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EXPLORING THE INFLUENCE OF LIFE INSURANCE DEMAND IN ADDIS ABABA, ETHIOPIA

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ABSTRACT

The demand for life insurance plays a vital role in financial planning and risk management, particularly in developing countries like Ethiopia. This study investigates the factors influencing life insurance demand in Addis Ababa, Ethiopia. Using an explanatory research design and a quantitative methodology, data were gathered from 343 customers through questionnaires and applied in Statistical Packages of Social Science (SPSS) software version 27. Descriptive statistics, such as frequency and percentage distributions, were used to summarize the data, while multiple linear regression analysis identified key determinants of life insurance demand. The findings highlight education, income, public awareness, urbanization, and inflation as significant factors. Education emerged as the most critical, with individuals possessing higher levels of education more likely to recognize the importance of life insurance. Urbanization also contributes positively by enhancing life expectancy and improving access to insurance services. Income and public awareness further encourage life insurance adoption, while inflation hinders demand by reducing purchasing power. The study recommends targeted strategies to promote life insurance adoption. These include enhancing education, expanding insurance services in urban areas, designing products tailored to higher-income groups, and addressing inflation concerns with policies that incorporate inflation protection. Public awareness campaigns can also bridge knowledge gaps, particularly in urban areas, fostering informed decisions and improving financial security in Ethiopia. Growing demand and economic growth are driving a major transition in Addis Ababa's life insurance sector. A key factor in determining market dynamics is the quantity of insurance companies and the size of their financial assets. Insurance companies must adjust to the rising demand by fortifying their financial resources, boosting their investment plans, and enhancing service provision in order to preserve market stability and expansion. Policymakers, insurers, and other stakeholders must comprehend these economic and financial factors in order to promote a robust and prosperous insurance industry in Ethiopia.

Keywords: awareness, income, inflation, life insurance demand, urbanization, financial assets, financial analysis, Ethiopia

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INTRODUCTION

Life insurance plays a vital role in economic growth and financial security by encouraging long-term savings that support investments in public and private projects. Beck and Webb (2003) and Deressa et al. (2023) highlight that life insurance, through its structured savings plans, offers a competitive alternative to other saving mechanisms like bank accounts and stocks, making it an effective tool for wealth accumulation. Similarly, Munir et al. (2013) emphasize its dual importance: for individuals, life insurance serves as a safety net against income risks arising from urbanization and societal changes, while for economies, insurers act as key facilitators of long-term financing by channelling savings into developmental projects.

The demand for life insurance has been widely studied, with a focus on economic, demographic, and cultural determinants. Beck and Webb (2003) underline the significance of income levels, financial literacy, and risk awareness in driving life insurance adoption,

while Outreville (2018) explores how institutional and regulatory frameworks shape insurance markets. In the African context, Meko et al. (2019) identify barriers such as distrust in financial institutions, low disposable income, and limited awareness of life insurance benefits. Specifically, in Ethiopia, studies like Ghani and Lambak (2018) have pointed to cultural beliefs, religious considerations, and a lack of customized insurance products as critical obstacles to market growth.

Although these studies provide valuable insights, they often overlook the distinct characteristics of urban centres like Addis Ababa, where economic activity, cultural dynamics, and consumer preferences differ significantly from rural areas. Recent research, such as Romanu and Zelalam (2023), has begun addressing these gaps but has yet to fully examine how urbanization, education, and emerging middle-class dynamics influence life insurance demand.

Despite Ethiopia's financial advancements, its life insurance sector faces significant challenges. The country has some of the lowest insurance penetration rates, premium market shares, and per capita premiums globally and regionally. This underdevelopment is partly due to restrictive investment policies by the National Bank, which require insurers to allocate funds to low-yield government bonds and bank deposits. The absence of a stock market further limits investment diversification. As noted by Cutler and Lleras-Muney (2010) and Osebo (2019), these constraints have stifled the growth of Ethiopia’s life insurance industry, leaving much of its potential untapped, despite modest recent growth.

Life insurance is a critical component of financial planning and risk management, particularly in developing countries like Ethiopia. In Addis Ababa, where economic activity is rapidly expanding, the importance of life insurance has grown. It provides individuals and families with financial protection against unforeseen events such as death or disability. However, Ethiopia’s life insurance penetration rate remains low compared to other African nations, highlighting the need for further exploration of the factors influencing demand (Osebo, 2019).

Revitalizing Ethiopia's life insurance sector requires innovative strategies and policy reforms. Ejigu (2016) stresses the importance of addressing economic and demographic factors to boost demand. Key steps include expanding investment options, enhancing public awareness, and modernizing service delivery. While the Ethiopian insurance industry has shown some growth, its contribution to GDP remains minimal. This study aims to investigate the factors influencing the demand for life insurance in Addis Ababa, Ethiopia.

With several insurers participating in the market, Ethiopia's life insurance industry has been steadily expanding. These businesses' competition affects prices, policy frameworks, and general customer interaction. The industry grows as a result of increased market entry prospects for new insurers brought about by rising demand for life insurance services.

One important factor influencing an insurance company's capacity to fulfil policyholder commitments is its financial health. The sustainability and reliability of these businesses are directly impacted by their total financial assets, which include reserves, investments, and capital adequacy. As insurers collect premiums and reinvest in lucrative financial instruments, the rising demand for life insurance services helps to expand financial assets.

