 | .036 | |
| Perceived Behavioral Control | <--- | Innovativeness | .276 | *** | .878 |
| Perceived Behavioral Control | <--- | Pro-activeness | .745 | *** | |
| Perceived Behavioral Control | <--- | Risk Taking | .092 | .247 | |
| Entrepreneurial Intention | <--- | Innovativeness | .142 | .022 | .990 |
| Entrepreneurial Intention | <--- | Pro-activeness | .181 | .176 | |
| Entrepreneurial Intention | <--- | Risk Taking | .162 | *** | |
| Entrepreneurial Intention | <--- | Family Business Involvement | .277 | *** | |
| Entrepreneurial Intention | <--- | Social Norm | .130 | .009 | |
| Entrepreneurial Intention | <--- | Personal Attitude | .108 | .011 | |
| Entrepreneurial Intention | <--- | Perceived Behavioral Control | .107 | .080 | |

The model fit indices, including CMIN/DF (1.189), GFI (0.938), CFI (0.996), AGFI (0.924), and RMSEA (0.021), all fell within the acceptable ranges. Figure 6 shows the SEM employed to analyze the impact of the research model.

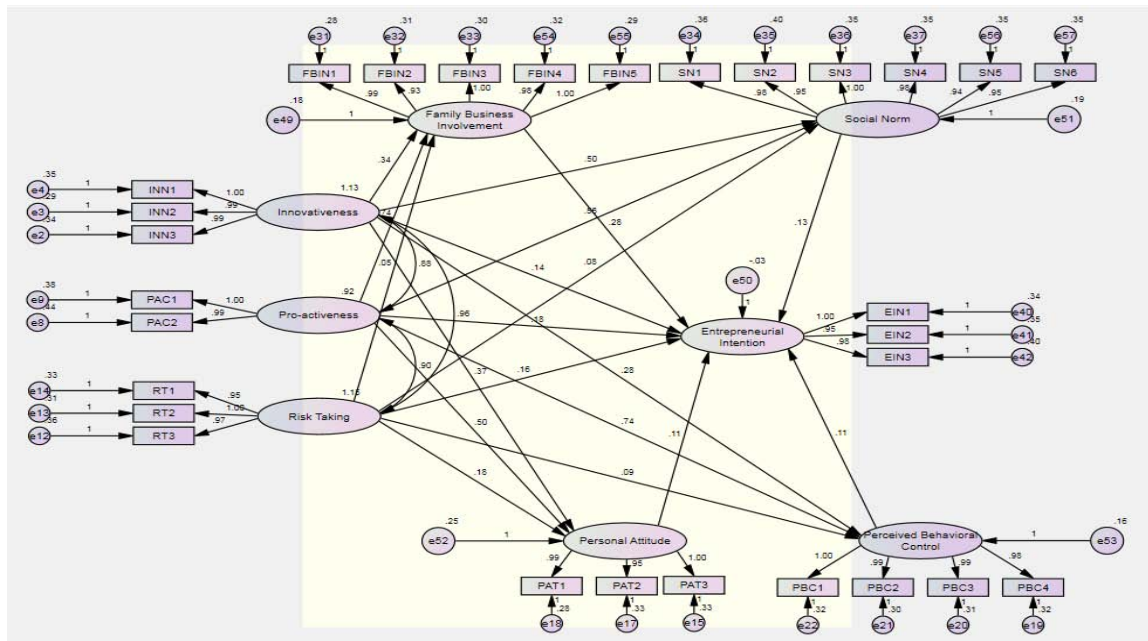


Figure 6: SEM for the Research Variables

IV. RESEARCH DISCUSSION AND CONCLUSION

In this section, the results of the hypotheses tested using a correlation matrix and Structural Equation Modeling (SEM) are discussed.

a) Research Discussion

The results of the first hypothesis reveal that innovativeness and pro-activeness have significant positive effects on family business involvement, therefore, the first hypothesis is partially supported. These results are consistent with those of Arzubagi et al. (2018), Glowka et al. (2021), Dos Santos et al. (2022), Kalali (2022), Moreno-Menéndez et al. (2022), and Jovic et al. (2023). Otherwise, the results of the second hypothesis proved that all three dimensions had significant positive effects on personal attitudes, therefore, the second hypothesis is fully supported. These results align with those of Zollo et al. (2021) and Hwang et al. (2021). The findings of the third hypothesis clarify that innovativeness and pro-activeness have significant positive effects on social norms, accordingly, the third hypothesis is partially supported. The results are consistent with those of Ekpe and Mat (2012) and Bagis (2022), but inconsistent with those of Awang et al. (2016).

Moreover, the results of the fourth hypothesis proved that innovativeness and pro activeness had significant positive effects on perceived behavioral control, therefore, the fourth hypothesis is partially supported. The results are consistent with Munir et al. (2019), but inconsistent with those of Awang et al. (2016). While the findings of the fifth hypothesis illustrate

that family business involvement had a significant positive effect on entrepreneurial intention, hence, the fifth hypothesis is fully supported. The results align with those of Wang et al. (2018), Onjewu et al. (2022), Xu et al. (2022), and Chaudhuri et al. (2023), but are inconsistent with those of Zaman et al. (2020). By examining the sixth hypothesis, the results indicate that Personal attitude has a significant positive effect on entrepreneurial intention, therefore, the sixth hypothesis is fully supported. The results are consistent with those of Miralles et al. (2016), Dinc and Budic (2016), Al-Jubari et al. (2019), Gieure et al. (2020), Jena (2020), Zovko et al. (2020), Kusumawardhany and Dwiarta (2020), Vamvaka et al. (2020), and Tausif et al. (2021), but inconsistent with those of Saeed et al. (2019).

The results of the seventh hypothesis proved that social norms had a significant positive effect on entrepreneurial intention, hence, the seventh hypothesis is fully supported. The results are consistent with those of Al-Jubari et al. (2019), Saeed et al. (2019), Gieure et al. (2020), Vamvaka et al. (2020), and Tausif et al. (2021), but inconsistent with those of Zovko et al. (2020).

Regarding testing the eighth hypothesis, the results indicate that perceived behavioral control had an insignificant positive effect on entrepreneurial intention, therefore, the eighth hypothesis is not supported. The results are consistent with Zovko et al. (2020), but inconsistent with Miralles et al. (2016), Dinc and Budic (2016), Al-Jubari et al. (2019), Saeed et al. (2019), Cynthia (2020), and Tausif et al. (2021). On the other hand, the findings of the ninth hypothesis revealed that innovativeness and risk-taking had significant positive effects on entrepreneurial intention, hence, the ninth hypothesis is partially supported. The results are

consistent with those of Mandongwe and Jaravaza (2020), Wathanakom et al. (2020), Chafloque-Cespedes et al. (2021), Hassan et al. (2021), and Singh and Mehdi (2022), but inconsistent with those of Efrata et al. (2021) and Twum et al. (2021).

The findings of the tenth hypothesis find that family business involvement partially mediates the relationship between innovativeness and entrepreneurial intention and fully mediates the relationship between pro-activeness and entrepreneurial intention, therefore, the tenth hypothesis is partially supported. The results of the eleventh hypothesis indicate that personal attitude partially mediates the relationship between innovativeness, risk-taking, and entrepreneurial intention, and fully mediates the relationship between pro-activeness and entrepreneurial intention. However, the findings of the twelfth hypothesis indicate that social norms partially mediate the relationship between innovativeness and entrepreneurial intention, and fully mediate the relationship between pro-activeness and entrepreneurial intention. Finally, testing the thirteenth hypothesis revealed that perceived behavioral control did not mediate the relationship between entrepreneurial orientation and entrepreneurial intention.

b) Research Recommendations and Limitations

This research provides detailed recommendations for various stakeholders and future research. For decision-makers and enterprise owners, it is recommended to prioritize innovativeness and pro activeness, as these dimensions significantly influence family involvement within businesses, social norms, and perceived behavioral control. Additionally, focusing on all three dimensions of entrepreneurial orientation (including risk-taking) is crucial because they collectively have a strong impact on personal attitudes. To enhance entrepreneurial intentions among potential entrepreneurs, especially within family enterprises, these elements should be integrated into business strategies and organizational cultures.

Academic institutions and educators of entrepreneurship should develop clear and comprehensive curricula that thoroughly explain the concepts of family business involvement, personal attitudes, and social norms. These concepts are critical because they significantly affect entrepreneurial intention. Proper education on these variables equips students with the knowledge and skills needed to successfully engage in entrepreneurial activities and make informed decisions when starting their businesses.

This research suggests focusing more on the independent variables of EO (innovativeness, pro-activeness, and risk-taking) as key factors influencing entrepreneurial intention. Researchers should investigate additional EO dimensions of entrepreneurial orientation to provide a broader understanding of its impact. Future research should apply similar studies in

other developing countries to compare results and gain a global perspective on the factors influencing entrepreneurial intention. Comparative studies between developed and developing countries are also recommended to understand the differences and similarities in entrepreneurial orientation and intention across different economic contexts. Extending the study duration and increasing the sample size will help obtain more generalized and robust results. Additionally, future research should explore other potential mediators and moderators that could influence the relationship between entrepreneurial orientation and entrepreneurial intention, such as cultural factors, economic conditions, and policy environments.

Several limitations were identified in this research. The timing of data collection was limited, suggesting that future research should include a longer period to capture more comprehensive data. The study sample, consisting of 445 respondents from Egypt, may not be representative of other contexts, indicating the need for a larger and more diverse sample in future studies. The focus on Egypt as the sole case study also limited the generalizability of the findings. Comparative studies involving multiple developing countries and those that compare developed and developing countries are recommended to provide a holistic understanding of the phenomena under investigation.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Al-Jubari, I., Hassan, A. and Liñán, F., 2019. Entrepreneurial intention among University students in Malaysia: integrating self-determination theory and the theory of planned behavior. *International Entrepreneurship and Management Journal*, 15 (4), pp.1323-1342.
2. Arzubaga, U., Iturralde, T., Maseda, A. and Kotlar, J., 2018. Entrepreneurial orientation and firm performance in family SMEs: the moderating effects of family, women, and strategic involvement in the board of directors. *International Entrepreneurship and Management Journal*, 14 (1), pp.217- 244.
3. Awang, A., Amran, S., Nor, M.N.M., Ibrahim, I.I. and Razali, M.F.M., 2016. Individual entrepreneurial orientation impact on entrepreneurial intention: Intervening effect of PBC and subjective norm. *Journal of Entrepreneurship, Business and Economics*, 4 (2), pp.94-129.
4. Bagis, A. A., 2022. Building students' entrepreneurial orientation through entrepreneurial intention and workplace spirituality. *Heliyon*, 8 (11).
5. Chafloque-Cespedes, R., Alvarez-Risco, A., Robayo-Acuña, P.V., Gamarra-Chavez, C.A., Martinez-Toro, G.M. and Vicente-Ramos, W., 2021, February. Effect of sociodemographic factors in entrepreneurial orientation and entrepreneurial intention in university students of Latin American



- business schools. In *Universities and entrepreneurship: meeting the educational and social challenges* (pp. 151-165). Emerald Publishing Limited.
6. Chaudhuri, S., Agrawal, A.K., Chatterjee, S. and Hussain, Z. (2023), "Examining the role of gender on family business entrepreneurial intention: influence of government support and technology usage", *Journal of Family Business Management*, Vol. 13 No. 3, pp. 665-686.
 7. Çiriş Yildiz, C., Ulaşlı Kaban, H. and Tanriverdi, F.Ş., 2022. COVID-19 pandemic and personal protective equipment: Evaluation of equipment comfort and user attitude. *Archives of Environmental & Occupational Health*, 77(1), pp.1-8.
 8. Cynthia, A.U., Ameh, A.A. and Alabi, J.O., 2020. Perceived behavioural control and entrepreneurial intention: Empirical evidence from selected tertiary institutions in Kogi State. *Ilorin Journal of Human Resource Management*, 4 (2), pp.66-77.
 9. Demir, S., 2022. Comparison of normality tests in terms of sample sizes under different skewness and Kurtosis coefficients. *International Journal of Assessment Tools in Education*, 9 (2), pp.397- 409.
 10. DINC, M.S. and Budic, S., 2016. The impact of personal attitude, subjective norm, and perceived behavioural control on entrepreneurial intentions of women. *Eurasian Journal of Business and Economics*, 9 (17), pp.23-35.
 11. Dos Santos, R.C., dos Santos, I.L., Raupp, F.M. and Tutida, A.Y., 2022. Familiness and Entrepreneurial Orientation: An Epistemological Systematization of the Literature Review. *Retail Management Review*, 2 (1), pp. e033-e033.
 12. EFRATA, T.C., RADIANTO, W.E.D. and EFFENDY, J.A., 2021. The Influence of Role Models on Entrepreneurial Intention: Does Individual Innovativeness Matter? *The Journal of Asian Finance, Economics, and Business*, 8 (2), pp.339-352.
 13. Ekpe, I. and Mat, N., 2012. The moderating effect of social environment on the relationship between entrepreneurial orientation and entrepreneurial intentions of female students at Nigerian universities. *International Journal of Management Sciences and Business*, 1(4).
 14. Galvão, A.R., Marques, C.S., Ferreira, J.J. and Braga, V., 2020. Stakeholders' role in entrepreneurship education and training programmes with impacts on regional development. *Journal of Rural Studies*, 74, pp.169-179.
 15. Garcia-Castro, R. and Aguilera, R.V., 2014. Family involvement in business and financial performance: A set-theoretic cross-national inquiry. *Journal of Family Business Strategy*, 5 (1), pp.85-96.
 16. Gieure, C., del Mar Benavides-Espinosa, M. and Roig-Dobón, S., 2020. The entrepreneurial process: The link between intentions and behavior. *Journal of Business Research*.
 17. Glowka, G., Kallmünzer, A. and Zehrer, A., 2021. Enterprise risk management in small and medium family enterprises: the role of family involvement and CEO tenure. *International Entrepreneurship and Management Journal*, 17 (3), pp.1213-1231.
 18. Hagger, M.S., Cheung, M.W.L., Ajzen, I. and Hamilton, K., 2022. Perceived behavioral control moderating effects in the theory of planned behavior: A meta-analysis. *Health Psychology*, 41 (2), p. 155.
 19. Hair Jr, J.F., Sarstedt, M., Matthews, L.M. and Ringle, C.M., 2016. Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I—method. *European Business Review*.
 20. Halizah, S.N. and Mardikaningsih, R., 2022. The Role of Family Support, Learning Achievement and Student Entrepreneurial Intention. *International Journal of Service Science, Management, Engineering, and Technology*, 2 (3), pp.13-18.
 21. Hassan, A., Anwar, I., Saleem, I., Islam, K.B. and Hussain, S.A., 2021. Individual entrepreneurial orientation, entrepreneurship education and entrepreneurial intention: The mediating role of entrepreneurial motivations. *Industry and Higher Education*, 35 (4), pp.403-418.
 22. Hernández-Perlines, F., Ibarra Cisneros, M.A., Ribeiro-Soriano, D. and Mogorrón-Guerrero, H., 2020. Innovativeness as a determinant of entrepreneurial orientation: analysis of the hotel sector. *Economic research-Ekonomska istraživanja*, 33 (1), pp.2305-2321.
 23. Hooi, H.C., Ahmad, N.H., Amran, A. and Rahman, S.A., 2016. The functional role of entrepreneurial orientation and entrepreneurial bricolage in ensuring sustainable entrepreneurship. *Management research review*, 39 (12), pp.1616-1638.
 24. Hwang, J., Kim, J.J. and Lee, K.W., 2021. Investigating consumer innovativeness in the context of drone food delivery services: Its impact on attitude and behavioral intentions. *Technological Forecasting and Social Change*, 163, p.120433.
 25. Jena, R. K., 2020. Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, p. 106275.
 26. Jovic, M.R., Morris, M.H. and Kuratko, D.F., 2023. Familiness and innovation outcomes in family firms: the mediating role of entrepreneurial orientation. *Journal of Small Business Management*, 61(4), pp. 1345-1377.
 27. Kubitskyi, S., Yeremenko, D., Danylenko, V., Bataiev, S. and Varaksina, E., 2024. Evaluating the impact of innovative technologies on global

- competitiveness through modelling. *Multidisciplinary Science Journal*, 6.
28. Kusumawardhany, P.A. and Dwiarta, I., 2020. Entrepreneurial Intention among Millennial Generation: Personal Attitude, Educational Support and Social Media.
 29. Mandongwe, L. and Jaravaza, D.C., 2020. Women entrepreneurial intentions in subsistence marketplaces: The role of entrepreneurial orientation and demographic profiles in Zimbabwe. *Cogent Business & Management*, 7 (1), p.1818365.
 30. Miralles, F., Giones, F. and Gozun, B., 2017. Does direct experience matter? Examining the consequences of current entrepreneurial behavior on entrepreneurial intention. *International Entrepreneurship and Management Journal*, 13 (3), pp. 881-903.
 31. Moreno-Menéndez, A.M., Arzubaga, U., Díaz-Moriana, V. and Casillas, J.C., 2022. The impact of a crisis on entrepreneurial orientation of family firms: The role of organisational decline and generational change. *International Small Business Journal*, 40 (4), pp.425-452.
 32. Munir, H., Jianfeng, C. and Ramzan, S., 2019. Personality traits and theory of planned behavior comparison of entrepreneurial intentions between an emerging economy and a developing country. *International Journal of Entrepreneurial Behavior & Research*.
 33. Onjewu, A.-K.E., Haddoud, M.Y., Tony-Okeke, U., Cao, D. and Nowiński, W. (2022), "Dissecting the effect of family business exposure on entrepreneurial implementation intention", *International Journal of Entrepreneurial Behavior & Research*, Vol. 28 No. 6, pp. 1438-1462.
 34. Saeed, A.Q.N.A.A., Gongyi, Z. and Charkos, T.G., 2019. Entrepreneurial Intentions of Undergraduate Students in Yemen: Applying the Theory of Planned Behaviour.
 35. Saunders, M., Lewis, P. and Thornhill, A., 2016. *Research methods for business students* (Seventh). Nueva York: Pearson Education.
 36. Selim, E., 2021. The Role of Entrepreneurship in Economic Growth and Development Models. 32-59.pp
قيال كمال رمثؤم (صاخ ددع 40) ليومتلاو قراجتلا , 32-59.pp
نيثاثل ءزجال 2020-((
 37. Seyed Kalali, N., 2022. Entrepreneurial orientation in family firms: the effects of long-term orientation. *International Journal of Entrepreneurial Behavior & Research*, 28 (7), pp.1732-1750.
 38. Sinclair, S. and Agerström, J., 2023. Do social norms influence young people's willingness to take the COVID-19 vaccine?. *Health Communication*, 38 (1), pp.152-159.
 39. Singh, L.B. and Mehdi, S.A., 2022. Entrepreneurial orientation & entrepreneurial intention: Role of openness to experience as a moderator. *The International Journal of Management Education*, 20 (3), p.100691.
 40. Smith, J. (2018). The Importance of Primary Data in Research. *Journal of Research Practice*, 14(2).
 41. Smith, J. A. (2010). *Interpretative Phenomenological Analysis: Theory, Method, and Research*.
 42. Sultan, S., Hudson, M., Habash, N., Sultan, W.I. and Izhiman, N., 2024. Entrepreneurial orientation and Palestinian family-owned businesses: does governance or geographic location make a difference?. *Journal of Small Business and Enterprise Development*.
 43. Taber, K.S., 2018. The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48, pp.1273-1296.
 44. TAUSIF, M.R., HAQUE, M.I., RAO, M. and KHAN, M.R., 2021. Antecedents of Entrepreneurial Intentions: A Comparative Study of Cultures. *The Journal of Asian Finance, Economics and Business*, 8 (5), pp.381-389.
 45. Twum, K.K., Kwakwa, P. A., Ofori, D. and Nkukporu, A., 2021. The relationship between individual entrepreneurial orientation, network ties, and entrepreneurial intention of undergraduate students: implications on entrepreneurial education. *Entrepreneurship Education*, 4 (1), pp.39-66.
 46. Upadhyay, N., Upadhyay, S., Al-Debei, M.M., Baabdullah, A.M. and Dwivedi, Y.K., 2023. The influence of digital entrepreneurship and entrepreneurial orientation on intention of family businesses to adopt artificial intelligence: examining the mediating role of business innovativeness. *International Journal of Entrepreneurial Behavior & Research*, 29 (1), pp.80-115.
 47. Vamvaka, V., Stoforos, C., Palaskas, T. and Botsaris, C., 2020. Attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention: dimensionality, structural relationships, and gender differences. *Journal of Innovation and Entrepreneurship*, 9 (1), pp.1-26.
 48. Vetter, T.R., 2017. Descriptive statistics: reporting the answers to the 5 basic questions of who, what, why, when, where, and a sixth, so what?. *Anesthesia & Analgesia*, 125 (5), pp.1797-1802.
 49. Wang, D., Wang, L. and Chen, L., 2018. Unlocking the influence of family business exposure on entrepreneurial intentions. *International Entrepreneurship and Management Journal*, 14 (4), pp. 951-974.
 50. Wathanakom, N., Khlaisang, J. and Songkram, N., 2020. The study of the causal relationship between innovativeness and entrepreneurial intention among undergraduate students. *Journal of Innovation and Entrepreneurship*, 9 (1), pp.1-13.