Because it reduces risk and offers long-term security, life insurance is essential to financial planning. The number of insurance companies, their financial resources, and general market trends are some of the economic and financial elements that affect the demand for life insurance in Addis Ababa, Ethiopia. Analyzing these variables and figuring out how they affect the expansion and sustainability of Ethiopia's life insurance market are the goals of this study.

LITERATURE REVIEW

The literature on life insurance demand identifies various factors influencing consumer behaviour. Kamau and Weda (2019) highlight the significant impact of socio-economic variables such as income, education, and awareness on life insurance uptake in African countries. Similarly, Deressa et al. (2023) emphasize cultural perceptions and attitudes as critical determinants of demand. In Ethiopia, Shewangezaw and Alebachew (2021) examined the insurance market, identifying low awareness and cultural resistance as major barriers. However, their study provided limited empirical evidence specific to life insurance. Zakaria et al. (2016) explored the role of financial literacy but focused primarily on health insurance, leaving a gap in understanding life insurance demand. While these studies offer valuable insights, they often lack specificity and fail to address the interplay of socio-economic and cultural factors unique to Addis Ababa.

Recent research highlights a complex interplay of factors shaping life insurance demand in Ethiopia. Shewangezaw and Alebachew (2021) found economic growth and financial literacy positively correlated with insurance demand, while Deressa et al. (2023) argued that cultural mistrust of financial institutions plays a more significant role. These findings underscore the need for localized studies to understand the challenges and opportunities specific to Addis Ababa.

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Life insurance provides economic security and mitigates risks such as income loss due to death, disability, or old age. Despite its importance, life insurance penetration remains low in many developing countries, including Ethiopia. Addis Ababa, as the nation's capital and economic hub, presents a unique demographic and socioeconomic context, making it a valuable setting for examining life insurance demand (Beck & Webb, 2003).

Ethiopia's life insurance sector is underdeveloped compared to other African nations, hindered by cultural, economic, and regulatory challenges. Understanding the factors influencing demand in Addis Ababa could provide insights to improve financial inclusion nationwide (Kamau & Weda, 2019).

Previous research on life insurance demand often adopts quantitative approaches, which, while useful, fail to capture the nuanced socio-cultural factors affecting consumer behaviour. For instance, Beck and Webb (2003) offered a global perspective but lacked region-specific insights for Ethiopia. Similarly, Outreville (2018) focused on macro-level determinants without examining individual behaviours. Studies like those by Meko et al. (2019) and Baruti (2020) explored financial literacy and the broader insurance market but overlooked the unique characteristics of urban settings such as Addis Ababa.

This study aims to fill these gaps by adopting a mixed-methods approach that integrates quantitative and qualitative data. It emphasizes the socio-economic and cultural dynamics unique to Addis Ababa, providing actionable insights for policymakers, and financial educators. By addressing barriers such as low awareness, cultural resistance, and mistrust of financial institutions, the findings can inform targeted interventions to improve life insurance penetration and household resilience.

The determinants of life insurance demand span demographic, socio-economic, and attitudinal factors. Higher-income levels, education, and asset ownership are consistently associated with increased insurance uptake (Brahmana et al., 2018). Additionally, factors such as age, marital status, and number of dependents influence purchasing decisions. Beyond economic factors, cultural and psychological dimensions, including risk aversion and perceptions of insurance benefits, also shape consumer behaviour (Trinh et al., 2021).

Economic and regulatory environments significantly impact insurance demand, with urbanization, financial market development, and economic freedom serving as key drivers (Baruti, 2020). In Islamic contexts, the uptake of Takaful, an alternative to conventional insurance, is influenced by religiosity, attitudes towards risk, and perceptions of Takaful principles (Sherif & Azlina, 2013; Sherif & Hussnain, 2017).

By addressing these diverse factors, this study contributes to understanding life insurance demand in Addis Ababa, offering a roadmap for enhancing financial inclusion and economic stability in urban Ethiopia.

AIMS AND OBJECTIVES

This research aims to:

- examine the relationship between the number of operating insurance businesses in Ethiopia and the demand for life insurance;
- examine insurance businesses' financial resources and how they affect the viability of the market;
- analyze the effects of demand-driven shifts on financial stability, investment strategies, and premium growth and describe the policy changes that could improve Addis Ababa's life insurance market's uptake and penetration.

METHODS

Research design and approach

This study adopts a mixed-methods approach to explore the factors influencing life insurance demand in Addis Ababa. The quantitative component involves a survey of 500 residents, stratified by income level, age, and education, to identify patterns and correlations. The survey includes questions on income, financial literacy, cultural attitudes, and trust in insurance providers. Descriptive statistics and regression were used to analyze the data.

The qualitative component involved semi-structured interviews with 343 participants, including policyholders, non-policyholders, and industry stakeholders. Thematic analysis is employed to identify recurring themes and insights that complement the quantitative findings. Additionally, secondary data from insurance companies and regulatory bodies was reviewed to contextualize the primary data.

Data sources and sampling

The study employed primary data collected directly from selected insurance customers. Additionally, existing materials like books, articles, and online resources relevant to the research topic were used. In order to determine the sample size, the numbers of customers at the Insurance Corporation of Addis Ababa city were considered. Therefore, the total number of customers in Ethiopian Insurance Corporation in Addis Ababa city was 3542. Accordingly, the sample size was determined by using the formula (Equation 1):

$$n = \frac{N}{1 + N_{(e)}^2}$$

$$n = \frac{3542}{1+3542(0.05)^2} \quad (1)$$

$$n \approx 360$$

where: n *= Sample Size,* N = Total Population, e = Sampling Error

After determining the sample size, the researcher employed a convenient sampling technique. This means the researcher selected participants based on their willingness and availability to be studied. Because, when population elements have no sampling frame and were selected for inclusion in the sample based on the ease of access, convenient sampling is the correct sampling technique(Mweshi & Sakyi, 2020).