51. Xu, Z., Zhou, Y., Zhang, Y., Zhang, Y. and Ouyang, Z. (2023), "Family-work enrichment and entrepreneurial intentions: a family affective support perspective", *Management Decision*, Vol. 61 No. 1, pp. 57-76.
52. Yong, A.G. and Pearce, S., 2013. A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in quantitative methods for psychology*, 9 (2), pp.79-94.
53. Zaman, S., Arshad, M., Sultana, N. and Saleem, S., 2020. The effect of family business exposure on individuals' entrepreneurial intentions: an institutional theory perspective. *Journal of Family Business Management*.
54. Zollo, L., Rialti, R., Tron, A. and Ciappei, C., 2021. Entrepreneurial passion, orientation and behavior: The moderating role of linear and nonlinear thinking styles. *Management Decision*, 59 (5), pp.973-994.
55. Zovko, L., Bilić, I. and Dulčić, Ž., 2020. Determinants of students' entrepreneurial intention: An empirical research. *Management: Journal of Contemporary Management Issues*, 25 (1), pp.25-44.



Analysis of the Financial and Economic Profitability of Rice Production in the Far North of Cameroon: The Case of SEMRY

By Asse Célestin, Ibrahima & Evina Dieudonné

ESSEC- Université de Douala

Résumé- La rentabilité financière et économique est un élément efficace permettant de comprendre si un système de production agricole est performant ou non. La Société d'Expansion et de Modernisation de la Riziculture de Yagoua (SEMRY) constitue une zone représentative de tous les systèmes de production de riz irrigué au Cameroun. Compte tenu de l'importance socioéconomique et alimentaire du riz, le présent travail a pour objectif d'analyser la rentabilité financière et économique de ces systèmes de production. La méthode de la Matrice d'Analyse des Politiques (MAP) a été utilisée pour calculer les ratios de mesure des rentabilités financière et économique. Ce système de production est financièrement rentable mais économiquement non rentable. Cette non rentabilité est causée par l'inaccessibilité à certains biens échangeables et les importations massives du riz étranger. Pour soutenir les producteurs, il faut mettre en place des subventions et des crédits pour faciliter le financement de leurs activités.

Mots Clés: riz, rentabilité, investissements, SEMRY, cameroun.

GJMBR-B Classification: JEL Code: Q12



Strictly as per the compliance and regulations of:



Analysis of the Financial and Economic Profitability of Rice Production in the Far North of Cameroon: The Case of SEMRY

Analyse De La Rentabilité Financière Et Economique De La Production Du Riz A l'Extrême-Nord Du Cameroun: Cas De La SEMRY

Asse Célestin ^α, Ibrahima ^σ & Evina Dieudonné ^ρ

Résumé- La rentabilité financière et économique est un élément efficace permettant de comprendre si un système de production agricole est performant ou non. La Société d'Expansion et de Modernisation de la Riziculture de Yagoua (SEMRY) constitue une zone représentative de tous les systèmes de production de riz irrigué au Cameroun. Compte tenu de l'importance socioéconomique et alimentaire du riz, le présent travail a pour objectif d'analyser la rentabilité financière et économique de ces systèmes de production. La méthode de la Matrice d'Analyse des Politiques (MAP) a été utilisée pour calculer les ratios de mesure des rentabilités financière et économique. Ce système de production est financièrement rentable mais économiquement non rentable. Cette non rentabilité est causée par l'inaccessibilité à certains biens échangeables et les importations massives du riz étranger. Pour soutenir les producteurs, il faut mettre en place des subventions et des crédits pour faciliter le financement de leurs activités. La formation, l'information et l'encadrement technique doivent également être apportés aux producteurs afin qu'ils respectent l'itinéraire technique et les normes vis-à-vis du marché international.

Mots Clés: riz, rentabilité, investissements, SEMRY, cameroun.

I. INTRODUCTION

La croissance et la stabilité de l'économie nationale des pays pauvres dépendent majoritairement de la production efficace du secteur agricole (Salisu, 2021). Mondialement connu comme l'Afrique en miniature, le Cameroun comporte d'abondantes ressources foncières encore largement sous exploitées; un fort potentiel de terres irrigables estimé à environ 240 000 ha, des populations rurales très entreprenantes et dynamiques et une position géographique hautement stratégique. Il bénéficie des conditions naturelles très favorables à la production agricole. Tous ces atouts font du Cameroun aujourd'hui, le grenier de l'Afrique centrale. De ce fait, le défi de la sécurité alimentaire du pays ne concerne pas seulement le niveau national, mais aussi le niveau sous régional pour lequel

l'insécurité alimentaire peut conduire à une instabilité sociale. L'objectif global du secteur rural tel que défini dans le Document de Stratégie pour Croissance et l'Emploi est de faire du Cameroun une puissance agricole sous régionale où le secteur agricole est un moteur de l'économie nationale, assurant la sécurité alimentaire des populations dans un souci de développement durable, respectueux de l'environnement. Dans cette optique, le Gouvernement s'est doté d'une Stratégie de Développement du Secteur Rural dont l'un des objectifs majeurs est l'accélération de l'accroissement des productions agricoles qui contribuera à relever ce défi. L'atteinte de ces objectifs passe par la mise en œuvre de quatre programmes notamment: l'amélioration de la productivité et la compétitivité agricole, la modernisation des infrastructures et les facteurs de production; la gestion durable des ressources naturelles; la gouvernance et l'appui institutionnel dans le secteur agriculture et développement rural.

Dans le but d'augmenter la production agricole et d'assurer la sécurité alimentaire, le Cameroun entend appuyer à court et moyen termes, le développement des filières stratégiques. L'Etat a classé le riz parmi les filières stratégiques, depuis la flambée des prix des denrées alimentaires en 2008.

La présente étude s'articule autour de quatre sections essentiellement: le cadre théorique de l'analyse de la rentabilité financière et économique des filières agricoles; l'état des lieux et diagnostic de la filière riz au Cameroun; la démarche méthodologique et la présentation des résultats, discussion et recommandations.

II. THÉORIES DE L'ANALYSE DE LA RENTABILITÉ FINANCIÈRE ET ECONOMIQUE DES FILIÈRES AGRICOLES

Il existe une abondante littérature sur la rentabilité financière et économique des filières agricoles et rizicoles. Atindegla (1999) et Afomasse & Arouna, (2004) ont montré dans leurs études

Author ^{α σ ρ}: ESSEC- Université de Douala (Cameroun).
e-mails: celestinasse@yahoo.fr, ibrahimadoc@yahoo.fr,
evinadieudonne9@gmail.com.

respectives que les rentabilités financière et économique des systèmes de production varient en fonction du système de production. Les résultats de Atindegla (1999), au lendemain de la dévaluation, montrent qu'elle a entraîné des effets politiques globalement positifs en termes de rentabilités financière et économique. Il en déduit que la filière coton et le riz en l'occurrence présentent de bonnes perspectives de développement si les mesures politiques et économiques accompagnent les initiatives et les projets et améliorent l'efficacité et la compétitivité du système de production fortement représenté par les petits producteurs. Arouna & Afomasse (2004), ont identifié huit sous-filières dont l'analyse de la rentabilité a montré qu'elles sont financièrement rentables et procurent un avantage comparatif pour la communauté de la zone d'étude. En outre, leur analyse de la compétitivité de la filière montre que les sous filières les plus compétitives sont constituées des systèmes de production où les producteurs utilisent l'urée et le sulfate de potassium : deux types d'engrais recommandés par les services agricoles pour la production du riz. Ces sous-filières procurent l'avantage comparatif le plus élevé pour le pays. Aussi, il en découle que les grands et moyens producteurs ont un avantage comparatif, mais plus faible, que celui des petits producteurs car leurs investissements sont très élevés. De par les études de ces trois auteurs, nous pouvons dire que le Cameroun possède, au vu de son potentiel, un avantage comparatif de produire, de transformer et même d'exporter du riz en concentrant l'effort sur l'accompagnement des petits producteurs.

Notre étude consiste à faire une analyse auprès de ces organisations pour étudier la rentabilité financière et économique du riz afin de dégager des pistes de solutions pour booster la production, la productivité et surtout la compétitivité de cette filière.

La rentabilité financière se rapporte aux revenus et aux coûts observés, reflétant les prix réels du marché reçus par les producteurs, les commerçants, ou les transformateurs dans le système agricole (Monke & Pearson, 1989)¹. Pour Houndekon (1996), la rentabilité financière nette d'une activité est la différence entre la valeur et le coût de la production calculé sur la base des prix observés sur le marché, l'estimation de cette différence indique le niveau de rentabilité financière nette.

La rentabilité économique évalue la même différence mais, sur la base des prix économiques ou prix sociaux qui permettent de mesurer les avantages comparatifs ou l'efficacité du système de production agricole. La différence entre les rentabilités financière et

économique se situe à deux niveaux. Le système de prix utilisé pour les calculs de la rentabilité financière est le prix du marché alors que le calcul de la rentabilité économique repose sur le prix de référence. Aussi, en plus des prix économiques, la rentabilité économique devrait intégrer les externalités issues de chaque activité de production. Dans notre étude, l'évaluation de la rentabilité économique est basée uniquement sur le profit économique net, le Coût des Ressources Domestiques et le ratio avantage coût économique.

Par ailleurs, la littérature distingue deux approches d'estimation des profits économiques: la méthode des effets et la méthode du prix de référence. D'origine française, la méthode des effets est une mesure des coûts et bénéfices de l'activité tels qu'ils apparaissent dans l'ensemble de l'économie nationale en utilisant le prix du marché. La méthode du prix de référence qui est une méthode anglo-saxonne, mesure au niveau de l'activité, le coût de l'emploi des ressources et la valeur sociale des biens et services consommés par la collectivité. Dans cette méthode, on substituerait au prix du marché, le prix théorique reflétant la "valeur juste" pour la collectivité. Pour la FAO(2005), "les prix de référence sont des valeurs qui remplacent les prix de marché dans les calculs théoriques lorsque l'on considère que les prix du marché ne représentent pas la vraie valeur économique du bien ou du service. Pour les facteurs échangeables, le prix mondial est choisi comme prix de référence. Mais, comme le révèle Houndekon (1996), plusieurs auteurs s'interrogent sur la pertinence du prix mondial choisi comme prix de référence, étant donné que ces prix sont fortement subventionnés.

Pour les facteurs non échangeables tels que la terre et le travail, diverses approches ont été utilisées pour estimer leur prix de référence. Selon certains auteurs, le prix de référence de la terre est zéro (0) car la terre serait un facteur abondant. Mais dans notre cas, la zone d'étude est une zone très soumise au paiement de la taxe foncière dite redevance. La pression foncière y est forte, le coût d'opportunité de la terre ne saurait être considéré comme nul. Aussi les producteurs n'ayant de terre en propriété, la louent contre le paiement au propriétaire en l'occurrence la SEMRY². C'est pourquoi, nous affirmons avec Gittinger (1985) que la rente payée par les producteurs peut remplacer valablement le prix de référence de la terre, car ceux qui payent la rente, ne l'auraient pas acceptée si elle ne correspondait pas à la valeur réelle.

¹ Monke, E. A. et Pearson, S. R. (1989): The Policy Analysis Matrix (PAM) for Agricultural Development. Ithaca: Cornell University Press, 1989.

² La SEMRY désigne la Société d'expansion et de modernisation de la riziculture de Yagoua à l'extrême nord du Cameroun.

III. L'ÉTAT DES LIEUX ET DIAGNOSTIC DE LA FILIÈRE RIZ AU CAMEROUN

Au Cameroun, les principaux bassins de production du riz se situant dans les trois régions de l'Extrême Nord (61%), du Nord-Ouest (16%), et du Nord (12%), assurent 90% de la production de riz au Cameroun. L'essentiel de son vaste potentiel rizicole se trouve dans la région de l'Extrême-nord.

La gestion a été confiée à la SEMRY, une entreprise à capitaux publics à hauteur de 04 milliards 580 millions de FCFA, avec l'Etat comme actionnaire unique. Créée par Décret Présidentiel N° 71/DF/74 du 24 février 1971, elle était alors inscrite dans la catégorie de « Société de Développement ». Son siège est fixé à Yagoua dans le Département du Mayo-Danay. Elle a pour mission essentielle de lutter contre la pauvreté en améliorant les conditions de vie des populations en proie à la rudesse du climat sahélien; contribuant à l'autosuffisance du Cameroun en riz produit sur son sol; limitant l'exode rural par la fixation des jeunes dans les villages riziocoles.

La SEMRY est une société parapublique désignée à gérer les activités riziocoles sur deux périmètres: à Yagoua (6300 ha) et à Maga (7200 ha) situées dans cette région. Elle est chargée de la mise à la disposition des populations des surfaces « riziocultivables »; l'accélération du développement économique dans les régions d'implantation de la SEMRY; l'amélioration et l'augmentation de la production rizicole au niveau national. Placée sous la tutelle du Ministère de l'Agriculture et du Développement Rural, elle est dotée des engins de labour, et des unités d'usinage.

Depuis le désengagement de l'Etat suite aux ajustements structurels, l'exploitation est assurée par les particuliers et des riziculteurs groupés en organisations des producteurs. Cependant la production n'est pas

assez reluisante à cause de la baisse drastique de la rentabilité de cette filière locale pourtant doté d'un potentiel promoteur. La faiblesse des moyens des producteurs de riz et la mauvaise qualité de la semence font baisser les rendements du riz. Cette situation est encore aggravée par la mauvaise gestion de l'exploitation, les mauvaises conditions climatiques, et la faiblesse et l'instabilité des cours internationaux du riz.

La SEMRY éprouve de nombreuses difficultés de fonctionnement. Le résultat de la structure est en baisse constante depuis 2016. Entre 2016 et 2018, les dettes fiscales de la SEMRY sont passées de 1 milliard 800 millions FCFA à plus de 3 milliards FCFA³. Cette situation démotive certains bons producteurs de riz et ne pourrait perdurer au risque de voir certaines Coopératives de Producteurs de Riz manquer de financement pour les intrants, autrement dit l'arrêt de la culture du riz au niveau des zones de production, ou des milliers de personnes vivent directement des revenus de cette culture.

a) Matériel Et Méthodes

Le riz fait partie des aliments de base des populations du Cameroun. La demande étant étroitement liée à la croissance démographique de la population et au taux d'urbanisation. L'indice de consommation du riz par habitant est d'environ (25kg/ht/an) (Ministère de l'Economie et de la Planification du Territoire, 2020).

D'après l'Institut National de la Statistique (INS), le pays a importé 652 565 tonnes de riz pour un montant de 162,5 milliards de FCFA au cours des 10 premiers mois de l'année 2022. Le besoin en riz au Cameroun est sans cesse croissant mais la production nationale couvre à peine 20% et l'essentiel de la demande est assuré par des importations ce qui représente un gap de 80%. Le tableau 1 suivant illustre:

Tableau 1: Gap Entre L'offre Et La Demande En Produits Alimentaires De Première Nécessité Au Cameroun En 2020

| Produits alimentaires en 2020 | Consommation en kg/tête/an | Demande nationale (tonnes) | Production nationale (tonnes) | Gap (tonnes) | Niveau de satisfaction de la demande |
|-------------------------------|----------------------------|----------------------------|-------------------------------|--------------|--------------------------------------|
| Blé | 65* | 900 000 | 100 | 899 000 | 0,01% |
| Riz | 25 | 600 000 | 140 000 | 460 000 | 23,33% |
| Poisson | 20 | 500 000 | 93 000 | 407 000 | 18,60% |
| Lait ** | 10 | 395 000 | 275 000 | 120 000 | 69,62% |

Source: rapports Ministère de l'Agriculture et du Développement Rural et Ministère des Pêches et des Industries Animales, 2020-2022 * tendance mondiale, ** en litres

Selon le journal Investir au Cameroun du 18/10/2024, le pays vise une production de 460 000 tonnes en 2027, toujours insuffisante pour satisfaire la demande locale. Ceci a conduit l'Etat du Cameroun à chercher des stratégies pour combler non seulement ce fossé, mais également à assurer sa sécurité alimentaire

et réduire par là sa dépendance face à l'importation massive de cette denrée devenue stratégique.

³ Selon le rapport de la situation des entreprises publiques du 31 décembre 2016.

b) Domaine D'activité Et Données Collectées

Le domaine d'activités de la SEMRY est la pratique de la riziculture irriguée en double culture annuelle sur 11 500 hectares aménagés répartis sur deux périmètres, dont 5 300 hectares à Yagoua. La société encadre 20 000 familles de riziculteurs et donc, près de 160 000 âmes qui tirent leurs revenus essentiellement de la riziculture.

La SEMRY dispose de grands atouts parmi lesquels un sol riche, adapté à la riziculture avec des possibilités d'extension; une variété de riz, l'IR46, qui permet de boucler deux cycles culturaux par an et qui donne des rendements moyens de six tonnes de paddy à l'hectare en milieu paysan. Ce qui la classe parmi les meilleures d'Afrique. Ce riz présente aussi des qualités organoleptiques inégalables: il a une très bonne saveur et est naturellement parfumé. Des campagnes de dégustation organisées par le Ministère du Commerce en 2010, en prélude à la tenue du Comice Agropastoral d'Ebolowa, ont démontré que l'IR46 est de loin la meilleure de toutes les variétés de riz cultivées, commercialisées et consommées au Cameroun.