Methods of data analysis

The data collected through questionnaires were meticulously processed to ensure accuracy and reliability for analysis. This involved a series of steps, including editing to correct inconsistencies, coding to categorize responses systematically, and inputting the data into SPSS version 27 for statistical analysis. Descriptive statistics, such as frequency and percentage distributions, were utilized to provide a clear and concise summary of the data, offering insights into the general patterns and trends observed among the respondents. To delve deeper into the factors influencing the demand for life insurance, multiple linear regression analysis was employed. This advanced statistical method allowed for the identification and quantification of relationships between the dependent variable—demand for life insurance—and various independent variables, enabling the study to pinpoint the most significant determinants shaping life insurance uptake.

Robust methodology for exploring the influence of life insurance demand

In this study, conducting a comprehensive review of existing literature on life insurance demand, focusing on: Economic theories of risk aversion and insurance demand; Empirical studies on life insurance demand in developing countries and Specific studies on the Ethiopian insurance market and developed a regression imperial formula as Equation (2) and using statistical software i.e., Statistical Packages of Social Science (SPSS).

Data collection for this methodology:

Primary Data:

Surveys: Designing and administering surveys to a representative sample of individuals and households in Addis Ababa. Primary data were collected by asking questions on demographics, income, education, awareness of life insurance, perceived risks, attitudes towards insurance, and insurance ownership through structured survey and qualitative data was by focus group discussion.

Secondary Data:

Secondary data were obtained from the National Bank of Ethiopia, Ethiopian Insurance Supervisory Authority, Addis Ababa City Administration, Academic research institutions and market research firms.

Developing a regression model to quantify the relationship between life insurance demand and key explanatory variables was used to identify key factors that affect life insurance demand.

Dependent Variable:

Life insurance penetration rate (percentage of the population with life insurance coverage) Or, alternatively, the demand for life insurance (measured as the total premium income of life insurance companies in Addis Ababa).

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Independent Variables:

Income (GDP per capita, household income), Education level (literacy rate, years of schooling), Age and gender distribution, Urbanization rate, Economic growth rate, Inflation rate, Interest rates, Awareness of life insurance products, Trust in insurance companies and Perceived risks (health, mortality, financial) (Table 1).

Table 1. Variables, Symbols and Descriptions used in SPSS.

Variables	Symbol	Descriptions of dependent and independent variables
Age	Ag	Age of respondents
Gender	Ge	Gender of respondents
Education	Ed	Education level
Marital Status	Ms	Marital status
Employment _status	Em	Employment status
Monthly _Income	Mi	Monthly income
House_ Owner	Ho	House owner
Car_Owner	Co	Car owner
Urbanization	Ur	Urbanization
Awareness	Ar	Awareness of life insurance
Beliefe_Linsurance	BLI	Belief in life Insurance
Benefits_Linsurance	BeLI	Benefits of life insurance
Linsurance_Expensive	LiE	Life insurance of expensiveness
Financial_Security	Fs	Financial security
Religious_Belief	ReB	Religious of belief on life insurance
Form_Saving	FSa	Life insurance taking as a form of saving
Cultural_Norms	Cno	Cultural norms
Financial_Stability	Fst	Financial stability
Relevant	Re	Relevancy of life insurance
Readly_available	Ra	Readily availability of life insurance
Affordable	Aff	Affordability of life insurance
Understandable	And	Understandability of life insurance work
Defendants	Def	Defendants on life insurance
Inflation	Inf	Inflation rates
Purchase	Pur	Purchase behaviour of respondents
Linsurance_policy	LiPL	Life insurance of policy effect
Financial_Literacy	Flit	Financial literacy on life insurance
Policy_complexity	PoCo	Policy complexity of life insurance
Linsurance_Demand	LiDe	Life insurance demand

Regression Equation:

$$LID = \beta 0 + + \beta 1 * \text{Income} + \beta 2 * \text{Education} + \beta 3 * \text{Age} + \beta 4 * \text{Gender} + \beta 5 * \text{Urbanization} + \beta 6 * \text{Economic Growth} + \beta 7 * \text{Inflation} + \beta 8 * \text{Interest Rates} + \beta 9 * \text{Awareness} + \beta 10 * \text{Trust} + \beta 11 * \text{Perceived Risks} + \varepsilon \quad (2)$$

where: β0 is the intercept; β1 to β11 are the coefficients of the independent variables; ε is the error term

This is a general framework, and the specific methodology and model were adjusted based on the availability of data, research objectives, and the specific context of the study and using the general conceptual framework (Figure 1).

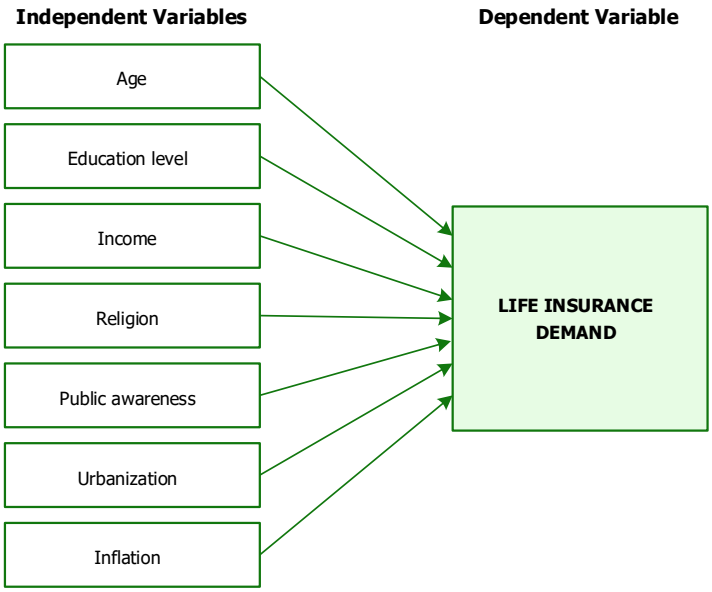

Figure 1. Conceptual framework. *(Source: adapted from Baruti (2020))*

RESULTS

Summary statistics

Table 2 explains the descriptive summary of the variables. A key statistic such as average, maximum, minimum, and standard deviation are depicted. Notably, education, employment, urbanization and religious belief exhibit the highest mean up to (2.4985) and maximum value (5). Others such as purchase behaviour, dependency, and affordability record the lowest average up to (1.3). Moreover, employment status has the highest standard deviation (1.92350), indicating considerable variability. However, finance stability exhibits a lower standard deviation (0.50063), which suggests minimal variability around the mean. Additionally, all variables' data distribution exhibits a mild rightward skew, with the exceptions being life insurance demand and age. The demand for life insurance is influenced by a multitude of variables, each with its own implications.

Table 2. Descriptive Statics.

	Observations	Mean	Std. Deviation	Skewness	Kurtosis	Minimum	Maximum	Probability
Ag	343	2.1341	1.70640	-0.178	-1.683	1.00	5.00	0.5640
Ge	343	1.2974	0.45777	0.890	-1.214	1.00	2.00	0.2450
Ed	343	2.4665	1.10998	0.046	-1.338	1.00	4.00	0.2350
Ms	343	2.4461	1.12228	0.067	-1.365	1.00	4.00	0.4560
Em	343	2.4869	1.92350	0.014	-1.371	1.00	5.00	0.5650
Mi	343	2.4898	1.12093	0.013	-1.365	1.00	4.00	0.4350
Ho	343	1.4985	0.50073	0.006	-2.012	1.00	2.00	0.2640
Co	343	1.4995	0.50073	0.006	-2.012	1.00	2.00	0.4750
Ur	343	2.4985	1.50073	0.006	-2.012	1.00	5.00	0.4789
Ar	343	1.4869	0.50056	0.053	-2.009	1.00	2.00	0.3786
BLI	343	1.4956	0.50071	0.018	-2.011	1.00	2.00	0.3784
BeLI	343	1.4898	0.50063	0.041	-2.010	1.00	2.00	0.3782
LiE	343	1.4956	0.50071	0.018	-2.011	1.00	2.00	0.3780
Fs	343	1.4898	0.50063	0.041	-2.010	1.00	2.00	0.3777
ReB	343	2.4985	0.50073	0.006	-2.012	1.00	5.00	0.3775
FSa	343	1.4995	0.50073	0.006	-2.012	1.00	2.00	0.3773
Cno	343	1.4985	0.50073	0.006	-2.012	1.00	2.00	0.3770

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Table 2. Continued.

	Observations	Mean	Std. Deviation	Skewness	Kurtosis	Minimum	Maximum	Probability
Fst	343	1.4985	0.50073	0.006	-2.012	1.00	2.00	0.3768
Re	343	1.4585	0.50073	0.006	-2.012	1.00	2.00	0.3766
Ra	343	1.4985	0.50073	0.006	-2.012	1.00	2.00	0.3764
Aff	343	1.4485	0.50073	0.006	-2.012	1.00	2.00	0.4250
And	343	1.4585	0.50073	0.006	-2.012	1.00	2.00	0.3759
Def	343	1.4985	0.50073	0.006	-2.012	1.00	2.00	0.3470
Inf	343	1.4985	0.50073	0.006	-2.012	1.00	2.00	0.3755
Pur	343	1.4985	0.50073	0.006	-2.012	1.00	2.00	0.3752
LiPL	343	1.4785	0.50073	0.006	-2.012	1.00	2.00	0.3750
Flit	343	1.4685	0.50073	0.006	-2.012	1.00	2.00	0.3748
PoCo	343	1.2985	0.50073	0.006	-2.012	1.00	2.00	0.3746
LiDe	343	1.3985	0.50073	0.006	-2.012	1.00	2.00	0.3743

Variables influencing life insurance demand

Table 3 illustrates Pearson correlation along with 2-tailed significance and variables collectively shape the landscape of life insurance demand. Understanding their influence can help insurers tailor their products, marketing strategies, and educational initiatives to better meet the needs of potential customers. By addressing these factors, life insurance companies can enhance customer engagement and increase overall demand in the market. The age of respondents affects their perception of risk and need for coverage. As Table 3 indicates Age correlates with education level at 1% error. Younger individuals may feel invulnerable, while older adults often seek life insurance for financial security and legacy planning.