L'autre atout indéniable de la Société d'Expansion et de modernisation de la Riziculture de Yagoua repose sur une population rizicole nombreuse et dynamique qui maîtrise de mieux en mieux les techniques culturelles modernes. Sur le registre économique, la riziculture injecte plus de 8 milliards de F CFA chaque année dans l'économie de la Vallée du Logone.

En perspective, un plan stratégique visant la satisfaction totale des besoins du Cameroun en riz à l'horizon 2030 a été prescrit par le MINADER à la SEMRY. Ce plan prend en compte l'extension des compétences techniques de la société à d'autres bassins de production du riz du Septentrion tels Lagdo, Zina, Kousseri et Faro.

Notre enquête porte sur 374 membres d'organisations des producteurs agricoles réparties dans les zones de Maga et Pouss. Un sondage de 30% a concerné l'ensemble de personnes recensées dans la zone d'étude soit un effectif de 112 personnes.

c) Le Riz Local Et Le Riz Importé

Selon une étude réalisée par l'Agence Japonaise de Coopération Internationale⁴ (JICA), de février à août 2021, 80% de la consommation de riz repose sur les importations. Le riz local compte pour 20% de la distribution totale, mais une partie de la production nationale est écoulée vers le pays voisins. Les centres de consommation sont situés dans les deux grandes villes de Douala et Yaoundé où 75% du riz importé est consommé. A la différence du port maritime situé à Douala et à 250 km de Yaoundé, les deux

grandes régions de productions sont éloignées de ces deux grands centres de consommation, ce qui rend difficile l'écoulement du riz local. Le plus grand bassin de production de la SEMRY est situé à 1300 km de Yaoundé et à 1550 km de Douala. L'autre bassin de production important se situe au nord-ouest: Upper Noun Valley Development Authority, à 450 km de Douala et à 390 km de Yaoundé. Ainsi, il est rare de voir du riz local sur les principaux marchés locaux (JICA, 2017).

Quant à la qualité du riz local, les populations habitant dans les villes sont en générale plus aisées et préfèrent le riz importé car il est de meilleure qualité que le riz local qui comporte de nombreuses impuretés. Cependant, les productions du Cameroun sont si limitées que le riz importé doit également être acheminé en zones rurales afin de répondre aux besoins de la population (JICA, 2017). Malgré la progression de la production, le pays continu d'être dépendant des importations. Une bonne partie du riz paddy produit à l'Extrême-Nord est directement vendue au Nigéria ou au Tchad par les agriculteurs dans certains villages. Certains agriculteurs vendent leur paddy à la SEMRY pour la transformation et la consommation nationale également. Quant au riz importé, l'approvisionnement est assuré par une dizaine d'importateurs. Le marché est toutefois dominé par certaines sociétés. En 2019, 803 505 tonnes de riz ont été importés⁵.

Depuis les émeutes de la faim de 2008, liées à la hausse de prix importante des produits alimentaires au Cameroun, les acteurs de la filière de riz commerce, se réunissent périodiquement pour établir les prix et l'approvisionnement du riz sur l'ensemble du territoire (JICA, 2017).

IV. METHODOLOGIE

Le choix de notre sujet sur l'analyse de la rentabilité financière et économique de la production rizicole à la SEMRY au nord Cameroun trouve tout son sens dans cette situation de libéralisation du marché où le jeu de la concurrence s'avère défavorable à l'économie camerounaise. Pour cela, nous supposons que le système de production du riz est financièrement et économiquement rentable. Il est donc indispensable d'identifier le système de production et de déterminer les coûts, les revenus et les profits. L'analyse financière va se baser sur la Profitabilité Privée Nette tandis que la rentabilité économique, sera basée sur les coûts, les revenus bruts et les profits économiques du paddy et riz blanc.

⁴ L'Agence Japonaise pour la Coopération Internationale est connue sous le sigle JICA.

⁵ Selon les données du journal La Voix du Paysan de 2020.

a) *Présentation De La Zone D'étude*

Le cadre de notre étude est la SEMRY. Les personnes interrogées ont été sélectionnées de manière raisonnée, c'est-à-dire, selon leur appartenance à une organisation de producteur qui est notre échantillon cible.

i. *Environnement Biophysique*

La SEMRY est située dans l'arrondissement de Maga, département du Mayo Danay, région de rizicole à la SEMRY au Nord Cameroun qui est une zone largement occupée par une vaste plaine d'inondation de 8 000 Km², appelée le grand Yaéré. Celui-ci s'étend à l'ouest du bourrelet de berge du Logone; il est contenu à l'ouest avant la frontière du Nigeria par la route sur digue Mora-Waza-Tilde et s'étend au Sud, de Yagoua à l'est, à Bogo au centre et au nord de Mora à l'ouest. Côté sud-ouest du Yaéré, les apports proviennent essentiellement des Monts Mandara. Côté est, le Yaéré est alimenté par les déversements du Logone (VIVA-Logone, 2020).

ii. *Principales Activités Economiques: Agriculture*

L'agriculture est la principale activité économique et porte essentiellement sur la culture du riz. Celle-ci se pratique dans les parcelles de la SEMRY (6 200 hectares). Cette activité se pratique également dans les rizières aménagées par les populations elles-mêmes (hors casiers). Deux campagnes sont organisées chaque année. Les labours se font mécaniquement avec les engins de la SEMRY et de manière attelée avec les bovidés. Les pesticides et herbicides sont de plus en plus utilisés par les riziculteurs pour la préparation des parcelles.

Tableau 2: Répartition Des Producteurs Enquêtés Par Commune

| | Fréquence | Pourcentage | Pourcentage valide | Pourcentage cumulée |
|-------|-----------|-------------|--------------------|---------------------|
| Maga | 74 | 66,1 | 66,1 | 66,1 |
| Pouss | 38 | 33,9 | 33,9 | 100 |
| Total | 112 | 100 | 100 | |

Source: enquête de 2024 et par nos soins

iv. *Collecte De Données*

La collecte des données s'est déroulée en trois grandes phases: la recherche documentaire et la recherche de données secondaires auprès de la bibliothèque de la mairie de Douala 2. Ce qui a abouti l'élaboration du premier draft du protocole de recherche; L'enquête exploratoire pour identifier les systèmes de production existants, a servi à la confection du questionnaire qui a été par la suite testé et amélioré; L'enquête fine a consisté en la collecte proprement dite des données primaires, au traitement des données, à l'analyse des résultats.

v. *L'instrument De Collecte Des Données: L'entretien Semi-Directif*

Parmi les techniques de collecte de données qualitatives les plus utilisées, nous avons trouvé judicieux de recourir à l'entretien semi-directif qui paraît,

iii. *Technique D'échantillonnage*

Les localités de Maga et Pouss dans la SEMRY sont choisies dans la zone d'étude. Le principal critère qui a conduit au choix du lieu est la présence dans la zone des gros producteurs et des petits producteurs. Ces derniers sont regroupés en unions et réseaux. La SEMRY constitue également la zone de forte production et a l'avantage de regrouper les différents systèmes de production du riz généralement exploités que sont le riz irrigué et le système pluvial.

Les producteurs enquêtés ont été sélectionnés suivant une typologie des systèmes de production réalisée et compte tenu de la fiabilité des données exigées pour la Matrice d'Application de Politiques, un choix raisonné de producteurs a permis d'obtenir les 112 producteurs pour l'enquête fine.

La collecte de données au cours de la phase exploratoire a permis d'établir une typologie des systèmes de production du riz. En s'inspirant des travaux de Adegbola et al. (2002) et de nos observations, on distingue deux types de riziculture dans la zone: la riziculture pluviale stricte de bas-fonds et la riziculture irriguée. C'est le système de production irrigué qui fait l'objet de notre étude. Pour pouvoir disposer des données assez fiables et précises, sur les 374 producteurs dont 222 à Maga et 152 à Pouss. Un taux de sondage de 30% a été retenu pour l'enquête fine. Notre échantillon a été tiré sur la base de ce taux de sondage parmi les 374 producteurs recensés. Au terme, 112 producteurs ont été enquêtés. Le tableau 2 suivant indique la répartition des enquêtés.

à notre sens, le mieux adapté à notre objectif. Il s'agit d'un entretien avec une personne à la fois. L'intérêt de cette modalité, c'est que la personne est seule et peut s'exprimer en toute liberté sans craindre d'être contredite et avec le sentiment de dire la vérité et d'être prise au sérieux.

vi. *Elaboration Du Guide D'entretien*

Le Guide a été structuré en quatre thèmes principaux:

- *Thème 1:* Identification du répondant
- *Thème 2:* Les causes ayant contribué à la désagrégation des facteurs de productivité et de la compétitivité de la production rizicole a la Société d'Expansion et de Modernisation de la Riziculture de Yagoua.
- *Thème 3:* Les outils et politique de leviers de croissance nécessaires à mettre en œuvre pour

améliorer la productivité du riz et booster la compétitivité de la filière.

- *Thème 4: L'importance de l'évaluation de la rentabilité de la production rizicole et recommandations*

b) *Données Secondaires Et Données Primaires*

Les données secondaires suivantes ont été collectées: Les données sur le prix paritaire du riz tel que le prix FOB, le fret et assurance, les prix CAF, les droits de douane. Les données sur les prix CAF des intrants agricoles, les différents frais intermédiaires liés à l'importation et à la commercialisation des intrants agricoles (engrais), les prix de vente aux producteurs des intrants agricoles avec ou sans taxe, la méthode de calcul des prix de vente des intrants.

Les données primaires ont été collectées dans la zone d'étude à l'aide d'un questionnaire.

Préétabli et d'un guide d'entretien auprès des producteurs, des transformateurs. La production obtenue au cours de la campagne 2024 en tonne/ha puis convertie en kg.

i. *Traitement Des Données*

Les données ont été complètement saisies sur le logiciel Excel et traitées avec le logiciel SPSS. A différentes étapes, les calculs intermédiaires ont été nécessaires avant d'établir la Matrice d'Application des Politiques.

ii. *Détermination Des Prix Financiers Et Economiques*

Le prix financier est le prix que le producteur du riz a effectivement encaissé ou le prix auquel il a acheté les intrants par exemple tandis que le prix économique est le prix auquel le producteur devra vendre en absence de distorsions et d'imperfections sur le marché.

iii. *Estimation Des Quantités Physiques Et Des Coûts De Production*

Le coût de production regroupe les coûts des différents inputs utilisés pour produire. Il s'agit des facteurs échangeables et des facteurs non échangeables. Les quantités physiques des intrants considérés pour les calculs, sont celles directement obtenues auprès des producteurs extrapolés à l'hectare. Mais au niveau des systèmes de production, ce sont les quantités moyennes de l'ensemble des producteurs constituant le système qui sont considérées pour les calculs.

Le calcul du coût des intrants concède le coût financier et le coût économique. Le coût financier est le prix financier des intrants utilisés pour la production du riz. C'est le prix courant, c'est-à-dire le prix de marché. Il est à considérer pour l'évaluation du budget financier. Le coût économique est le prix économique des intrants échangeables. C'est le prix obtenu en déduisant les taxes afférentes et en ajoutant les subventions.

iv. *Estimation Des Quantités De Main-D'œuvre*

Les quantités des travaux ont été collectées en heures sur les différentes superficies. Ces heures ont été extrapolées à l'hectare et converties en homme-jour. Un homme jour étant égal à huit heures de travail pour les hommes et six heures de travail pour les femmes. L'homme-jour considéré ici, est égal à 8 heures car nous n'avons enregistré aucune femme dans l'exécution des travaux lors de l'enquête préliminaire bien qu'il y ait des femmes, membres des organisations des producteurs qui décident. L'ensemble des activités est assuré par l'utilisation de la main-d'œuvre salariée.

v. *Calcul Des Coûts Des Opérations Culturelles*

Les coûts d'opportunité des différentes opérations culturelles ont été calculés à partir des coûts de la main d'œuvre salariée obtenus auprès des producteurs. La moyenne pondérée par la superficie a ainsi été retenue comme coût d'opportunité de la main d'œuvre à l'hectare.

vi. *Méthode D'analyse Des Données*

La plupart des auteurs utilisent la Matrice d'Analyse des politiques (MAP) pour analyser les systèmes de production agricoles. Cet outil a été utilisé par d'autres auteurs dans l'analyse économique d'autres filières agricoles. C'est le cas du maïs, du niébé et du coton. C'est le cas de l'analyse économique des systèmes de production du riz dans le Nord-Benin (Houndekon, 1996), de la compétitivité des systèmes rizicoles au Bénin (Adegbola et al. 2002), et de la compétitivité du coton indien (Mohanty et al. 2002).

La MAP a pour objectif d'aider dans la formulation des politiques agricoles et des prises de décision améliorant la compétitivité des produits agricoles sur les marchés nationaux, régionaux et internationaux. Elle permet de façon spécifique d'évaluer la rentabilité financière et économique des cultures; De quantifier ou mesurer l'impact des décisions gouvernementales sur la rentabilité de la production agricole avec les technologies nouvelles.

Pour étudier la compétitivité et l'avantage comparatif de la filière riz au niveau de la zone cible de notre étude, le modèle d'analyse appelé Matrice d'Analyse des Politiques de Monke & Pearson (1989) a été retenu. Selon Lancon (2000, cité par Arouna et Afomasse, 2004), la MAP est un outil de représentation d'un système simple reposant sur la construction de comptes de production des agents représentatifs du système dans deux systèmes de prix: le prix financier et le prix économique. Le prix financier est le prix auquel le producteur achète ou vend. Le prix économique inclut les effets de toutes les interventions politiques, impôts et/ou taxes, subventions directes ou indirectes et autres distorsions du marché. Pour les facteurs échangeables, leur prix économique est le prix paritaire qui est évalué avec le prix international au lieu d'utilisation du bien.

vii. *Structure De La Matrice d'Analyse Des Politiques*

Le modèle de la Matrice d'Analyse des Politiques est un système de comptabilité à double entrée et composé de deux types de budgets. Un budget financier évalué au prix du marché (ou prix financier) et un budget économique évalué aux coûts d'opportunité social (ou prix économique). Les deux types de prix sont utilisés pour calculer les coûts, les revenus et les profits. Ensuite, les divergences entre le budget financier et le budget économique ont été calculées. Enfin le budget pour la production du paddy et riz blanc a été élaboré.

Avant la conception des budgets, les intrants et la production (riz) sont classés en facteurs échangeables et en facteurs non échangeables. Les facteurs échangeables ou commercialisables sont ceux qui peuvent être théoriquement importés ou exportés et évalués sur le marché international, tandis que les facteurs non échangeables ou facteurs domestiques sont ceux qui ne sont pas normalement commercialis-

ables sur le marché international comme la terre, le travail et le capital.

L'approche MAP a l'avantage d'apprécier l'impact de chaque instrument de distorsion sur la rentabilité d'une activité et permet une plus grande désagrégation des éléments de calcul des deux coefficients qui permettent d'apprécier la rentabilité financière et la rentabilité économique de la production (Pd, Qd). I, J, K et L sont les différences entre le budget financière est positive, alors le système est rentable pour le producteur. Ce dernier peut utiliser efficacement ses ressources dans ce système.

Un système est considéré comme plus rentable, lorsqu'il dispose de la plus grande valeur de Rentabilité Financière Nette (RFN). Il en est de même pour la rentabilité sociale ou économique, si le coefficient de Rentabilité Économique Nette (REN) est positif alors, l'activité est socialement rentable; l'activité ainsi considérée présente un avantage comparatif statique.

Tableau 3: Matrice d'Analyse Des Politiques

| | Recette | facteurs échangeables | Facteurs domestiques | Profits |
|-----------------|---------------|-----------------------|----------------------|---------|
| Prix financiers | $A = Pf * Qf$ | $B = Pt * Qt$ | $C = Pn * Qn$ | D (1) |
| Prix économique | $E = Pe * Qe$ | $F = Pi * Qi$ | $G = Pd * Qd$ | H (2) |
| Divergence | I (3) | J (4) | K (5) | L (6) |

Source: Monke et Pearson, 1989

A, B, C et D sont les éléments du budget financier; E, F, G et H sont ceux du budget économique, représentés respectivement par les vecteurs de prix et de quantités physiques des outputs (Pf, Qf) et (Pe, Qe), des facteurs échangeables (Pt, Qt) et (Pi, Qi) et des facteurs domestiques non échangeables (Pn, Qn) et (Pd, Qd). I, J, K et L sont les différences entre le budget financier et le budget économique. A représente les revenus obtenus par le producteur et reflétant les prix du marché. (B+C) est la somme des coûts observés afférente à ce prix. E est le niveau des revenus évalués au prix de référence. (F+G) est la somme des coûts évalués au prix de référence.

Le profit financier $D = A - (B + C)$, mesure la compétitivité du système de production. Il est encore appelé la Profitabilité Privée Nette (PPN). Si $PPN > 0$, cela implique que le système de production considéré est financièrement rentable.

Le profit économique $H = E - (F + G)$, mesure l'avantage comparatif. Il est encore appelé la Profitabilité

Sociale Nette (PSN). Si $PSN > 0$, l'activité considérée présente un avantage comparatif statique.

Le prix financier utilisé est estimé à 175 F CFA /kg pour le paddy et 370 FCFA/kg pour le riz blanc.

V. RÉSULTATS ET DISCUSSIONS

Il s'agit des résultats de l'évaluation de la rentabilité financière et économique du système de production rizicole à la Société d'Expansion et de Modernisation de la Riziculture de Yagoua ainsi que de l'application de la Matrice d'Analyse de Politiques de développement agricole à la production du riz.

a) *Rentabilité Financière Et Economique*

L'exécution du modèle de budgétisation MAP nécessite des calculs des coûts des facteurs de production qui sont composés des coûts des facteurs domestiques et des coûts des facteurs échangeables, des revenus bruts et des profits. Ces calculs sont faits pour une superficie de 1 hectare et basés sur les données de la campagne de 2024.

Tableau 4: Calcul Des Facteurs De Production

| Facteurs De Production | | Prix Financiers | Facteurs De Conversion | Prix De Parité Economique |
|-----------------------------|--|-----------------|------------------------|---------------------------|
| Total facteurs échangeables | | 174 000 | | 153 120 |
| Total facteurs domestiques | | 65 600 | | 543 300 |

Source: par nos soins

Détermination de la composante du budget financier consommé dans la situation de la production avec utilisation de semences locales à faible taux de rendement et faible utilisation d'engrais et

la situation de la Production avec utilisation de semences améliorées à haut rendement avec utilisation d'engrais, des Produits Phytosanitaires et respect de l'itinéraire technique.

b) Analyse Et Discussions Des Résultats De L'évaluation Financière

Tableau 5: La Matrice d'Analyse Des Politiques De La Production Du Riz Paddy

| | Revenus | Coûts | | Profits |
|-------------------|-------------|-----------------------|----------------------|------------|
| | | Facteurs échangeables | Facteurs domestiques | |
| Budget financier | 665 000 | 174 000 | 153 120 | 337 880 |
| Budget économique | 1 119 552,2 | 656 000 | 543 300 | -79 747,8 |
| divergences | -454 552,2 | -482 000 | -390 180 | -417 627,8 |

Source: Calculs élaborés par nos soins à partir des données récoltées sur le terrain, 2024

D'après la Matrice d'Analyse des Politiques (tableau 5) et le tableau des indicateurs de rentabilité la production avec utilisation de semences locales à production du riz paddy a une Profitabilité Privée Nette positive. (PPN) D = 337 880. Ce système est donc financièrement rentable. Celle-ci dépend du rendement

et par conséquent de la densité de la production. Les producteurs ont un avantage financier acceptable. Cette rentabilité dépend des techniques culturales, du type d'aménagements effectués, du type de transformation et surtout des intrants utilisés.

Tableau 6: Les Indicateurs De Rentabilité Financière Et Economique

| Indicateur | Formule | Valeur |
|--|-----------------|------------|
| Profitabilité privée nette (PPN) | $D = A - B - C$ | 337880 |
| Profitabilité sociale nette (PSN) ou profit économique | $H = E - F - G$ | -79747,8 |
| Ratio coût/bénéfice financier | $CBF = C/A - B$ | 0,31185336 |

Source: Calculs élaborés par nos soins à partir des données récoltées sur le terrain, 2024

L'analyse de l'indicateur de rentabilité financière utilisé (Tableaux 5 et 6), montre que la production du riz dans la zone d'étude est financièrement rentable suivant les travaux de Monke, e a. et Pearson, s r. (1989). Cependant, les charges de production supportées par les producteurs rizicoles sont assez élevées. Cela serait dû au prix élevé des engrais minéraux et de la main d'œuvre. En effet, l'inaccessibilité des villages et leur indisponibilité au moment opportun justifieraient, le surplus de coût que les producteurs supportent dans l'acquisition de l'engrais minéral. La pénibilité du travail et l'exode rural sont également les raisons qui expliqueraient le coût élevé de la main d'œuvre.

La transformation du paddy est financièrement rentable et crée ainsi de la valeur ajoutée par rapport au riz non décortiqué. Cependant les quantités traitées demeurent faibles. Cela pourrait s'expliquer entre autre par la faiblesse du rendement de l'activité, la faible capacité de financement.

c) Analyse Et Discussions Des Résultats De L'évaluation Economique

Le profit économique ($H = E - (F + G)$), est encore appelé la Profitabilité Sociale Nette (PSN) d'après le tableau 6. Dans le cas de notre étude, il ressort que la Profitabilité Sociale Nette (PSN) n'est pas économiquement rentable. Cela se confirme par le résultat du revenu économique négatif (-79 747,8) du tableau 5. L'analyse dusystème rizicole de la SEMRY montre que les productions du paddy et riz blanc ne sont économiquement rentables.

Par contre cette activité est financièrement rentable avec un résultat du profit financier positif. Ce qui revient à dire qu'il y'a compétitivité du système de production. Soulignons la valeur ajoutée occasionnée par la transformation du paddy en riz blanc.

Tableau 7: Matrice d'Analyse Des Politiques (MAP) De La Production Du Riz Blanc

| | Ressources | Coûts | | Profits |
|-------------------|-------------|-----------------------|----------------------|---------------|
| | | Facteurs échangeables | Facteurs domestiques | |
| Budget financier | 91300 | 174000 | 153120 | 586780 |
| Budget économique | 673572,2832 | 656000 | 543300 | -525727,7168 |
| Divergences | 240327,7168 | -482000 | -390180 | 1 112 507,717 |

Source: Calculs élaborés par nos soins à partir des données récoltées sur le terrain, 2024

En définitive, l'idée selon laquelle le système de production de la SEMRY est financièrement rentable, est vérifiée. Cependant celle selon laquelle le système de production de riz est économiquement rentable n'est pas valide. Il n'y a pas d'avantage comparatif à produire localement du riz dans les conditions du moment car les facteurs de production tels que les facteurs échangeables sont inaccessibles car hors de prix.

VI. CONCLUSION

L'objectif de cette étude était d'analyser la rentabilité financière et économique de la SEMRY.

La méthode de la matrice d'analyse des politiques (MAP) a été utilisée pour calculer les ratios de mesure des rentabilités financière et économique. Les résultats montrent que la production du riz à la SEMRY est financièrement rentable. Cependant cette rentabilité n'est pas satisfaisante à cause de la faible compétitivité de la filière locale par rapport au riz importé. Ceci est dû à la faiblesse du rendement à l'exploitation, au prix exorbitant des intrants agricoles, du coût du transport non accessible pour cause l'éloignement des grands centres de consommation de masse situés plus loin dans la partie méridionale du pays en l'occurrence Douala et Yaoundé. Mais, le système de production de la SEMRY n'est pas économiquement rentable. Il convient dans cette perspective d'entreprendre des actions concrètes pour redynamiser la production rizicole aussi bien dans la zone d'étude, que dans les autres zones productrices de la vallée du Logone. Ces actions devront viser à alléger les coûts de production de la spéculation, tout en facilitant l'accès aux facteurs de production.

Au sortir de notre analyse, nous proposons comme recommandations les éléments stratégiques suivants: couvrir les besoins en semences de qualité à l'échelle des organisations de producteurs.; Trouver des techniques alternatives à la fertilisation minérale et à subventionner de manière dégressive sur un délai de 3 ans l'acquisition des engrais avec une forte implication des organisations paysannes dans le processus de recouvrement des créances; Assurer le renforcement des capacités des producteurs en matière d'entretien des équipements agricoles; Accès à des crédits de financement adaptés aux réalités locales. Le coût inhérent à la mise en œuvre de cette stratégie a été estimé à: 191 milliards de francs CFA, soit 382.000.000 \$US. L'objectif est de réduire les importations en faisant passer la production nationale de 65 000 tonnes à 627. 250 tonnes de riz blanchi et en outre, de constituer des stocks de sécurité.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Abikou J.M., Gouwakinnou J.Y., Chabi Sero I. & Yabi J.A. (2023). Analyse de l'Efficacité Économique des Systèmes de Culture du Riz en Bas-fonds dans

- la Commune de Malanville, au Nord-Bénin. European Scientific Journal, ESJ, 19 (10), 169. <https://doi.org/10.19044/esj.2023.v19n10p169>
2. Adégbola, P. e. (2003). *Analyse de la filière de riz au Bénin*. Porto-Novo: PADSAPAPA/INRAB.
3. Afomasse & Arouna (2004). Analyse de la compétitivité de la filière ananas au Bénin rentabilité financière.
4. Agence Japonaise de Coopération Internationale, (2021). Analyse de la Compétitivité du Riz Local par Rapport au Riz Importé au Cameroun, de février à août.
5. Amoussouhoui, R., Arouna, A., & Diagne, A. (2012). Analyse de l'efficacité économique des producteurs des semences du riz face à la problématique de la sécurité alimentaire: Cas du Bénin. Centre du Riz pour l'Afrique (Africa Rice).
6. Arouna, A., Adegbola, P. Y., & Adekambi, S. A. (2010). Estimation of the economic efficiency of cashew nut production in Benin.
7. Atindegla, A.C (1999). Analyse de la rentabilité financière et économique des systèmes de production de l'ananas au Bénin. Codesria.
8. Bamba V., & K. (2022). « Lutte contre la pauvreté en Côte d'Ivoire: une analyse économique et financière de la filière manioc à Daloa », *Revue Française d'Economie et de Gestion*, Volume 3: N° 7, 332 – 348.
9. Cameroun, m. d. (2015, mars). Stratégie Nationale de Développement de la filière Semences de Riz (sndsr). Yaoundé, Cameroun.
10. Cameroun, r. d. (2023). La stratégie de développement de riziculture 2022-2030. Yaoundé, centre, Cameroun, Janvier.
11. Dossouhoui et al. (2017). « Analyse de la rentabilité financière de la production de semence du riz au Bénin ». *Journal of Applied Biosciences*, 11267-11275.
12. Evina, D. (2024). *Contribution à l'amélioration des performances de la riziculture au Cameroun: Cas de la SEMRY II à Maga*, Mémoire de Master Professionnel en Analyse et Evaluation des Projets, ESSEC, Université de Douala.
13. Eudoxie, B., Alastaire, S. A. (2018). « Efficacité économique des systèmes de production du riz en basfonds dans la commune de Malanville, au Nord-Bénin ». *European Scientific Journal*-1
14. Fabre, P. (1994). *Note de méthodologie générale sur l'analyse de filière : utilisation de l'analyse de filière pour l'analyse économique des politiques. Document de formation pour la planification agricole*. Rome.
15. Filibirou, Tassou Z. (2023). « Rentabilité économique et financière de la production du riz par l'approche Smart Valley au Centre et au nord du Bénin ». *Bulletin de la Recherche Agronomique du Bénin (BRAB)*, 33.



16. Gittinger, J. Price (1985). *Analyse économique des projets agricoles*, volume 1, Banque mondiale, 547 pages.
17. Houndekon, V. A. (1996). *Analyse économique des systèmes de production du riz dans nord Bénin*. Abidjan: IRES, FASEG, Université de Cote d'Ivoire.
18. Mohanty, S. C.Fang & J. Chaudhary, (2002). Assessing the Competitiveness of Indian Cotton Production: A Policy Analysis Matrix Approach, *Journal of cotton Science*, vol 7, (02-wp301).
19. Monke, E. A. (1989). *The Policy Analysis Matrix (PAM) for Agricultural Development. The role of agricultural policy analysis*. Ithaca and London: Cornell University Press.
20. Morris, M. L. (1989). *Determining Comparative Advantage through DRC Analysis. Guidelines Emerging from CIMMYTS' Experience*. Economic Paper n°1. CIMMYT Mexico.
21. Pariso, A.A, A.C.GSossou,R.N. Yegbemey, G. Biaou (2011), Analyse de la rentabilité de la production de fonio dans la commune de Boukombé au Bénin. *J. Rech. Sci. Univ. Lomé (Togo) Série A*, 13 (1): 27-37.
22. Pariso, A.A, A.J. Yabi, A. Sossou N. Zoumarou-Wallis, R. Yegbemey (2012a): Rentabilité économique et financière de la production coyonnaire à Ouaké au nord-ouest du Bénin. *Annales des Sciences agronomiques* 16 (1) 91-105
23. Quivy R. et Van Campenhoudt I. (2011). *Manuel de recherche en sciences sociales*. Paris: éd, Dunod, Paris.
24. Rense. (2002). Analyse coût-bénéfice des Technologies du niébé: Une application de la Matrice d'Analyse des Politiques (MAP). *ReNSE/NIGER.*, 20.
25. Salisu, A. & Adahama Ibrahim, H. (2021). Agricultural Output, Government Expenditure and Economic Growth in Nigeria: A Gregory-Hansen Cointegration Test with Structural Breaks.
26. Sellen, D. (1994). *Application de la matrice d'analyse politique au cours d'un séminaire sur l'analyse de la politique du secteur agricole*.
27. Toure, L., Konipo O. et Diagne A. (2021). « Analyse de la Rentabilité Economique et Financière de la Production Cotonnière au Mali ». *Revue Scientifique Biannuelle de l'Université de Ségou*. Hal-03147507.
28. Valeschini, E. (1993). La qualité des produits agricoles et alimentaires dans le marché unique européen: l'épreuve de la concurrence et de la confiance. *Demeter*, 121-162
29. Yovo, K. (2010). Incitation par les prix, rentabilité et compétitivité de la production du riz au sud Togo. *Tropicultura*, 226-23.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: B
ECONOMICS AND COMMERCE

Volume 25 Issue 1 Version 1.0 Year 2025

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

The Effect of SMEs on Social Development in Zimbabwe: A Case Study of Zimbabwe's Home Industries

By Mika Mugogo

University of Johannesburg

Abstract- This research sought to investigate the contribution of SMEs to social development. Owing to the exponential increase in unemployment and retrenchments from the formal sector in Zimbabwe, there is a critical absence of empirical evidence to support SMEs as viable alternatives for income generation and employment, as well as general uncertainty about the contribution of the sector to the national economy. This study was significant since SMEs are believed to have a role upon employment creation, particularly for the less qualified people of society, as well as income generation, and since they are understood to have the potential to fight poverty and aid development, which also helps through the generation of information for policymaking purposes. The objectives of the study were therefore to detail the structure of Zimbabwe's SME sector, to investigate its employment creation ability as well as to assess the average monthly incomes of the employees within this sector. These were determined in order to establish how these jobs contribute to the development of the people involved in this sector.

Keywords: SMEs, social development, income generation, employment, contribution to national economy.

GJMBR-B Classification: JEL Code: O12



Strictly as per the compliance and regulations of:



The Effect of SMEs on Social Development in Zimbabwe: A Case Study of Zimbabwe's Home Industries

Mika Mugogo

Abstract- This research sought to investigate the contribution of SMEs to social development. Owing to the exponential increase in unemployment and retrenchments from the formal sector in Zimbabwe, there is a critical absence of empirical evidence to support SMEs as viable alternatives for income generation and employment, as well as general uncertainty about the contribution of the sector to the national economy. This study was significant since SMEs are believed to have a role upon employment creation, particularly for the less qualified people of society, as well as income generation, and since they are understood to have the potential to fight poverty and aid development, which also helps through the generation of information for policymaking purposes. The objectives of the study were therefore to detail the structure of Zimbabwe's SME sector, to investigate its employment creation ability as well as to assess the average monthly incomes of the employees within this sector. These were determined in order to establish how these jobs contribute to the development of the people involved in this sector.

Keywords: SMEs, social development, income generation, employment, contribution to national economy.

I. INTRODUCTION

This section seeks to introduce the background of the study. It introduces the issues concerning small and medium enterprises (SMEs) and social development. Thus the researcher came up with objectives that will assist in data gathering leading to coming up with possible recommendations to the SMEs sector in Zimbabwe.

a) Background Information

Although development usually refers to economic progress, it can apply to political, social and technological progress as well. Development is a human process as the energy aspiration of the people who seek it forms the motive force that drives development and is one of the most powerful means of propagating and sustaining new developments if the educational system in a society. It transmits society's collective knowledge from one generation to the next and equips people with the mental capacity to devise ways and means to improve productivity and enhance living standards, and involves the use of such resources as physical, social, mental and human resources.

Social development describes the actions that are taken to build positive outcomes and to prevent

negative outcomes that can adversely affect a community (UN, 1995). It is an approach that helps the society to better realize its aims and objectives. Social development empowers people by creating more inclusive, cohesive, resilient and accountable institutions and societies that help overcome poverty. Social sustainability is a critical aspect of achieving long-term development that significantly improves the lives of the world's poorest people.

As one of these attempts, the importance of social development has been emphasized especially since the 1990s, learning from the past development experiences. The United Nations Development Programme (UNDP) promoted the concept of human development from the 1990s by redefining development as centering on people rather than simple material growth and as a process of enlarging people's choices (UNDP 1990), enriching the concept of social development (Judge, 1988). In the 1980s, sustainable development became one of the key points to redefine development with the recognition of the environmental degradations. Corresponding to the evolvement of the development definitions, the concept of social development became refined, and its importance was confirmed globally in the Social Summit of 1995 (UNDP, 1993).

The original definition of social development during the 1960s and 1970s was mainly the social infrastructure to support economic development, which corresponded with the mainstream development during this period focusing on economic development. The conceptualization of human development in the 1990s, to broaden the choices of people, is also closely related to the foundation of the social development concept (Rist, 1996). The 1995 Copenhagen Social Summit emphasized social development as a global imperative whose objectives can be summarized as ensuring poverty eradication, full employment, and social integration. With these three main pillars, social development evolved to include 10 commitments of the Social Summit, namely; creating an economic, political, social, cultural and legal environment to enable social development; eradicating poverty in the world; promoting full employment; promoting social integration, based on protection of human rights, non-discrimination, and the participation of all people; equity between women and men; universal education, and health; respecting and promoting common and particular cultures; preserving the essential bases of

Author: PhD. Business Management Candidate from the University of Johannesburg, South Africa. e-mail: mugogo2020@gmail.com



people-centered sustainable development; and contributing to the full development of human resources to social development in order to eradicate poverty, promote full and productive employment and foster social integration; accelerating the economic, social and human resource development of Africa and the least developed countries; ensuring structural adjustment programmes to include social development goals, in particular eradicating poverty, promoting full employment, and enhancing social integration; increasing resources allocated to social development and improving framework for international, regional and sub-regional cooperation for social development (United Nations, 1995).

Social development is therefore a necessity for communities the world over, particularly in the developing countries which are yet to meet global standards of development. Whilst there are many approaches to ensure social development initiatives are fruitful, one that finds ready applicability is taking the SME route in developing countries like Zimbabwe. However, understanding the role and importance of these SMEs in development is another area that needs review.

b) Problem Statement

The problem is that although there is an exponential increase in unemployment and retrenchments from the formal sector in Zimbabwe, there is a critical absence of empirical evidence to support SMEs as viable alternatives for income generation and employment. There continues to be uncertainty over the significance of the SME sector to the national economy. There is also limited or scanty information on the role of SMEs within the societies they serve.

c) Objectives of the Study

The following were the objectives of the study;

1. To examine the structure of SMEs at Glen View 8 Industry.
2. To determine the number of jobs created by the SMEs in the Glen View Area 8 industry.
3. To determine the disposable monthly incomes created by the SMEs in the Glen View Area 8 industry.

d) Scope

The research was confined to Harare's Glen View Area 8 industry. This made it easier and cheaper for the researcher to locate the SME staff who were the key respondents in this research. The researcher faced problems in obtaining information which was deemed confidential but endeavoured to get authority from business owners and convince those with the necessary statistics that the information was purely for academic purposes and would be treated in high confidentiality. There was also the risk of no response from the

anticipated respondents owing to such issues as other commitments, limited time and negative perceptions from the respondents who deemed this research as something that jeopardised their business or professional interests, particularly along political lines. The researcher is also a full time employee and had to dedicate extra hours effort to ensure completion of the research.

e) Key Definitions

Small to Medium Enterprises (SMEs): A business enterprise employing a total of between 5 and 10 people. However it should be noted that this definition varies from place to place.

Social Development: The social infrastructure to support economic development.

Entrepreneur: One who assumes the financial risk of the initiation, operation and management of a given business or undertaking. Someone who organises a business venture and assumes the risk for it.

Informal Activities: In economics, the informal economy is a system of exchange used outside state-controlled or money-based economic activities.

Formal Activities: Industrial activities that are carried out within the legal framework of an economy.

II. LITERATURE REVIEW

a) The Definition of SMEs

A lot of definitions have been put across to define SMEs. There is no universally accepted definition of SMEs (Tevera, 1998). The variables used in the definitions of SMEs vary from country to country. In South Korea the definition of SMEs is based on the number of employees found at an establishment (Bert, 1994). In Taiwan an SME is defined according to level of capitalisation (Kim and Gallent, 2000). It can be argued that some definitions focus on measures such as number of employees and volume of sales while others prefer to pay attention to total capital assets and capital per worker. In Zimbabwe the definition of SMEs is based on number of employees and asset base (Republic of Zimbabwe, 2002). The Ministry of Small and Medium Enterprises Development (MSMED), which was set up in 2002 by the Government of Zimbabwe, defines SMEs by reference to number of employees, total assets and legal structure (Republic of Zimbabwe, 2002). SMEs are defined as enterprises with fewer than 500 employees (Republic of Zimbabwe, 2002). According to MSMED, the number of employees, asset base and the legal structure must be met for an enterprise to be classified as SMEs. The statistical definition of SMEs varies by country and is usually based on the number of employees, and the income as shown in Table 1.1.