As indicated in Table 3, education level correlates with all other variables at 1% and 5% error, impacting understanding of insurance products and their benefits, thus influencing demand. More educated individuals are likely to recognize the importance of life insurance.

As indicated in Table 3, marital status correlates with all other variables at 1% and 5% error, married individuals, especially those with dependents, typically have a higher demand for life insurance to secure their family's financial future and influence the life insurance demand. As indicated in Appendix (Table 3), employment status correlates with all other variables at 1% and 5% error, employment stability can influence demand; employed individuals are more likely to consider life insurance as part of their financial planning and influence life insurance demand. Higher-income levels generally lead to increased demand for life insurance, as individuals can afford premiums and seek to protect their wealth.

Background characteristics of customers

Of the 360 questionnaires distributed, 343 were accurately completed and returned, resulting in a high response rate. Tables 4 and 5 provide a detailed overview of the participants' demographic characteristics, including their gender, age, education level, and monthly income.

Table 4. Sex and Age of the Customers. *(Source: Survey Data, 2024)*

Variables	Categories	Frequency	Percentage
Sex	Male	220	64.1
	Female	123	35.9
	Total	343	100
Age of customers	25-34	15	4.4
	35-44	45	13.1
	45-54	102	29.7
	55-64	160	46.6
	Above 64	21	6.1
	Total	343	100

As presented in Table 4, among 343 respondents, the majority (64.1%) of sampled respondents were male. On the other hand, female sampled respondents accounted for 35.9%. This indicates that in the use of life insurance, the number of male respondents is greater than their female counterparts.

The age of sampled respondents was one of the demographic variables. As the result of Table 4 shows 46.6% of them were found in the age group of 55-64 and 29.7% of them were found in 45-54 age categories. The remaining 16.7% and 13.9% of them were found below the 18 and 34-41age categories, respectively. This indicates that all of the sampled respondents are found in the productive age group.

Table 5. Customers' Education Level and Income. *(Source: Survey Data, 2024)*

Variables	Categories	Frequency	Percentage
Education level	Grade 12 completed	40	11.7
	Certificate	23	6.7
	College diploma	119	34.7
	Degree and above	161	46.9
	Total	343	100
Monthly income	6001-9000	90	26.2
	9001-12000	44	12.8
	Above 12000	209	60.9
	Total	343	100

Table 5 reveals that the overwhelming majority of respondents (95.8%) hold a college diploma or higher, while only 4.2% have completed up to grade 12. Regarding monthly income, 36.1% of participants earn between 6,001 and 9,000 Birr, and 20.1% earn 9,001 Birr or more. These findings indicate that the majority of study participants have a monthly income exceeding 3,000 Birr.

Table 6. Customers' Religion and Duration as a Client. *(Source: Survey Data, 2024)*

Variables	Categories	Frequency	Percentage
What is your religion	Orthodox Christian	177	51.6
	Muslim	57	16.6
	Protestant	86	25.1
	Catholic	23	6.7
	Total	343	100
How many years have you stayed as a client in life insurance	Below 5	182	53.1
	6-9	145	42.3
	10-13	16	4.7
	Total	343	100

Table 6 reveals that the dominant religion among respondents is Orthodox Christianity, accounting for 54.2% of the sample. Protestants constitute 32.6%, while Muslims and Catholics represent 11.8% and 1.4%, respectively. In terms of client tenure in life insurance, the data indicates that 49.3% of respondents have been clients for less than five years. The next largest group (45.1%) has a client history of six to nine years, while 5.6% have been clients for ten to thirteen years. This indicates that the greater sampled respondents have stayed as clients in life insurance for less than 5 years.

Factors affecting the demand for life insurance

This section presents the results of the multiple linear regression analysis conducted to examine the relationship between independent variables and life insurance demand.

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Table 7. Model Summary of Regression Analysis. *(Source: Survey Data, 2024)*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.850	.723	.718	.28973

The model exhibits a strong relationship between the independent and dependent variables, as indicated by the R-value of 0.850 in Table 7. The adjusted R^2 value of 0.718 implies that about 71.8 per cent of the effect of life insurance demand has been explained by public awareness, level of income, religion, education level, urbanization, inflation, and age. The remaining 28.2 per cent of the variance in life insurance demand was not accounted for by the independent variables considered in the model.

Table 8. Results of ANOVA Output. *(Source: Model output, 2024)*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	73.519	7	10.503	125.119	.000
	Residual	28.120	335	.084		
	Total	101.639	342			

The ANOVA table (Table 8) assesses the overall significance of the multiple regression model. Unlike R^2, which measures the proportion of variance explained, the F-statistic determines whether the model's explanatory power is statistically significant or could have occurred by chance. Essentially, the F-statistic evaluates the probability of a random deviation from a linear relationship. Therefore, the regression results showed that the computed F-statistic (125.119) was significant at one per cent. This justifies the suitability of the regression model in determining the life insurance demand.