Table 1.1: The Definition of SMEs in Zimbabwe

| Sector | Number of People | Asset Base | Legal Structure |
|--------------------------|------------------|----------------------|-----------------|
| Micro-enterprises | | | |
| All sub-sectors | Less than 5 | Not relevant | Informal |
| Small-scale Enterprises | | | |
| Manufacturing | Less than 50 | Less than 12 000 000 | Formal |
| Other | Less than 30 | Less than 6 000 000 | Formal |
| Medium-scale Enterprises | | | |
| Manufacturing | 50-70 | 12-24 000 000 | Formal |
| Manufacturing | 30-50 | 6 000 000-14 000 000 | Formal |

(Republic of Zimbabwe, 2002)

b) Characteristics and Importance of SMEs

SMEs are central to local private sector development, a major driver of economic growth and are key builders of social infrastructure. These businesses generate up to 90% of jobs in developing and low-income economies (World Bank, 2012). The jobs generated are suitable for semi-skilled and unskilled workers. Importantly, employment is a major driver of reduced conflict and social empowerment. Governments recognize that SMEs are vibrant and innovative engines of growth and of job creation, quick to respond, flexible and adaptable to changing circumstances. SMEs have become a central force in the economy and society. SMEs are also important for the development and acceleration of change economies in transition, such as those in which agricultural predominance is giving way to industry and services, or those moving from a centralized to a free market economy. They also serve as important vehicles in facilitating people-to-people conflict resolution through direct interaction between important sectors of society (World Bank, 2012). In this way, they can help create growing mutual trust between 'enemies'.

Small and medium-sized enterprises (SMEs) are a very heterogeneous group. SMEs are found in a wide array of business activities, ranging from the single artisan producing agricultural implements for the village market, the coffee shop at the corner, the internet café in a small town to a small sophisticated engineering or software firm selling in overseas markets and a medium-sized automotive parts manufacturer selling to multinational automakers in the domestic and foreign markets. The owners may or may not be poor; the firms operate in very different markets (urban, rural, local,

national, regional and international); embody different levels of skills, capital, sophistication and growth orientation.

At the lower end of the SME sector, a large number of countries define a group, which is a mixture of the self-employed and "micro" enterprises, with less than 10 employees. Irrespective of the level of development of an economy, a significant proportion of micro and, sometimes, small enterprises are found in the informal sector or the shadow economy. Schneider (2003) compared the size of the informal sector in 22 transition (former Soviet Union and Central and Eastern Europe) and 21 OECD economies from 2000-2002 and found that the size of the informal sector amounted to an average of 16.7%, 29.2% and 44.8% of GDP in OECD, Central and Eastern Europe and the former Soviet Union economies, respectively.

Recent empirical studies show that SMEs contribute to over 55% of GDP and over 65% of total employment in high-income countries. SMEs and informal enterprises account for over 60% of GDP and over 70% of total employment in low-income countries, while they contribute over 95% of total employment and about 70% of GDP in middle-income countries (Schneider, 2003). In low-income countries, especially in the least developed economies, the contribution of SMEs to employment and GDP is less than that of the informal sector, where the great majority of the poorest of the poor make a subsistence level of living. Therefore, an important policy priority in developing countries is to reform the policies that divide the informal and formal sectors, so as to enable the poor to participate in markets and to engage in higher value added business activities.

In middle-income countries, formal SMEs contribute about 20% more to employment and GDP than the informal enterprises. Thus, in these countries, eliminating factors that discourage informal enterprises from entering the formal SME sector would also bring about gains in economic terms. This is evidenced by the fact that SMEs contribute over 3 times as much as the informal sector in both total employment (~65%) and GDP (~55%) in high-income countries, and that these countries are also taking initiative to bring as many informal enterprises as possible into the formal sector. SMEs have played a pivotal role in the development of the manufacturing sector in South East Asia and countries such as Japan, South Korea, Taiwan, Hong Kong and Malaysia owe their industrial development to SMEs (Sunita and Mead, 2002). Evidence from the highly developed economies has also shown the importance of SMEs. Countries in Europe and North America have advanced programmes to encourage the development of the SMEs in peripheral regions (Kim and Gallent, 2000). In some African countries SMEs have also contributed to the manufacturing sector (Musampa, 1999). Just as in developed countries, SMEs tend to revive manufacturing industries in peripheral regions.

c) *SMEs in Zimbabwe*

SMEs play a key role in job creation, providing two thirds of all formal jobs in developing countries and up to 80% in low income countries. 50% of total employment creation comes from enterprises with less than 100 employees (WB, 2012). Job growth comes not only from existing companies but also from newly created firms, especially those that grow very fast in the first years of activity. There are key areas where data is missing, for example on micro and informal firms, and on the quality of jobs created in SMEs.

The employment creation potential of the SME sector is well documented in both developed and developing countries (WB, 2003) and presents an attractive and compelling policy option for a country like Zimbabwe confronted with a structural unemployment rate between 57 and 63% (Zimbabwe, 2006). Across much of the Sub-Saharan Africa region, including Zimbabwe, the true potential of the SME sector remains stymied in a phenomenon described as missing middle (UNDP, 2008). In Zimbabwe, the SME Policy and Strategy Framework has defined SMEs as those firms who are registered in terms of their legal statuses and employ anywhere between 6 to 100 workers (Zimbabwe, 2008).

There is general consensus that there is a dearth of up-to-date metrics on the size and nature of the SME sector in Zimbabwe (UNDP, 2010). Increased retrenchments make the SME sector the safety net for those retrenched. The first country-wide survey conducted in 1991 established that the country had a total of 845 000 SMEs employing around 1.6 million

people in small-scale manufacturing, trade and services (WB, 2012). SMEs are largely based on hawking and vending.

Small to Medium Enterprises (SMEs) occupy a key and strategic role in revitalizing the economy. It is universally acknowledged that they are effective instruments of employment creation and economic growth, which ultimately lead to poverty alleviation for the entrepreneurs themselves as well as their employees. Their contribution will help turn the economic fortunes of the country and many will experience a better way of life.

Zimbabwean manufacturing sector is regarded as one of the most advanced and highly diversified in Sub-Saharan Africa (SSA). The sector produced over 7000 separate industrial products with 50% of all manufacturing in the formal sector taking place in Harare and half of the remainder taking place in Bulawayo (Ministry of Industry and Trade, 1999; Mumbengegwi, 1993). Manufacturing industry in Zimbabwe has been restricted to major urban centres like Harare, Bulawayo, Gweru and Kwekwe (Ministry of Industry and Trade, 1999; Ministry of Industry and Trade, 1998 and Mumbengegwi 1993). The manufacturing sector contributes about 17% to the Gross Domestic Product (GDP) and it employs 15% of the labour force (Ministry of Industry and Trade, 1998). These figures apply to the formal manufacturing sector. The Ministry of Industry and Trade (1999) argues that although figures from the informal sector are not reflected, SMEs contribute much to the manufacturing sector.

SMEs in Zimbabwe are highly diverse and they operate in various market conditions. They vary in scale and operations. Bango (1990) argues that SMEs employ varied means of production ranging from quasi-cottage systems to automated assembly line systems. SMEs engage in different manufacturing activities, these include carpentry, textiles, tinsmithing, basketry, shoemaking, panel beating, drinks and brick moulding (Ministry of Industry and Trade, 1999; Ministry of Industry and Trade, 1998; Bango, 1990). The range includes growing profit-making enterprises as well as poorly managed establishments lacking the financial and managerial resources (Tevera, 1998).

McPherson (1991) estimates that 70% of SMEs in Zimbabwe are in manufacturing, 23% in trading and 7% in service sectors. Helmsing (1993) and McPherson (1991) both agree that linkages exist between SMEs and LSEs in the manufacturing sector. Helmsing (1993) argues that weak linkages exist between SMEs in manufacturing and LSEs in the same sector since the latter uses inputs generated by nature. McPherson (1991) observed that strong linkages exist between the two, since SMEs buy some inputs from LSEs and LSEs sometimes hire labour from the SMEs.

There was a steady rise in the informalization of the Zimbabwean economy which persisted since the

ESAP era up to 2009 (UNDP, 2008). The introduction of dollarization and the accompanying stabilization of the economy, as well as trade liberalization in 2008 and 2009 have impacted both positively and negatively on the SMEs and it is important to understand the nature of such correlation. Although the formation of the Inclusive Government in 2008 and 2009 has done a lot in stabilizing Zimbabwe's economy with real possibilities for recovery and growth, there has not been up-to-date information on SMEs since the last comprehensive GEMINI national survey on SMEs undertaken in 1998 (UNDP, 2008). There exists therefore an opportunity to conduct research on the social impact of the SME sector on Zimbabwean communities, especially since the SME sector is poised to play a key role in the Zimbabwean society, especially in employment creation and poverty alleviation. In order for the SMEs to best execute this social mandate, there is a need to come up with credible statistics on its impact on the livelihoods of the people. The evident data gaps highlighted in this paper point to the need for accelerated research into the SME sector in Zimbabwe.

III. METHODOLOGY

a) *Research Philosophy*

The researcher in coming up with the study relied on positivism and interpretivism philosophies. Assumptions of positivism depend upon real objectivity that confirms the use of laws and natural sciences (Johnson and Cassell, 2001). The main aim of positivism is to discover the laws related to positive facts and quantitative research methods. The researcher adopted the positivist paradigm in determining the target population that was to be used in the research of SMEs in Glen View 8. The researcher also used descriptive survey in collecting data for the sampled respondents to highlight their employment and incomes as required by the objectives of the research.

Positivism philosophy was not conclusive enough to give evidence that could be used to come up with a conclusion to the research of SMEs. Qualitative data was probed through administering of self administered interviews. This information was blended together to explain the characteristics, employment creation and income generation abilities of SMEs in Glen View.

b) *Research Design*

The researcher used the descriptive and exploratory research designs which assisted in getting data of the creation of employment and income generation at Glen View 8 SME complex. The researcher employed exploratory research. Exploratory research provided qualitative data in relation to how SMEs are structured, the number of jobs they are creating for the

people within the society as well as the income they are generating. As a result interviews with these entrepreneurs provided the qualitative data required by researcher to explain their feelings. The research method was critical in the description of the findings of the structure of SMEs, their employment creation ability and the mean monthly incomes. The research design enabled the researcher to use a questionnaire with closed ended questions to determine the number of employees per SME and the monthly income of both employees and business owners.

c) *Population and Sampling*

The target population for the study consisted of SMEs operating at Glen View's Area 8 SME complex. The population was approximately 90. The business owners and employees of these farms constituted the target population. The researcher used the sample frame of SMEs operating at Glen View 8 who were knowledgeable of the area under study.

Kotler (1997) pointed out that a target of not less than 1% of the population can provide good and reliable results. Wegner (2003) is of a different view, as he stated that in terms of statistical analysis, a sample size (n) should not be less than 30 to enable a researcher to make inferences. The researcher opted for a sample size which is not less than 30 ($n > 30$), because the method of using not less than 1% of the population would provide a limited number of respondents to be considered for the study. The sample size was 30. The SME owners and the employees for the 30 selected SMEs were the respondents to the questionnaires. However, where the owner was not available the managing employee was the respondent to the research instruments.

The following formula for determining the sample size (Mutambirwa, 2002) was used:

$$n^* = (n) / [1 + (n/N)]$$

Where;

n^* = Necessary sample size

n = Desired sample size when n is less than 10 000

N = Estimated population size

n/N = The sampling fraction

In this study, a total of 30 SMEs were investigated. This was the sample for the approximately 90 SMEs that operate at Glen View's Area 8 (the population).

d) *Sources of Data*

This data was collected specifically for the research problems at hand from respondents using questionnaires and interviews. A field survey to determine the number of people who have become

employed by the Area 8 home industry was done. This survey involved key stakeholders within this SME sector, mostly proprietors and business managers and owners as well as their close employees and family. The purpose of the survey was to generate data on the number of people who have become employed by the Area 8 SME industry.

Structured questionnaires were used to determine the level of incomes of the employees of the SMEs at the home industry. The questionnaires were distributed to key SME business owners and employees, filled and returned to the researcher for computation and analysis.

Minimal Standard Monitoring (before and after analysis) was used to understand how the Glen View society has generally changed owing to the establishment of the SMEs. This ensured no bias in choosing the SMEs for the study.

The primary sources of data were obtained from the SMEs through the use of questionnaires. Business owners and employees were engaged as they had knowledge of the existing methods of job creation and income generation. The questionnaire was the chief tool of gathering field data. The questionnaire comprised of both open ended and closed questions. This was done to allow flexibility from respondents. It was felt that if a closed questionnaire was to be used in the collection of data it would limit the responses from the respondents. Thus the open-ended questions open a new avenue that might have been over looked by the researcher. The questionnaires were administered to the owners of the enterprises. For each target population, standard questionnaires were administered to ensure that all respondents were asked exactly the same set of questions in the same sequence thereby making it possible to quantify and compare responses.

Secondary data was collected from brochures, strategic plans, reports, academic journals and the press. These sources enabled the researcher to get

accurate information on the SME sector in Zimbabwe, particularly its job creation ability and the incomes generated. Secondary sources of data were used to supplement data from the survey. Data from the Ministry of Small and Medium Enterprise Development (MSMED) were used to examine the trends in the development of SMEs in the country.

e) *Data Analysis*

Responses were numerically coded and inputted into an SPSS data editor. Several data analysis functions were used to generate frequency tables, cross-tabulations and other descriptive statistics showing the most popular responses. Data from interviews with key informants was also classified according to the order of the questions on the interview schedule and important quotes from interviewees were noted for direct citation in data analysis. Data collected from field observations were recorded separately and used in the analysis where it was applicable.

Analysis of variance (ANOVA) was used to test the hypothesis formulated and determine goodness of fit of regression models computed in the study. Simple regression was used to quantify and establish the nature of the relationships between various variables in the research, such as the duration of operation, earnings and number of employees.

IV. RESULTS AND DISCUSSION

a) *Demographic Profiles of Participants*

i. *Gender*

The gender distribution of the entrepreneurs showed that males dominated most of manufacturing activities carried out in Glen View 8 (Fig. 4.1). According to the results of this study, males owned all of the SMEs interviewed at Glen View 8, with a significant portion of women (31.2%) engaged only as employees.

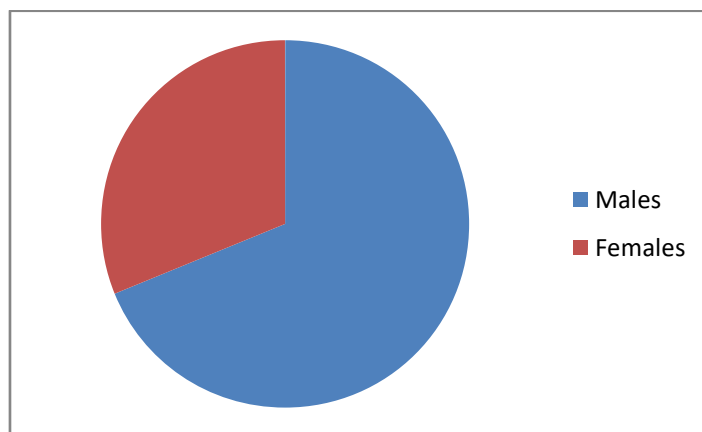


Fig. 4.1: The Gender Composition of Employees at Glen View 8 SME Complex

The traditional belief of reserving physically strenuous jobs exclusively for men was apparent in the SMEs (Choshi, 1996; Sunita and Mead, 2002). However, another possible explanation for this observation might be the fact that women have limited access to capital to start up businesses thus they tend to be concentrated in activities that require limited start up capital. In African society women roles are limited to household chores and men are thought to be the ones who should be involved in income generating projects.

ii. Level of Education

Educational levels were four, namely none at all, primary education, secondary education and tertiary

levels. The entrepreneurs were requested to indicate the highest level of education they attained. This was to ensure that during analysis, it would be easy to tell if respondents had a clear understanding of the questions and the study itself.

The survey revealed that the majority of the entrepreneurs in the sample sites had at least attained formal education, especially through the Ordinary level. This went on to show that the majority of the entrepreneurs were school dropouts or people who failed to secure formal employment owing to the harsh economic climate obtaining in the country, or were retrenched workers.

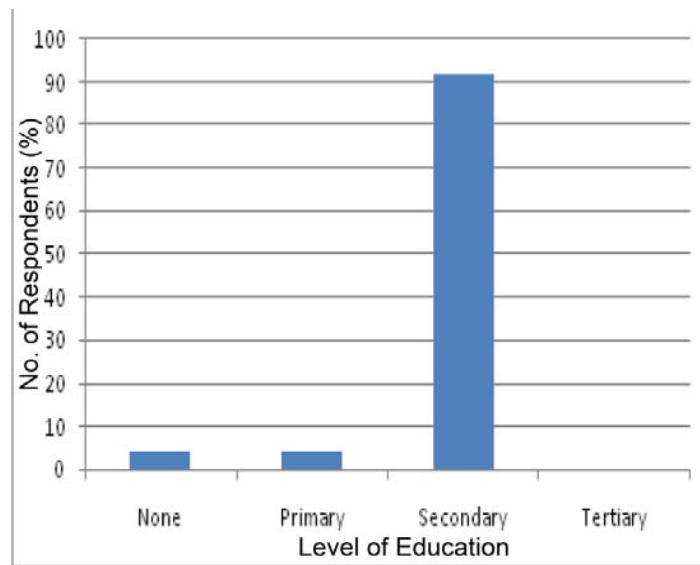


Fig. 4.2: Level of Education

It is generally accepted that the higher the educational standard of entrepreneurs the higher the chance for the enterprise to be successful, as has been suggested elsewhere entrepreneurs with higher educational training standards are more likely to survive economically in a more 'turbulent' business environment. More educated entrepreneurs tend to run their business establishments professionally, and hence provide reliable sources of income and employment for themselves and their employees. In the survey it was noted that the most successful entrepreneurs in Glen View Area 8 were those who had higher educational qualifications.

iii. Age

It was apparent from the survey that people in the middle age were mostly involved in the various manufacturing activities in the area. The majority of the respondents, business owners and employees at the Glen View Area 8 SME Complex were found to be in the age range of 20-35 years (68%), although there also was a considerable proportion between 36-50 years (16%), those below 20 years of age (12%) and one above 50 years (4%). This is the economically active people and it shows that the majority of the entrepreneurs were in their prime age. Table 4.1 shows the age profile of the respondents from Glen View's Area 8 SME complex.

Table 4.1: Age Profile (%) of respondents from Area 8 SME complex

| Age (Years) | No. of Respondents |
|-------------|--------------------|
| <20 | 3 |
| 20-35 | 17 |
| 36-50 | 4 |
| >50 | 1 |

This age distribution showed that SME owners are young people, and the possible explanation for this may be the high unemployment generally obtaining in the country. Unemployment in Zimbabwe is high because the formal industries like banking, mining, the parastatals and even the civil service have been retrenching and thus many people tend to revert to the informal sector to start up their small businesses in order to have a source of income and something to do. Retrenchments of even older persons is the likely cause for the significant portion of older persons trading at Glen View Complex.

iv. Training level

The level of training of the employees was also assessed in this study. Both employees and business owners were asked about any form of training they received for the businesses which they are currently doing. Of these respondents, 16% confirmed some form of training whilst the rest had no formal training for the jobs. Those with training attributed it to apprenticeship training programmes offered in the Area 8 complex.

Table 4.2: Level of Training of the Respondents

| Training status | Number of Respondents (%) |
|----------------------------|---------------------------|
| Employees with training | 16 |
| Employees without training | 84 |

v. Years with Firm

The number of years that a given employee had been with the firm was also observed. This was important as it is an indicator of the reliability of the SME sector in providing a lasting employment option, as well as a reliable source of income for a given employee. Generally, shorter years with a firm would imply an unreliable form employment whilst longer terms show the reliability of the firm in providing employment for the

employee. In this study, 32% of the respondents showed that they had been employed for a periods less than a year, 20% had been employed for between 1 to 2 years whilst 24% said they had been employed for between 2 to 3 years. A significant proportion of the respondents (24%) did not provide any information pertaining to how long they had been employed. These figures are as shown in Fig. 4.3 below.

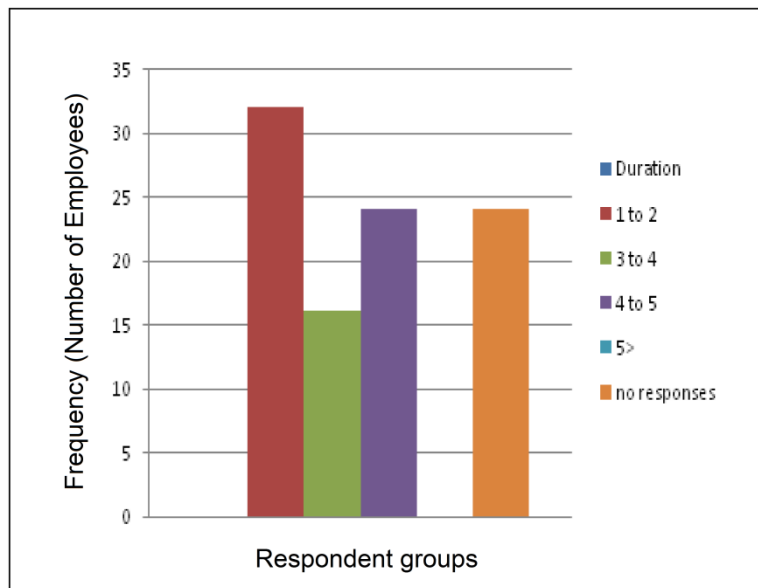


Fig. 4.3: Duration of Employment for the Respondents

The first observation that 32% of the respondents were employed for less than a year is true since the majority of the SMEs operating within the Area 8 complex have not been spared from the harsh economic climate obtaining throughout the country. Such problems as financial liquidity as well as the general dynamism of the Zimbabwean economy will make it difficult for companies, SMEs included, to retain

their employees as there is a high turnover rate. The high turnover occurs as employees move from one company to another in search of better remuneration and incentives, with some even going as far as South Africa and overseas. The result is that the SME is almost always with relatively new employees as the majority do not stay beyond a year, especially since SMEs themselves have low salaries. The observation that

some SMEs could not provide any information on the durations of their employees was not surprising since, owing to the above dynamics, it sometimes becomes difficult to record this since, for example, some employees go and return within given times.

The observation that older firms had more jobs than younger firms is true as small businesses will never remain small forever as some of them will grow and expand beyond 20 workers by joining medium and large businesses when using a given strategic planning (Schayek, 2008). This type of migration to another class size reduces the share of small businesses by becoming medium size. The migration of businesses into and out of class sizes also contribute to decrease or increase of jobs in those class sizes (Edmiston, 2004).

vi. *Employment Status*

The employment status was also taken note of in this study. This was important since the form of employment contract given the employee is by large a good indicator of the security of that given job, especially in the terms of income generation and employment creation and job security. Of the interviewed employees, 48% said they were employed on a short term basis (less than one year) whilst 16% said they were employed on a medium term basis (between 1 to 5 years), 32% were employed on a permanent basis (5 years and above) whilst 4% of the respondents did not respond at all. This is shown Fig. 4.4 below.

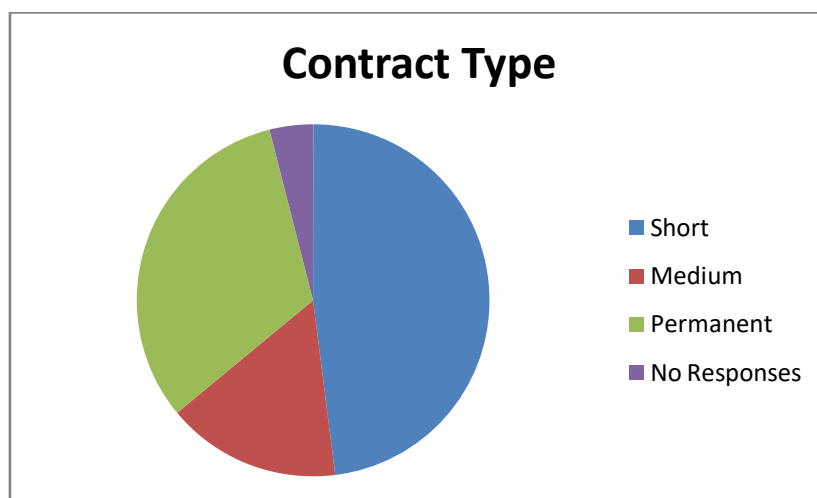


Fig. 4.4: The Contract Type of SMEs at Glen View Area 8

Again, the employment contracts noted reflect the dynamic structure of the Zimbabwean economy where the majority of arrangements are preferred to be short-term, with the possibility of contract renewal. Permanent contracts were also significantly high owing to the fact that the majority of the SMEs include family members and relatives who generally believe that they will remain business partners for life. It was noted in this research that the majority of these contractual agreements were verbal, revealing the informal structure of the SMEs.

Employment contracts are an important factor in the economic activities of the SMEs.

vii. *SMEs Role in Employment Creation*

One of the objectives of this research was to establish if and how SMEs are contributing to employment creation in the country, and hence their impact upon social development. This is so since employment creation is one of the prerequisites for social development. SMEs have been castigated for their failure in creating adequate job opportunities for the growing number of unemployed youths in the small towns. The sample of entrepreneurs surveyed employed

a total of 93 workers. An average of 3.72 job opportunities per each enterprise were created. This figure shows that SMEs had a relatively poor performance in terms of creating job opportunities compared to studies carried out by Osei et al (1993) in a similar study in Ghana and Choshi (1996) who did a research in Northern Province of South Africa. These two studies showed that in small urban areas SMEs should at least employ 5-10 people if they are to make any significant contribution to employment creation. Osei (1993) states that if a SME employs more than 5 people it ceases to be family based, as it tends to employ more people who are non-relatives. Although many can argue that 393 people are insignificant to alleviate unemployment, it should be borne in mind that the majority of the SMEs that were interviewed were lacking proper support to expand their businesses. If proper support mechanisms are offered to the SMEs they might create more employment opportunities.

In FGDs many of the entrepreneurs at Glen View 8 argued that if they received assistance from the government they would definitely employ more people. According to this study, SME business growth in terms of production output stood at a measly 12%, whilst only

1% of the respondents reported some firm expansion. The remainder of the respondents said their businesses were not growing at all. They argued that they were failing to grow or expand their businesses because of several reasons, among them lack of funding, the harsh economic environment and cash insolvencies. If government gave them financial assistance they would expand and employ more people in their firms.

b) Relationship between Duration of Operation and Level of Education

Enterprises that were operated by people who had a higher level of education tended to be in operation for a long time. Of the 25 enterprises, 13 (52%) had been in the business for more than 10 years, of which 3 had attained at least secondary school level. All entrepreneurs who had no formal education and had only attained a primary school education could not operate their enterprises for a long period. Another important observation from the survey in Glen View 8 was that entrepreneurs who had experience in the activity that they were involved in tended to last long in the business. This goes on to show that it is very important for entrepreneurs to at least have experience in the activity they are involved in. This shows the importance of education in the operations of SME activities.

It is important to note that enterprises who were realising an increase in their outputs were those who had been in business for a relatively long time. Only 9 (36%) enterprises had operated for 5 or less years, with the majority of the enterprises being 'experienced' in their fields of trade. It is important to note that in the study area the majority of the enterprises that reported that they were not realising growth were those that had

been in operation for less than one year and 1-5 years. So it can be concluded that the longer the enterprise has been in operation the more chances of it expanding its operations. Thus there was a positive relationship between duration and increase in output.

The SME enterprises that had been in operation for long periods of time were successful, possibly because of their long relationship with customers. Such operation for long periods of time had actually led to some enterprises curving a permanent niche in the market. Some of the entrepreneurs were so experienced in their activities thus they produced quality products compared to the upcoming entrepreneurs, often attracting more flows of customers and profit and had a stronger survival rate compared to new comers.

c) Relationship between Duration of Operations and Number of Employees

The study showed that there was a relationship between duration of operation of entrepreneurs and the number of employees in the SMEs. The null hypothesis put forward in this research was that there was no significant relationship between number of employees in an SME and the duration of that SME. ANOVA was used to test the hypothesis formulated and determine goodness of fit of regression models computed. Simple regression was used to quantify and establish the nature of the relationship between duration of operation and number of employees. For curve estimation, the linear method was used because unlike the logarithm, quadratic and exponential methods it best fitted the data. The relationship between duration of operation and income in the study area and regression equations computed to explain the relationships are shown in Fig. 4.5 below.

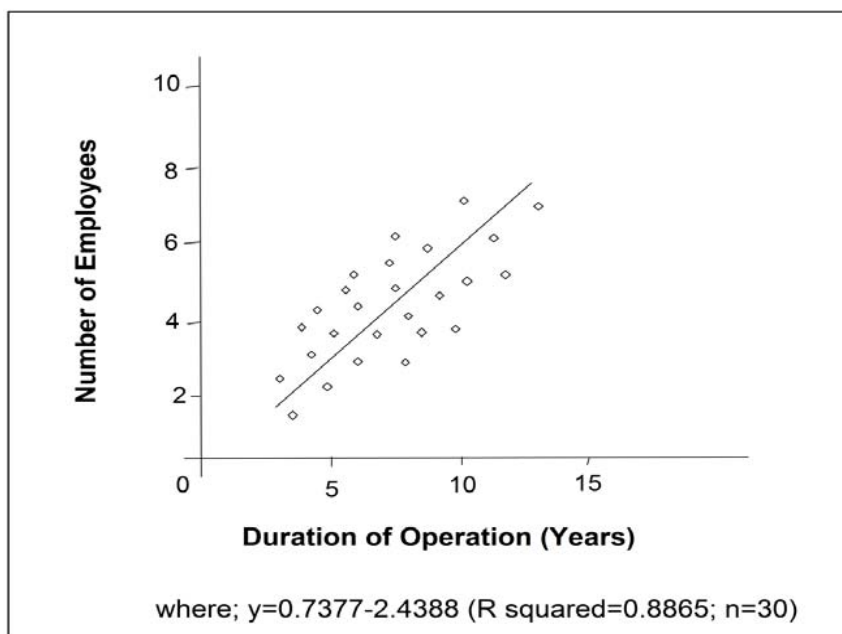


Fig. 4.5: The Relationship between the Years of Operation and the Number of Employees

d) *Relationship between Duration of Operation and Income*

The null hypothesis put forward in this study is that there is no significant difference brought by the SMEs to the incomes made by the entrepreneurs. The hypothesis was put forward because there was need to examine if there was any significant difference in the earnings made by the entrepreneurs through engaging in SME production. One Way ANOVA was used to test the hypothesis formulated. The calculated value obtained was 7.050 and the critical value obtained was 3.123 and the P value of 0.001598 at 0.05 significance level. On the basis of this information the null hypothesis was rejected and the alternative hypothesis which stated that there was significant difference in the income made by the entrepreneurs was accepted.

The survey showed that there was a mean annual income of \$318.80 for the business owners and \$80.40 for the general employees at the Glen View 8 Complex. The incomes varied greatly between business owners and between employees, with the highest income for the entrepreneurs and for the employees being \$700 and \$200 respectively. The lowest incomes stood at \$200 and \$50 for business owners and employees respectively. This can be explained by the fact that there were differences in the operation years of

the SMEs, as well as in the access to markets and product qualities owing to differences in production experiences.

However, it should be remembered that the data pertaining to sales is very biased since the entrepreneurs were not forced to disclose their sales statistics and since most of the entrepreneurs reported these figures from their heads and thus it would be difficult to verify if these figures were accurate. The figures, however, are important because they give a background of what is really happening in the enterprises.

The study showed that there was a relationship between duration of operation and the income in the SMEs. The null hypothesis put forward in this research was that there was no significant relationship between income in an SME and the duration of that SME. ANOVA was used to test the hypothesis formulated and determine goodness of fit of regression models computed. Simple regression was used to quantify and establish the nature of the relationship between duration of operation and the income. The relationship between duration of operation and income in the study area and regression equations computed to explain the relationships are shown in Figure 4.6.

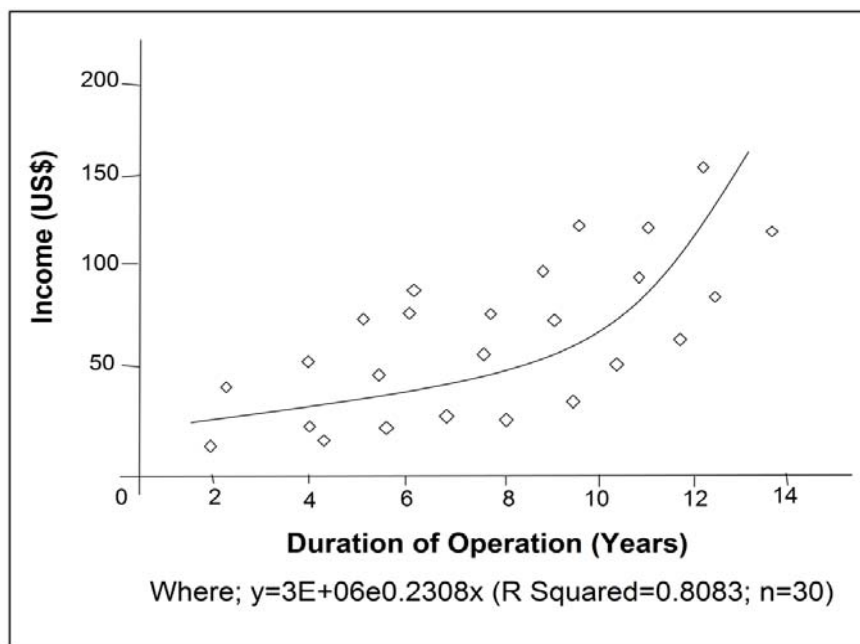


Fig. 4.6: Relationship between Duration of Operation and Income

As shown in Figure 4.6, there was a high degree of relationship between the income of the SMEs and their duration of operations. This suggested that with age, the incomes of the SMEs improved. On the contrary, younger SMEs had smaller incomes owing to various challenges in their start-up, such as financing, the lack of knowledge, low innovation levels and poor business marketing.

V. CONCLUSIONS

From the results of this study, it can be said that SMEs are useful alternatives, to the formal sector, for income generation. They SMEs provide better option for the generation of income, particularly in the economic hardships that many citizens of Zimbabwe have or continue to face. This has important social bearings as it

enables people to take care of themselves as well as their families and communities (Pedersen, 1998). The provision of a source of income, though low and sometimes unreliable, is a good ground for social development, particularly if viewed in the light of curbing the ills of unemployment. The assertions of Tevera (1998) of the SME sector being a viable option for the retrenched workers and those outside formal employment are found to be true as this agrees to the above findings of this study.

Also, SMEs provide cheap, ready and easily negotiable option for good and services. These goods may even be of very high qualities and standards and help the average or low-income families to obtain those goods they would never get from the formal, more-established retailers as from Harare's CBD. The goods from the SME sector make it viable for members of the public to purchase them. Goods could be found on credit and most of the low income people from Glen View, Glen Norah, Highfield and Budiriro found it worthwhile to purchase the goods, mostly furniture, for their households.

From the results of this study, it was seen that SMEs provide a good avenue for the employment of the majority of the unemployed people in the country. These results can also apply to any other country, particularly those in sub-Sahara Africa and the developing nations of the world. However, it was discovered in this study that the security of this employment is generally higher in those SMEs that have been operating for a longer while compared to new or smaller ones. The reasons for this were identified as the fact that older SMEs usually are more established and have a more reliable cashflow compared to younger ones which are still in the processes of either establishing their client bases or perfecting the qualities of their products. The employment contracts in older firms offered more reliable employment for the employees, and this was also evidenced by the length or number of years given employees stayed with these firms.

Although it is generally true that the income and employment creation ability of the SMEs cannot compare to those of the formal sector, this has to be reinforced by empirical researches into the area. This therefore necessitates the need for a comparative research which establishes the benefits or demerits of incomes between the formal sector and the SME sector. However, despite the above fact, the SMEs as studied in this research were beneficial in employment creation as the majority of the employees had before been completely unemployed. Working, even for low amounts of income, is generally better than being completely unemployed, as discussions with the respondents in this research revealed. Although the average number of employees per SME was quite low (3.72), it goes a long way on showing that SMEs have the potential to

become the country's largest sector of employment, particularly for such people as school dropouts, the uneducated and the retrenched. This figure differs by far from the Indonesia's average of 12.3 employees per SMEs (World Bank, 2003), possibly because of the differences in the degrees or extents to which these countries economies have slipped. The figure, however, is quite nearer to those found in Mali, with an average of 3.88 employees per SME (UNDP, 2010). This can be explained since Mali is a third world country with similar economic and social problems like Zimbabwe.

Owing to the above contributions of SMEs to employment creation and income generation, it can be generalized that they have a net effect on social development. Although social development itself cannot be entirely measured by employment status and income alone, these are among the major factors that determine how a society develops. Without a stable source of income and employment, a society might miss developmental targets and goals, apart from the fact that negative development may also occur. This negative development might be the destruction of already met developmental goals as well as the rise of social ills like crime, violence, prostitution and theft, among many others. Poverty is fought as families have a source of income and are able to survive above the poverty datum levels, which agrees with the assertions McPherson (1991), on the role of SMEs in the development of Zimbabwe. SMEs will also enhance the country's GDP as more production is done and foreign currency is earned, although the case of Glen View's Area 8 pointed to insignificant exportation levels of the finished goods. Hence it can be said that SMEs provide a good platform for the commencement or continuation of development within the given societies, as was seen in the case of the Glen View Area 8 SME industry.

VI. RECOMMENDATIONS

Most of the SMEs interviewed by the research were poorly coordinated and lacked the basic organization expected for serious businesses. Poor coordination and differences may be seen as confusion and thus throw them into a negative perception from interested stakeholders like customers, potential investors and even governmental organizations. For example, it was noted that most SMEs at Glen View 8 sorely focus on the production of such carpentry-related products like sofas, which gave rise to stiff competition on the market when some could in fact focus on other finished goods like beds and wardrobes. Thus, the organization and coordination of the SMEs sector on local and national levels is required to enhance their performance and create more incomes and jobs.

The research revealed that there are policy gaps which are having a deleterious effect on the operations of the SMEs. The lack of a comprehensive

national policy packages to target SMEs has been self evident throughout the research, even though the discipline of governmental policies was not among the objectives of this study. It is recommended that there be policies to cater for SMEs and enhance their current operations as well as to enable the growth of new ones in this potentially beneficial sector of the Zimbabwean society. Such policies should encompass support systems for existing SMEs, provide help to the SMEs' internal and external resources, and provide financial requirements such as starting capital. It was actually very disturbing for the researcher to note that governmental bodies and agents actually are currently working much to the harm of the SMEs' operation, particularly via such means as exorbitant taxes and rentals, the high difficulties of obtaining operating licenses and the constant negative force of corruption which demands bribes from the SMEs even for no apparent reason on any given day.