Table 9. Results of Multiple Linear Regression analysis. Note: Dependent variable = Life insurance demand.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	SE	Beta		
1	(Constant)	1.226	.149		8.208	.000
	Age	.018	.016	.040	1.148	.252
	Education level	.148	.022	.268	6.837	.000
	Monthly income	.138	.021	.220	6.543	.000
	Religion	-.073	.052	-.050	-1.417	.157
	Public awareness	.151	.023	.220	6.573	.000
	Urbanization	.142	.022	.272	6.610	.000
	Inflation	-.095	.017	-.172	-5.522	.000

The regression analysis identified five variables—education level, monthly income, public awareness, urbanization, and inflation—as significant determinants of life insurance demand. Education, income, public awareness, and urbanization were found to have positive and statistically significant effects, with regression coefficients of $\beta = 0.148$, $\beta = 0.138$, $\beta = 0.151$, and $\beta = 0.142$, respectively, indicating that higher levels of these factors lead to increased life insurance demand. Conversely, inflation exhibited a negative and statistically significant effect ($\beta = -0.095$), suggesting that rising inflation reduces life insurance demand. These findings underscore the critical influence of socioeconomic and contextual factors on life insurance preferences (Table 9).

DISCUSSION

Individuals with higher levels of education exhibit a greater propensity to desire life insurance coverage. This aligns with a study by (Dragos et al., 2017) which found people with higher education were more likely to have and want more life insurance. The study suggests this connection is due to a few reasons: education can lead to higher income and wealth, which allows people to afford more insurance. Additionally, education might improve financial knowledge and understanding of risk, making people more likely to see the value of life insurance. Furthermore, education has been linked to better

health outcomes. This is partially explained by the fact that more educated individuals tend to engage in more health-promoting behaviours, such as regular exercise, healthy eating, and preventative care. Education can also directly improve health by enhancing cognitive abilities, which in turn facilitates healthier choices (Cutler & Lleras-Muney, 2010).

The analysis reveals a positive and statistically significant relationship between income level and life insurance demand. This indicates that individuals with higher incomes are more likely to desire life insurance coverage. Aligned with this finding, (Hochscherf, 2017) determined that income has a significant positive effect on life insurance demand, an effect that persists across different model specifications and measures of income and life insurance demand. The authors suggest this relationship may stem from several factors, including the greater financial capacity of higher-income individuals to afford life insurance, the increased need for life insurance as incomes rise and assets accumulate, and the heightened awareness of life insurance benefits among higher-income individuals.

The results of increased public awareness have a positive and statistically significant effect on life insurance demand. In connection with this finding, (Zakaria et al., 2016) argued that individuals with higher financial literacy and awareness were more likely to demand life insurance. Specifically, the authors found that financial literacy had a positive and significant effect on life insurance demand, while awareness had an even stronger positive and significant effect on life insurance demand. This suggests that efforts to improve financial education and raise public awareness of the benefits of life insurance could lead to increased demand for these important financial products.

The results of the regression analysis indicated that urbanization has a positive and statistically significant effect on life insurance demand. (Meko et al., 2019) found that urbanization fosters the distribution of life insurance products. Urban areas tend to have lower reliance on informal insurance mechanisms like family or community support systems. Furthermore, urban populations have greater access to financial services and disposable income, making them more likely to purchase luxury items like insurance. Concentrated populations in urban areas can also reduce insurance company costs related to marketing, policy distribution, underwriting, and claims processing. Consequently, the shift of populations to urban centres due to industrialization often leads to increased income, financial awareness, and demand for life insurance products, especially for retirement planning and asset protection.

Depending on the results, inflation has a negative and statistically significant effect on life insurance demand. Supporting this finding, (Kanwal et al., 2023) indicated that inflation can have a negative effect on the demand for life insurance for a number of reasons. As the general price level of goods and services rises, the purchasing power of money decreases. This means that people have less disposable income available to spend on things like life insurance premiums. Additionally, high inflation can erode the real value of life insurance benefits over time, making the product less attractive to potential policyholders. Furthermore, inflation can lead to economic uncertainty, causing people to be more cautious with their spending and less likely to invest in long-term financial products like life insurance. Consequently, rising inflation can significantly dampen the demand for life insurance as consumers struggle with higher costs of living and have fewer resources to allocate towards this type of coverage.

CONCLUSIONS

The demand for life insurance is significantly influenced by various factors, including education level, income, public awareness, urbanization, and inflation. Among these, education emerged as the most dominant determinant. Education not only enhances personal growth and critical thinking skills but also equips individuals with the knowledge to assess risks and the importance of life insurance as a preventive measure. Societies with higher education levels are more likely to understand the benefits of life insurance, making education a critical factor in determining demand and premiums. Investing in education, therefore, has a cascading positive effect on life insurance uptake.

Urbanization also plays a pivotal role in shaping life insurance demand. Urban areas with better healthcare infrastructure, such as hospitals and health centres, contribute to improved life expectancy, which in turn increases the demand for life insurance. Nationwide strategies focusing on health promotion and disease prevention, combined with professional guidance and community training, further bolster this demand. A well-urbanized society, with access to essential health services, inherently seeks financial security through life insurance products to manage uncertainties effectively.

Income, public awareness, and inflation also significantly affect life insurance demand. Higher-income levels positively correlate with increased demand, as individuals with greater financial security are more inclined to purchase life insurance for added protection. Public awareness plays a crucial role in bridging the knowledge gap about the benefits of life insurance and encouraging informed decisions. On the other hand, inflation negatively impacts demand by eroding purchasing power and discouraging individuals from committing to life insurance policies. Despite its financial benefits, life insurance

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uptake in the study area faces challenges due to the adverse effects of inflation and limited public awareness, highlighting areas for targeted interventions.