The SMEs need financing in order for their initiatives to be successful. Without proper financial mechanisms, as was seen through this research and particularly through the field interviews, the goals of these SMEs will never be realized and they will still realize relatively low incomes and employment creation compared to their formal sector counterparts. They should have access to loans from banks and other financial institutions and since the majority of them do not have the required collateral, the government should chirp in with necessary financial security strategies. The majority of the interviewed SMEs and entrepreneurs lacked the skills to effectively and efficiently manage their business. As such, training is required in such fields and bookkeeping, corporate governance and accounting, among others. National programmes and policies to help develop SMEs are required. Training though governmental and non-governmental associations can be initiated so that the SMEs will have more knowledge on how to improve their incomes and employment statuses, and thus contribute more meaningfully towards social development.

It is recommended that those unemployed in Zimbabwe, particularly the youths and those retrenched from formal sectors of employment, adopt SME production and entrepreneurship as options for employment and income generation. Although this sector offers lower incomes per month as compared to the formal sector, which may also be unreliable, it is worthwhile than having nothing to do at all. Engaging in SME production not only helps them to acquire survival skills that they previously did not have, but also enables them to determine their own destinies, create employment for others, disengage from harmful acts like crime, drug abuse and violence and realize a respectable living for themselves and their families. Opportunities for growth and development are also there, particularly with the recovering economy of the

country, the growing demand for cheaper household products and goods as well as through the widely publicised indigenisation and economic empowerment policies within the country.

VII. SUMMARY

This research addressed the role of SMEs in social development through a pedestrian approach. It examined how SMEs create employment as well as the income they normally generate for their employees per month and discovered that although these figures are not as one would expect, they are appreciable because there is some level of employment creation and income generation within these enterprises. Employment creation and income generation are helpful determinants of social development, a useful goal in the present-day Zimbabwe which still is recovering from the worst economic crisis in its history. The findings of this research may be compared and applied to other countries, particularly those in the developing world. However, the study discovered that more still needs to be done to help the SME sector in Zimbabwe to become as competitive as the formal sector, particularly along policy and training lines.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Bango, S. (1990). *Case Study of SEDCO Zimbabwe*. Paper Prepared for Small Scale Enterprises Policy Seminar, Nyanga: ITDG.
2. Bert, P. (1994). *Planning Comprehensiveness and Strategy in SME's*. Small Business Economics, Vol. 06, No.5.
3. Brand, G, Scott, L and Roberts, P. (1995). *The Growth of the Small Enterprise: An Answer to Third World Industrialisation*: Routledge, London.
4. CDR Project Paper 89, Center for Development Research: Copenhagen.
5. Choshi, P. S. (1996). *Industrial Estates and Formal Small-Scale Manufacturing Activities in the Northern Province*. An unpublished Masters Thesis, University of Witswatersrand: Johannesburg.
6. The World Summit for Social Development, 6-12 March 1995. Copenhagen, Denmark. Available at: <https://www.un.org/en/conferences/social-development/copenhagen1995>
7. Evenson, R. E. Gollin, D. (2003). *Assessing the Impact of the Green Revolution, 1960-2000* Science.
8. Helmsing, A.H.J and Kolstee, T. (1993). *Small Enterprise Promotion in a Changing Policy Environment in Africa: Raising Issues and Attempting Answers*. In Helmsing, A. H. J and Kolstee, T (eds) Small Enterprises and Changing Policies: Structural Adjustment, Financial Policy



- and assistance Programs in Africa. Intermediate Technology Publications: London.
9. Judge, G. G. (1988). *Introduction to the Theory and Practice of Econometrics*. John Wiley and Sons Publishing Company, New York.
 10. Kim, K and Gallent, N. (2000). *Industrial Land Planning and Development in South Korea: Current Problems and Future Directions*. Third World Planning Review.
 11. Loveman, G and Sengenberger, W. (1991). *The Re-emergence of Small-Scale Production, an International Comparison*. Small Business Economics.
 12. McPherson, D. (1991). *Micro and Small Scale Enterprises in Zimbabwe: Results of a Countrywide Survey*. GEMINI Technical Report 25.
 13. Mumbengegwi, C. (1993). *Structural Adjustment and Small Scale Enterprise Development in Zimbabwe*. In Helmsing, A. H. J and Kolstee, T (eds) *Small Enterprises and Changing Policies: Structural Adjustment, Financial Policy and assistance Programs in Africa*. Intermediate Technology Publications: London.
 14. Musampa, C. (1999). *Import Substitution and the Creation of Backward Linkages in the Zambian Manufacturing Sector 1984 – 88*. South African Geographical Journal. Vol 73.
 15. Mutambirwa, C. (2002). *Unpublished notes on Spatial Analysis*. Department of Geography and Environmental Science, University of Zimbabwe: Harare.
 16. OECD. (2001). *The New Economy Beyond the Hype*. The OECD Growth Project, Paris.
 17. Pedersen, P. O. (1998). *The Role of Small Enterprises and Small Towns in the Developing Countries*.
 18. Piore, M and Sabel, C. (1984). *The Second Industrial Divide: Possibilities for Prosperity*. Basic Books: New York.
 19. Rasmussen, J. (1992). *The Small Enterprise Environment in Zimbabwe: Growing in the Shadow of Large Enterprises*. IDS Bulletin 23.
 20. Regnier, P. (1993). *The Dynamics of SMEs in Korea and other Asian New Industrialising Economies (NIEs)*. Small Business Economics, Vol 5.
 21. Republic of Zimbabwe. (2002). *The Development Framework of Small and Medium Scale Enterprises in Zimbabwe*, Government Printers: Harare.
 22. Rist, G. (1996). *History of Development: From western origins to global faith*, Zed Books, New York.
 23. Sabel, C. (1986). *Changing Models Economic Efficiency and their Implications for Industrialisation in the Third World*. In Foxley, A; McPherson, M.S and O'Dennell, P (eds), *Development, Democracy and the Art of Trespassing*, University of Notre Dame: Notre Dame.
 24. Schneider, F. (2003). *The Size and Development of the Shadow Economies and Shadow Economy Labor Force of 22 Transition and 21 OECD Countries: What Do We Really Know?*. In Boyan Belev, editor, *The Informal Economy in the EU Access Countries: Size, Scope, Trends and Challenges to the Process of EU Enlargement*, Center for Study of Democracy. Sofia.
 25. Storey, D. J. Potter, J. (2007). *OECD Framework for the Evaluation of SME and Entrepreneurship Policies and Programme*. Organization for Economic Co-operation and Development (OECD), Paris.
 26. Summers, L. H. (2003). *Godkin Lectures*. John F. Kennedy School of Government, Harvard University.
 27. Tevera, D. S. (1998). *Micro and Small- Scale Enterprises in Shamva District within the Context of an adjusting National Economy*. In Masuko, L (ed) (1998) *Economic Policy Reforms and Meso-Scale Rural market Changes in Zimbabwe: the Case of Shamva District*. IDS. UZ: Harare.
 28. UNCTAD. (2001). *Best Practices in Financial Innovations for SMEs*. Background paper presented at the Intergovernmental Expert Meeting on Improving the Competitiveness of SMEs in Developing Countries: the Role of Finance to Enhance Enterprise Development, UNCTAD/ITE/TEB/Misc.3, Geneva, Switzerland.
 29. UNDP, (1993). *Human Development Report 1990; 1993*, Oxford University Press, New York.
 30. UNDP. (2003). *Human Development Report*, New York.
 31. UNDP. (2008). *Vietnam Development Report*, Hanoi.
 32. UNDP. (2010). *Human Development Report*, New York.
 33. UNDP. *Human Development Reports. 1992-2010*. UNDP Publications, New York Oxford University Press.
 34. United Nations. (1995). *Copenhagen Declaration on Social Development and Programme of United Nations. 1995. Copenhagen Declaration on Social Development and Programme of Action of the World Summit for Social Development*. Report of the World Summit for Social Development, 6-12 March 1995, Copenhagen.
 35. USAID. (2003). *Building Trade Capacity in the Developing World*. USAID Strategy No. PD-ABX-241, March, Washington D. C.
 36. World Bank, (2012). *Impact Assessment Framework: SME Finance*. Prepared by the World Bank on behalf of the G20 Global Partnership for Financial Inclusion (GPFI) SME Finance Sub Group. World Bank, Washington DC, USA.

37. World Bank, (2012). *Impact Evaluation Toolkit*. World Bank, Washington, DC.
38. World Bank. (2001). *Business Development Services for Small Enterprises: Guiding Principles for Donor Intervention*. Committee of Donor Agencies for Small Enterprise Development, 2001 Edition, February, Washington D. C.
39. World Bank. (2003). *KUPEDES: Indonesia's Model Small Credit Program*. Précis No. 104, World Bank, January.
40. World Bank. (2012). *The Quality of Growth*. Washington D. C.



GLOBAL JOURNALS GUIDELINES HANDBOOK 2025

WWW.GLOBALJOURNALS.ORG

MEMBERSHIPS

FELLOWS/ASSOCIATES OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL FMBRC/AMBRC MEMBERSHIPS

INTRODUCTION



FMBRC/AMBRC is the most prestigious membership of Global Journals accredited by Open Association of Research Society, U.S.A (OARS). The credentials of Fellow and Associate designations signify that the researcher has gained the knowledge of the fundamental and high-level concepts, and is a subject matter expert, proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice. The credentials are designated only to the researchers, scientists, and professionals that have been selected by a rigorous process by our Editorial Board and Management Board.

Associates of FMBRC/AMBRC are scientists and researchers from around the world are working on projects/researches that have huge potentials. Members support Global Journals' mission to advance technology for humanity and the profession.

FMBRC

FELLOW OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL

FELLOW OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL is the most prestigious membership of Global Journals. It is an award and membership granted to individuals that the Open Association of Research Society judges to have made a 'substantial' contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Fellows are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Fellow Members.



BENEFITS

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A FMBRC member gets access to a closed network of Tier 1 researchers and scientists with direct communication channel through our website. Fellows can reach out to other members or researchers directly. They should also be open to reaching out by other.

[Career](#)[Credibility](#)[Exclusive](#)[Reputation](#)

CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Fellows receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

[Career](#)[Credibility](#)[Exclusive](#)[Reputation](#)

DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Fellows can use the honored title of membership. The "FMBRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FMBRC or William Walldroff, M.S., FMBRC.

[Career](#)[Credibility](#)[Exclusive](#)[Reputation](#)

RECOGNITION ON THE PLATFORM

BETTER VISIBILITY AND CITATION

All the Fellow members of FMBRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All fellows get a dedicated page on the website with their biography.

[Career](#)[Credibility](#)[Reputation](#)

FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Fellows receive discounts on future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Fellows get secure and fast GJ work emails with unlimited forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org.

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Fellows are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All fellows receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive



PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

Fellows can publish articles (limited) without any fees. Also, they can earn up to 70% of sales proceeds from the sale of reference/review books/literature/publishing of research paper. The FMBRC member can decide its price and we can help in making the right decision.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

ACCESS TO EDITORIAL BOARD

BECOME A MEMBER OF THE EDITORIAL BOARD

Fellows may join as a member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. Additionally, Fellows get a chance to nominate other members for Editorial Board.

Career

Credibility

Exclusive

Reputation

AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

All members get access to 5 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 10 GB free secure cloud access for storing research files.

ASSOCIATE OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL

ASSOCIATE OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL is the membership of Global Journals awarded to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Associate membership can later be promoted to Fellow Membership. Associates are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Associate Members.



BENEFITS

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A AMBRC member gets access to a closed network of Tier 2 researchers and scientists with direct communication channel through our website. Associates can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career

Credibility

Exclusive

Reputation



CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Associates receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career

Credibility

Exclusive

Reputation



DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Associates can use the honored title of membership. The "AMBRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., AMBRC or William Walldroff, M.S., AMBRC.

Career

Credibility

Exclusive

Reputation

RECOGNITION ON THE PLATFORM

BETTER VISIBILITY AND CITATION

All the Associate members of ASFRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All associates get a dedicated page on the website with their biography.

Career

Credibility

Reputation

FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Associates receive discounts on the future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Associates get secure and fast GJ work emails with 5GB forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org..

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to almost all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Associates are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All associates receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive



PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

Associates can publish articles (limited) without any fees. Also, they can earn up to 30-40% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

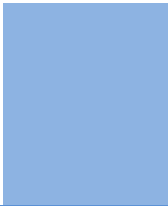
Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

All members get access to 2 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 5 GB free secure cloud access for storing research files.



| ASSOCIATE | FELLOW | RESEARCH GROUP | BASIC |
|---|---|--|---------------------------|
| \$4800 lifetime designation | \$6800 lifetime designation | \$12500.00 organizational | APC per article |
| Certificate , LoR and Momento 2 discounted publishing/year Gradation of Research 10 research contacts/day 1 GB Cloud Storage GJ Community Access | Certificate , LoR and Momento Unlimited discounted publishing/year Gradation of Research Unlimited research contacts/day 5 GB Cloud Storage Online Presense Assistance GJ Community Access | Certificates , LoRs and Momentos Unlimited free publishing/year Gradation of Research Unlimited research contacts/day Unlimited Cloud Storage Online Presense Assistance GJ Community Access | GJ Community Access |



PREFERRED AUTHOR GUIDELINES

We accept the manuscript submissions in any standard (generic) format.

We typeset manuscripts using advanced typesetting tools like Adobe In Design, CorelDraw, TeXnicCenter, and TeXStudio. We usually recommend authors submit their research using any standard format they are comfortable with, and let Global Journals do the rest.

Alternatively, you can download our basic template from <https://globaljournals.org/Template.zip>

Authors should submit their complete paper/article, including text illustrations, graphics, conclusions, artwork, and tables. Authors who are not able to submit manuscript using the form above can email the manuscript department at submit@globaljournals.org or get in touch with chiefeditor@globaljournals.org if they wish to send the abstract before submission.

BEFORE AND DURING SUBMISSION

Authors must ensure the information provided during the submission of a paper is authentic. Please go through the following checklist before submitting:

1. Authors must go through the complete author guideline and understand and *agree to Global Journals' ethics and code of conduct*, along with author responsibilities.
2. Authors must accept the privacy policy, terms, and conditions of Global Journals.
3. Ensure corresponding author's email address and postal address are accurate and reachable.
4. Manuscript to be submitted must include keywords, an abstract, a paper title, co-author(s) names and details (email address, name, phone number, and institution), figures and illustrations in vector format including appropriate captions, tables, including titles and footnotes, a conclusion, results, acknowledgments and references.
5. Authors should submit paper in a ZIP archive if any supplementary files are required along with the paper.
6. Proper permissions must be acquired for the use of any copyrighted material.
7. Manuscript submitted *must not have been submitted or published elsewhere* and all authors must be aware of the submission.

Declaration of Conflicts of Interest

It is required for authors to declare all financial, institutional, and personal relationships with other individuals and organizations that could influence (bias) their research.

POLICY ON PLAGIARISM

Plagiarism is not acceptable in Global Journals submissions at all.

Plagiarized content will not be considered for publication. We reserve the right to inform authors' institutions about plagiarism detected either before or after publication. If plagiarism is identified, we will follow COPE guidelines:

Authors are solely responsible for all the plagiarism that is found. The author must not fabricate, falsify or plagiarize existing research data. The following, if copied, will be considered plagiarism:

- Words (language)
- Ideas
- Findings
- Writings
- Diagrams
- Graphs
- Illustrations
- Lectures



- Printed material
- Graphic representations
- Computer programs
- Electronic material
- Any other original work

AUTHORSHIP POLICIES

Global Journals follows the definition of authorship set up by the Open Association of Research Society, USA. According to its guidelines, authorship criteria must be based on:

1. Substantial contributions to the conception and acquisition of data, analysis, and interpretation of findings.
2. Drafting the paper and revising it critically regarding important academic content.
3. Final approval of the version of the paper to be published.

Changes in Authorship

The corresponding author should mention the name and complete details of all co-authors during submission and in manuscript. We support addition, rearrangement, manipulation, and deletions in authors list till the early view publication of the journal. We expect that corresponding author will notify all co-authors of submission. We follow COPE guidelines for changes in authorship.

Copyright

During submission of the manuscript, the author is confirming an exclusive license agreement with Global Journals which gives Global Journals the authority to reproduce, reuse, and republish authors' research. We also believe in flexible copyright terms where copyright may remain with authors/employers/institutions as well. Contact your editor after acceptance to choose your copyright policy. You may follow this form for copyright transfers.

Appealing Decisions

Unless specified in the notification, the Editorial Board's decision on publication of the paper is final and cannot be appealed before making the major change in the manuscript.

Acknowledgments

Contributors to the research other than authors credited should be mentioned in Acknowledgments. The source of funding for the research can be included. Suppliers of resources may be mentioned along with their addresses.

Declaration of funding sources

Global Journals is in partnership with various universities, laboratories, and other institutions worldwide in the research domain. Authors are requested to disclose their source of funding during every stage of their research, such as making analysis, performing laboratory operations, computing data, and using institutional resources, from writing an article to its submission. This will also help authors to get reimbursements by requesting an open access publication letter from Global Journals and submitting to the respective funding source.

PREPARING YOUR MANUSCRIPT

Authors can submit papers and articles in an acceptable file format: MS Word (doc, docx), LaTeX (.tex, .zip or .rar including all of your files), Adobe PDF (.pdf), rich text format (.rtf), simple text document (.txt), Open Document Text (.odt), and Apple Pages (.pages). Our professional layout editors will format the entire paper according to our official guidelines. This is one of the highlights of publishing with Global Journals—authors should not be concerned about the formatting of their paper. Global Journals accepts articles and manuscripts in every major language, be it Spanish, Chinese, Japanese, Portuguese, Russian, French, German, Dutch, Italian, Greek, or any other national language, but the title, subtitle, and abstract should be in English. This will facilitate indexing and the pre-peer review process.

The following is the official style and template developed for publication of a research paper. Authors are not required to follow this style during the submission of the paper. It is just for reference purposes.



Manuscript Style Instruction (Optional)

- Microsoft Word Document Setting Instructions.
- Font type of all text should be Swis721 Lt BT.
- Page size: 8.27" x 11", left margin: 0.65, right margin: 0.65, bottom margin: 0.75.
- Paper title should be in one column of font size 24.
- Author name in font size of 11 in one column.
- Abstract: font size 9 with the word "Abstract" in bold italics.
- Main text: font size 10 with two justified columns.
- Two columns with equal column width of 3.38 and spacing of 0.2.
- First character must be three lines drop-capped.
- The paragraph before spacing of 1 pt and after of 0 pt.
- Line spacing of 1 pt.
- Large images must be in one column.
- The names of first main headings (Heading 1) must be in Roman font, capital letters, and font size of 10.
- The names of second main headings (Heading 2) must not include numbers and must be in italics with a font size of 10.

Structure and Format of Manuscript

The recommended size of an original research paper is under 15,000 words and review papers under 7,000 words. Research articles should be less than 10,000 words. Research papers are usually longer than review papers. Review papers are reports of significant research (typically less than 7,000 words, including tables, figures, and references)

A research paper must include:

- a) A title which should be relevant to the theme of the paper.
- b) A summary, known as an abstract (less than 150 words), containing the major results and conclusions.
- c) Up to 10 keywords that precisely identify the paper's subject, purpose, and focus.
- d) An introduction, giving fundamental background objectives.
- e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition, sources of information must be given, and numerical methods must be specified by reference.
- f) Results which should be presented concisely by well-designed tables and figures.
- g) Suitable statistical data should also be given.
- h) All data must have been gathered with attention to numerical detail in the planning stage.

Design has been recognized to be essential to experiments for a considerable time, and the editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned unrefereed.

- i) Discussion should cover implications and consequences and not just recapitulate the results; conclusions should also be summarized.
- j) There should be brief acknowledgments.
- k) There ought to be references in the conventional format. Global Journals recommends APA format.

Authors should carefully consider the preparation of papers to ensure that they communicate effectively. Papers are much more likely to be accepted if they are carefully designed and laid out, contain few or no errors, are summarizing, and follow instructions. They will also be published with much fewer delays than those that require much technical and editorial correction.

The Editorial Board reserves the right to make literary corrections and suggestions to improve brevity.



FORMAT STRUCTURE

It is necessary that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

All manuscripts submitted to Global Journals should include:

Title

The title page must carry an informative title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) where the work was carried out.

Author details

The full postal address of any related author(s) must be specified.

Abstract

The abstract is the foundation of the research paper. It should be clear and concise and must contain the objective of the paper and inferences drawn. It is advised to not include big mathematical equations or complicated jargon.

Many researchers searching for information online will use search engines such as Google, Yahoo or others. By optimizing your paper for search engines, you will amplify the chance of someone finding it. In turn, this will make it more likely to be viewed and cited in further works. Global Journals has compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Keywords

A major lynchpin of research work for the writing of research papers is the keyword search, which one will employ to find both library and internet resources. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining, and indexing.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy: planning of a list of possible keywords and phrases to try.

Choice of the main keywords is the first tool of writing a research paper. Research paper writing is an art. Keyword search should be as strategic as possible.

One should start brainstorming lists of potential keywords before even beginning searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in a research paper?" Then consider synonyms for the important words.

It may take the discovery of only one important paper to steer in the right keyword direction because, in most databases, the keywords under which a research paper is abstracted are listed with the paper.

Numerical Methods

Numerical methods used should be transparent and, where appropriate, supported by references.

Abbreviations

Authors must list all the abbreviations used in the paper at the end of the paper or in a separate table before using them.

Formulas and equations

Authors are advised to submit any mathematical equation using either MathJax, KaTeX, or LaTeX, or in a very high-quality image.

Tables, Figures, and Figure Legends

Tables: Tables should be cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g., Table 4, a self-explanatory caption, and be on a separate sheet. Authors must submit tables in an editable format and not as images. References to these tables (if any) must be mentioned accurately.



Figures

Figures are supposed to be submitted as separate files. Always include a citation in the text for each figure using Arabic numbers, e.g., Fig. 4. Artwork must be submitted online in vector electronic form or by emailing it.

PREPARATION OF ELETRONIC FIGURES FOR PUBLICATION

Although low-quality images are sufficient for review purposes, print publication requires high-quality images to prevent the final product being blurred or fuzzy. Submit (possibly by e-mail) EPS (line art) or TIFF (halftone/ photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Avoid using pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings). Please give the data for figures in black and white or submit a Color Work Agreement form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution at final image size ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs): >350 dpi; figures containing both halftone and line images: >650 dpi.

Color charges: Authors are advised to pay the full cost for the reproduction of their color artwork. Hence, please note that if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a Color Work Agreement form before your paper can be published. Also, you can email your editor to remove the color fee after acceptance of the paper.

TIPS FOR WRITING A GOOD QUALITY MANAGEMENT RESEARCH PAPER

Techniques for writing a good quality management and business research paper:

1. Choosing the topic: In most cases, the topic is selected by the interests of the author, but it can also be suggested by the guides. You can have several topics, and then judge which you are most comfortable with. This may be done by asking several questions of yourself, like "Will I be able to carry out a search in this area? Will I find all necessary resources to accomplish the search? Will I be able to find all information in this field area?" If the answer to this type of question is "yes," then you ought to choose that topic. In most cases, you may have to conduct surveys and visit several places. Also, you might have to do a lot of work to find all the rises and falls of the various data on that subject. Sometimes, detailed information plays a vital role, instead of short information. Evaluators are human: The first thing to remember is that evaluators are also human beings. They are not only meant for rejecting a paper. They are here to evaluate your paper. So present your best aspect.

2. Think like evaluators: If you are in confusion or getting demotivated because your paper may not be accepted by the evaluators, then think, and try to evaluate your paper like an evaluator. Try to understand what an evaluator wants in your research paper, and you will automatically have your answer. Make blueprints of paper: The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

3. Ask your guides: If you are having any difficulty with your research, then do not hesitate to share your difficulty with your guide (if you have one). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work, then ask your supervisor to help you with an alternative. He or she might also provide you with a list of essential readings.

4. Use of computer is recommended: As you are doing research in the field of management and business then this point is quite obvious. Use right software: Always use good quality software packages. If you are not capable of judging good software, then you can lose the quality of your paper unknowingly. There are various programs available to help you which you can get through the internet.

5. Use the internet for help: An excellent start for your paper is using Google. It is a wondrous search engine, where you can have your doubts resolved. You may also read some answers for the frequent question of how to write your research paper or find a model research paper. You can download books from the internet. If you have all the required books, place importance on reading, selecting, and analyzing the specified information. Then sketch out your research paper. Use big pictures: You may use encyclopedias like Wikipedia to get pictures with the best resolution. At Global Journals, you should strictly follow here.



6. Bookmarks are useful: When you read any book or magazine, you generally use bookmarks, right? It is a good habit which helps to not lose your continuity. You should always use bookmarks while searching on the internet also, which will make your search easier.

7. Revise what you wrote: When you write anything, always read it, summarize it, and then finalize it.

8. Make every effort: Make every effort to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in the introduction—what is the need for a particular research paper. Polish your work with good writing skills and always give an evaluator what he wants. Make backups: When you are going to do any important thing like making a research paper, you should always have backup copies of it either on your computer or on paper. This protects you from losing any portion of your important data.

9. Produce good diagrams of your own: Always try to include good charts or diagrams in your paper to improve quality. Using several unnecessary diagrams will degrade the quality of your paper by creating a hodgepodge. So always try to include diagrams which were made by you to improve the readability of your paper. Use of direct quotes: When you do research relevant to literature, history, or current affairs, then use of quotes becomes essential, but if the study is relevant to science, use of quotes is not preferable.

10. Use proper verb tense: Use proper verb tenses in your paper. Use past tense to present those events that have happened. Use present tense to indicate events that are going on. Use future tense to indicate events that will happen in the future. Use of wrong tenses will confuse the evaluator. Avoid sentences that are incomplete.

11. Pick a good study spot: Always try to pick a spot for your research which is quiet. Not every spot is good for studying.

12. Know what you know: Always try to know what you know by making objectives, otherwise you will be confused and unable to achieve your target.

13. Use good grammar: Always use good grammar and words that will have a positive impact on the evaluator; use of good vocabulary does not mean using tough words which the evaluator has to find in a dictionary. Do not fragment sentences. Eliminate one-word sentences. Do not ever use a big word when a smaller one would suffice. Verbs have to be in agreement with their subjects. In a research paper, do not start sentences with conjunctions or finish them with prepositions. When writing formally, it is advisable to never split an infinitive because someone will (wrongly) complain. Avoid clichés like a disease. Always shun irritating alliteration. Use language which is simple and straightforward. Put together a neat summary.

14. Arrangement of information: Each section of the main body should start with an opening sentence, and there should be a changeover at the end of the section. Give only valid and powerful arguments for your topic. You may also maintain your arguments with records.

15. Never start at the last minute: Always allow enough time for research work. Leaving everything to the last minute will degrade your paper and spoil your work.

16. Multitasking in research is not good: Doing several things at the same time is a bad habit in the case of research activity. Research is an area where everything has a particular time slot. Divide your research work into parts, and do a particular part in a particular time slot.

17. Never copy others' work: Never copy others' work and give it your name because if the evaluator has seen it anywhere, you will be in trouble. Take proper rest and food: No matter how many hours you spend on your research activity, if you are not taking care of your health, then all your efforts will have been in vain. For quality research, take proper rest and food.

18. Go to seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.

19. Refresh your mind after intervals: Try to give your mind a rest by listening to soft music or sleeping in intervals. This will also improve your memory. Acquire colleagues: Always try to acquire colleagues. No matter how sharp you are, if you acquire colleagues, they can give you ideas which will be helpful to your research.

20. Think technically: Always think technically. If anything happens, search for its reasons, benefits, and demerits. Think and then print: When you go to print your paper, check that tables are not split, headings are not detached from their descriptions, and page sequence is maintained.



21. Adding unnecessary information: Do not add unnecessary information like "I have used MS Excel to draw graphs." Irrelevant and inappropriate material is superfluous. Foreign terminology and phrases are not apropos. One should never take a broad view. Analogy is like feathers on a snake. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Never oversimplify: When adding material to your research paper, never go for oversimplification; this will definitely irritate the evaluator. Be specific. Never use rhythmic redundancies. Contractions shouldn't be used in a research paper. Comparisons are as terrible as clichés. Give up ampersands, abbreviations, and so on. Remove commas that are not necessary. Parenthetical words should be between brackets or commas. Understatement is always the best way to put forward earth-shaking thoughts. Give a detailed literary review.

22. Report concluded results: Use concluded results. From raw data, filter the results, and then conclude your studies based on measurements and observations taken. An appropriate number of decimal places should be used. Parenthetical remarks are prohibited here. Proofread carefully at the final stage. At the end, give an outline to your arguments. Spot perspectives of further study of the subject. Justify your conclusion at the bottom sufficiently, which will probably include examples.

23. Upon conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print for the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects of your research.

INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form which is presented in the guidelines using the template.
- Please note the criteria peer reviewers will use for grading the final paper.

Final points:

One purpose of organizing a research paper is to let people interpret your efforts selectively. The journal requires the following sections, submitted in the order listed, with each section starting on a new page:

The introduction: This will be compiled from reference matter and reflect the design processes or outline of basis that directed you to make a study. As you carry out the process of study, the method and process section will be constructed like that. The results segment will show related statistics in nearly sequential order and direct reviewers to similar intellectual paths throughout the data that you gathered to carry out your study.

The discussion section:

This will provide understanding of the data and projections as to the implications of the results. The use of good quality references throughout the paper will give the effort trustworthiness by representing an alertness to prior workings.

Writing a research paper is not an easy job, no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record-keeping are the only means to make straightforward progression.

General style:

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear: Adhere to recommended page limits.

Mistakes to avoid:

- Insertion of a title at the foot of a page with subsequent text on the next page.
- Separating a table, chart, or figure—confine each to a single page.
- Submitting a manuscript with pages out of sequence.
- In every section of your document, use standard writing style, including articles ("a" and "the").
- Keep paying attention to the topic of the paper.



- Use paragraphs to split each significant point (excluding the abstract).
- Align the primary line of each section.
- Present your points in sound order.
- Use present tense to report well-accepted matters.
- Use past tense to describe specific results.
- Do not use familiar wording; don't address the reviewer directly. Don't use slang or superlatives.
- Avoid use of extra pictures—include only those figures essential to presenting results.

Title page:

Choose a revealing title. It should be short and include the name(s) and address(es) of all authors. It should not have acronyms or abbreviations or exceed two printed lines.

Abstract: This summary should be two hundred words or less. It should clearly and briefly explain the key findings reported in the manuscript and must have precise statistics. It should not have acronyms or abbreviations. It should be logical in itself. Do not cite references at this point.

An abstract is a brief, distinct paragraph summary of finished work or work in development. In a minute or less, a reviewer can be taught the foundation behind the study, common approaches to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Use comprehensive sentences, and do not sacrifice readability for brevity; you can maintain it succinctly by phrasing sentences so that they provide more than a lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study with the subsequent elements in any summary. Try to limit the initial two items to no more than one line each.

Reason for writing the article—theory, overall issue, purpose.

- Fundamental goal.
- To-the-point depiction of the research.
- Consequences, including definite statistics—if the consequences are quantitative in nature, account for this; results of any numerical analysis should be reported. Significant conclusions or questions that emerge from the research.

Approach:

- Single section and succinct.
- An outline of the job done is always written in past tense.
- Concentrate on shortening results—limit background information to a verdict or two.
- Exact spelling, clarity of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else.

Introduction:

The introduction should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable of comprehending and calculating the purpose of your study without having to refer to other works. The basis for the study should be offered. Give the most important references, but avoid making a comprehensive appraisal of the topic. Describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will give no attention to your results. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here.

The following approach can create a valuable beginning:

- Explain the value (significance) of the study.
- Defend the model—why did you employ this particular system or method? What is its compensation? Remark upon its appropriateness from an abstract point of view as well as pointing out sensible reasons for using it.
- Present a justification. State your particular theory(-ies) or aim(s), and describe the logic that led you to choose them.
- Briefly explain the study's tentative purpose and how it meets the declared objectives.



Approach:

Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done. Sort out your thoughts; manufacture one key point for every section. If you make the four points listed above, you will need at least four paragraphs. Present surrounding information only when it is necessary to support a situation. The reviewer does not desire to read everything you know about a topic. Shape the theory specifically—do not take a broad view.

As always, give awareness to spelling, simplicity, and correctness of sentences and phrases.

Procedures (methods and materials):

This part is supposed to be the easiest to carve if you have good skills. A soundly written procedures segment allows a capable scientist to replicate your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order, but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt to give the least amount of information that would permit another capable scientist to replicate your outcome, but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section.

When a technique is used that has been well-described in another section, mention the specific item describing the way, but draw the basic principle while stating the situation. The purpose is to show all particular resources and broad procedures so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step-by-step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

Materials may be reported in part of a section or else they may be recognized along with your measures.

Methods:

- Report the method and not the particulars of each process that engaged the same methodology.
- Describe the method entirely.
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures.
- Simplify—detail how procedures were completed, not how they were performed on a particular day.
- If well-known procedures were used, account for the procedure by name, possibly with a reference, and that's all.

Approach:

It is embarrassing to use vigorous voice when documenting methods without using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result, when writing up the methods, most authors use third person passive voice.

Use standard style in this and every other part of the paper—avoid familiar lists, and use full sentences.

What to keep away from:

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings—save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part as entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Use statistics and tables, if suitable, to present consequences most efficiently.

You must clearly differentiate material which would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matters should not be submitted at all except if requested by the instructor.



Content:

- Sum up your conclusions in text and demonstrate them, if suitable, with figures and tables.
- In the manuscript, explain each of your consequences, and point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation of an exacting study.
- Explain results of control experiments and give remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or manuscript.

What to stay away from:

- Do not discuss or infer your outcome, report surrounding information, or try to explain anything.
- Do not include raw data or intermediate calculations in a research manuscript.
- Do not present similar data more than once.
- A manuscript should complement any figures or tables, not duplicate information.
- Never confuse figures with tables—there is a difference.

Approach:

As always, use past tense when you submit your results, and put the whole thing in a reasonable order.

Put figures and tables, appropriately numbered, in order at the end of the report.

If you desire, you may place your figures and tables properly within the text of your results section.

Figures and tables:

If you put figures and tables at the end of some details, make certain that they are visibly distinguished from any attached appendix materials, such as raw facts. Whatever the position, each table must be titled, numbered one after the other, and include a heading. All figures and tables must be divided from the text.

Discussion:

The discussion is expected to be the trickiest segment to write. A lot of papers submitted to the journal are discarded based on problems with the discussion. There is no rule for how long an argument should be.

Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implications of the study. The purpose here is to offer an understanding of your results and support all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of results should be fully described.

Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact, you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved the prospect, and let it drop at that. Make a decision as to whether each premise is supported or discarded or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."

Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work.

- You may propose future guidelines, such as how an experiment might be personalized to accomplish a new idea.
- Give details of all of your remarks as much as possible, focusing on mechanisms.
- Make a decision as to whether the tentative design sufficiently addressed the theory and whether or not it was correctly restricted. Try to present substitute explanations if they are sensible alternatives.
- One piece of research will not counter an overall question, so maintain the large picture in mind. Where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.



Approach:

When you refer to information, differentiate data generated by your own studies from other available information. Present work done by specific persons (including you) in past tense.

Describe generally acknowledged facts and main beliefs in present tense.

THE ADMINISTRATION RULES

Administration Rules to Be Strictly Followed before Submitting Your Research Paper to Global Journals Inc.

Please read the following rules and regulations carefully before submitting your research paper to Global Journals Inc. to avoid rejection.

Segment draft and final research paper: You have to strictly follow the template of a research paper, failing which your paper may get rejected. You are expected to write each part of the paper wholly on your own. The peer reviewers need to identify your own perspective of the concepts in your own terms. Please do not extract straight from any other source, and do not rephrase someone else's analysis. Do not allow anyone else to proofread your manuscript.

Written material: You may discuss this with your guides and key sources. Do not copy anyone else's paper, even if this is only imitation, otherwise it will be rejected on the grounds of plagiarism, which is illegal. Various methods to avoid plagiarism are strictly applied by us to every paper, and, if found guilty, you may be blacklisted, which could affect your career adversely. To guard yourself and others from possible illegal use, please do not permit anyone to use or even read your paper and file.

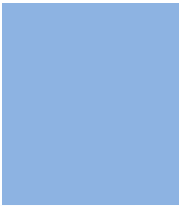


CRITERION FOR GRADING A RESEARCH PAPER (COMPILATION)
BY GLOBAL JOURNALS

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals.

| Topics | Grades | | |
|-------------------------------|--|---|--|
| | A-B | C-D | E-F |
| <i>Abstract</i> | Clear and concise with appropriate content, Correct format. 200 words or below | Unclear summary and no specific data, Incorrect form Above 200 words | No specific data with ambiguous information Above 250 words |
| <i>Introduction</i> | Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited | Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter | Out of place depth and content, hazy format |
| <i>Methods and Procedures</i> | Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads | Difficult to comprehend with embarrassed text, too much explanation but completed | Incorrect and unorganized structure with hazy meaning |
| <i>Result</i> | Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake | Complete and embarrassed text, difficult to comprehend | Irregular format with wrong facts and figures |
| <i>Discussion</i> | Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited | Wordy, unclear conclusion, spurious | Conclusion is not cited, unorganized, difficult to comprehend |
| <i>References</i> | Complete and correct format, well organized | Beside the point, Incomplete | Wrong format and structuring |





INDEX

A

Antecedents · 12

E

Elucidating · 23

H

Heterogeneity · 2, 30

I

Interlude · 1, 10

P

Pivotal · 17
Predominantly · 2
Prerequisite · 22
Province · 2

Q

Quotients · 6, 9

R

Residual · 1, 10

S

Stewardship · 11
Strengthens · 12

T

Tenure · 11, 20, 30



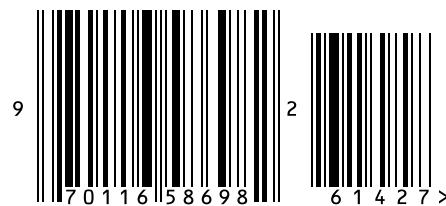
save our planet

Global Journal of Management and Business Research

Visit us on the Web at www.GlobalJournals.org | www.JournalofBusiness.Org
or email us at helpdesk@globaljournals.org



ISSN 9755853



© Global Journals