To address the factors influencing life insurance demand, targeted strategies are essential. Education plays a critical role in increasing awareness and adoption, as individuals with higher education levels are better equipped to understand the importance of financial planning and health maintenance. Encouraging investments in education can lead to improved health outcomes and greater life insurance adoption. Urbanization also presents an opportunity to expand insurance services by focusing on areas with growing health infrastructure and economic activity. Collaborating with healthcare providers to bundle health and life insurance packages, coupled with technological advancements to enhance service delivery, can further drive demand in urban centres.

Income and inflation significantly influence life insurance demand, necessitating tailored approaches. Marketing efforts should target higher-income individuals with products that offer comprehensive coverage, flexible terms, and personalized services. To address concerns about inflation, insurance companies can develop and promote policies with built-in inflation protection features, highlighting their value as a financial safety net. Public awareness campaigns are equally vital, emphasizing the benefits of life insurance and equipping individuals with the knowledge needed to make informed financial decisions. By implementing these strategies, insurance companies can effectively enhance demand and foster financial security among diverse populations.

Prospects for further research

Although the demand for life insurance has been established by this study, other research can examine other factors that can affect policy adoption. Future research should look into how fintech and digital transformation can increase access to life insurance, especially in areas with low insurance coverage. Furthermore, longitudinal research may shed further light on how demographic changes, inflation patterns, and economic cycles affect insurance demand over the long run. A more thorough understanding of consumer behaviour can also be attained by looking at the cultural and psychological aspects that affect people's decisions about life insurance. Lastly, comparative research between various nations and areas can provide insightful information on creative methods and best practices for increasing the global penetration of life insurance.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

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CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

REFERENCES

1. Baruti, B. H. (2020). Part Two: Insurance Sector Development And Its Effect On The Financial Markets In Developing Countries: The Case Of Kosovo. *European Journal of Business and Management Research*, *5*(3), 1–10. https://doi.org/10.24018/ejbmr.2020.5.3.352
2. Beck, T., & Webb, I. (2003). Economic, demographic, and institutional determinants of life insurance consumption across countries. *World Bank Economic Review*, *17*(1), 51–88. https://doi.org/10.1093/wber/lhg011
3. Brahmana, R., Brahmana, R. K., & Memarista, G. (2018). Planned Behaviour in Purchasing Health Insurance. *The South East Asian Journal of Management*, *12*(1), 43–64. https://doi.org/10.21002/seam.v12i1.7465
4. Cutler, D. M., & Lleras-Muney, A. (2010). Understanding differences in health behaviors by education. *Journal of Health Economics*, *29*(1), 1–28. https://doi.org/10.1016/j.jhealeco.2009.10.003
5. Deressa Negesa, B., Hailegebreal, D., & Muze, M. Q. (2023). Determinants of Non-Life Insurance Business

Development in Ethiopia. *Journal of Business and Administrative Studies*, *15*(2), 77–93. https://www.ajol.info/index.php/jbas/article/view/269319

6. Dragos, S. L., Mare, C., Dragota, I. M., Dragos, C. M., & Muresana, G. M. (2017). The nexus between the demand for life insurance and institutional factors in Europe: New evidence from a panel data approach. *Economic Research-Ekonomska Istrazivanja*, *30*(1), 1477–1496. https://doi.org/10.1080/1331677X.2017.1325764
7. Ejigu, S. N. (2016). Macro Level Determinants of Life Insurance Purchasing Demand in Ethiopia. *International Journal of Research in Economics and Social Sciences (IJRESS)*, *6*(12), 2249–7382. https://doi.org/ISSN(o): 2249-7382
8. Ghani, H. A., & Lambak, S. (2018). Determinants of Takaful: Case in East Coast Region of Malaysia. *International Journal of Academic Research in Business and Social Sciences*, *8*(12). https://doi.org/10.6007/ijarbss/v8-i12/5059
9. Hochscherf, J. (2017). Income heterogeneity and index insurance demand. *Zeitschrift Fur Die Gesamte Versicherungswissenschaft*, *106*(3–4), 343–368. https://doi.org/10.1007/s12297-017-0386-x
10. Kamau, M. M., & Weda, C. (2019). Influence of Socio Economic Factors on the Demand for Life Insurance in Kenya. *Journal of Finance and Accounting*, *3*(4), 21–38. https://www.stratfordjournal.org/journals/index.php/journal-of-accounting/article/view/381
11. Kanwal, Z., Iqbal, M. N., Ramish, M. S., & Usman, M. (2023). Exploration of the Factors Influencing Customers' Intentions towards Life Insurance Products during Inflation in Pakistan: A Qualitative Study. *Priority-The International Business Review*, *2*(1), 219–230. https://www.researchgate.net/publication/379926605_EXPLORATION_OF_THE_FACTORS_INFLUENCING_CUSTOMERS%27_INTENTIONS_TOWARDS_LIFE_INSURANCE_PRODUCTS_DURING_INFLATION_IN_PAKISTAN_A_QUALITATIVE_STUDY
12. Mall, S., & Sahoo, S. (2015). Determinants of lapsation of life insurance policies: an empirical investigation for the Indian market. *International Journal of Financial Services Management*, *8*(2), 133. https://doi.org/10.1504/ijfsm.2015.074154
13. Meko, M., Lemie, K., & Worku, A. (2019). Determinant of life insurance demand in Ethiopia. *Journal of Economics, Business, & Accountancy Ventura*, *21*(3), 293–302. https://doi.org/10.14414/jebav.v21i3.1474
14. Munir, S., Khan, A., & Jamal, A. (2013). Impact of Macroeconomic & Demographic Variables on the Demand of Life Insurance: A case study of State Life Insurance Corporation of Pakistan (1973-2010). *Academic Journal of Management Sciences*, *2*(1), 7–19. https://doi.org/ISBN: 978-969-9368-07-3
15. Mweshi, G. K., & Sakyi, K. (2020). Application of sampling methods for the research design. *Archives of Business Research*, *8*(11), 180–193. https://doi.org/10.14738/abr.811.9042
16. Osebo, D. (2019). Finance and Management Scholar at Riphah International University Islamabad, Pakistan, Faculty of Management Sciences. *Research Journal of Finance and Accounting*, *10*(No 1), 7–15. https://doi.org/10.7176/RJFA
17. Outreville, J. F. (2018). Culture and Life Insurance. *Journal of Insurance Issues*, *41*(2), 168–192. https://doi.org/https://www.jstor.org/stable/10.2307/26505753
18. Romanu Benti, T., & Zelalam Gasisa, S. (2023). An Assessment of Urban and Per-Urban Household's Willingness to Participate in Urban Forest Conservation Practice in Assosa District, Western Ethiopia. *International Journal of Economy, Energy and Environment*, *2*(2), 11–25. https://doi.org/10.11648/j.ijeee.20230806.11
19. Sherif, M., & Azlina Shaairi, N. (2013). Determinants of demand on family Takaful in Malaysia. *Journal of Islamic Accounting and Business Research*, *4*(1), 26–50. https://doi.org/10.1108/17590811311314276
20. Sherif, M., & Hussnain, S. (2017). Family Takaful in developing countries: the case of Middle East and North Africa (MENA). *International Journal of Islamic and Middle Eastern Finance and Management*, *10*(3), 371–399. https://doi.org/10.1108/IMEFM-01-2016-0016
21. Shewangezaw Kura, T., & Alebachew Legass, H. (2021). Determinants of Life Insurance Demand: Evidence from Ethiopia. *International Journal of Finance and Banking Research*, *7*(6), 144. https://doi.org/10.11648/j.ijfbr.20210706.12
22. Trinh, C. T., Nguyen, X., & Sgro, P. (2021). Culture and the demand for non-life insurance: Empirical evidences from middle-income and high-income economies. *Economics of Transition and Institutional Change*, *29*(3), 431–458. https://doi.org/10.1111/ecot.12274
23. Zakaria, Z., Azmi, N. M., Hassan, N. F. H. N., Salleh, W. A., Tajuddin, M. T. H. M., Sallem, N. R. M., & Noor, J. M. M. (2016). The Intention to Purchase Life Insurance: A Case Study of Staff in Public Universities. *Procedia Economics and Finance*, *37*(16), 358–365. https://doi.org/10.1016/s2212-5671(16)30137-x

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ВИВЧЕННЯ ВПЛИВУ ПОПИТУ НА СТРАХУВАННЯ ЖИТТЯ В АДДИС-АБЕБІ, ЕФІОПІЯ

Попит на страхування життя відіграє життєво важливу роль у фінансовому плануванні та управлінні ризиками, особливо в країнах, що розвиваються, таких як Ефіопія. Автори досліджують фактори, що впливають на попит на

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страхування життя в Аддис-Абебі, Ефіопія. Використовуючи пояснювальний дизайн дослідження та кількісну методологію, вони зібрали дані від 343 клієнтів за допомогою анкет і застосували в програмному забезпеченні статистичних пакетів соціальних наук (SPSS) версії 27. Для узагальнення даних використані описові статистичні дані, такі як частотні та відсоткові розподіли, водночас множинний лінійний регресійний аналіз виявив ключові детермінанти попиту на страхування життя. Результати вказують на те, що освіта, дохід, суспільна свідомість, урбанізація та інфляція є важливими факторами. Освіта виявилася найбільш критичною, причому люди з більш високим рівнем освіти частіше визнають важливість страхування життя. Урбанізація також робить позитивний внесок у збільшення тривалості життя та покращення доступу до страхових послуг. Доходи та поінформованість населення ще більше стимулюють упровадження страхування життя, а інфляція стримує попит, знижуючи купівельну спроможність. У дослідженні порекомендовані цільові стратегії для сприяння впровадженню страхування життя. Вони включають підвищення рівня освіти, розширення страхових послуг у міських районах; розробку продуктів, адаптованих для груп із високим рівнем доходу; а також розв'язання проблем інфляції за допомогою політики, яка включає захист від інфляції. Кампанії з підвищення обізнаності громадськості також можуть подолати прогалини в знаннях, особливо в міських районах, сприяючи ухваленню обґрунтованих рішень і покращуючи фінансову безпеку в Ефіопії. Зростаючий попит та економічний розвиток сприяють серйозним змінам у секторі страхування життя Аддис-Абеби. Ключовими факторами, що визначають динаміку ринку, є кількість страхових компаній і розмір їхніх фінансових активів. Страхові компанії повинні пристосовуватися до зростаючого попиту, зміцнюючи свої фінансові ресурси, посилюючи свої інвестиційні плани та покращуючи надання послуг із метою збереження стабільності ринку й розширення. Політики, страховики та інші зацікавлені сторони повинні розуміти ці економічні й фінансові фактори, щоб сприяти надійній і процвітаючій страховій галузі в Ефіопії.

Ключові слова: обізнаність, дохід, інфляція, попит на страхування життя, урбанізація, фінансові активи, фінансовий аналіз, Ефіопія

JEL Класифікація: G22, R13

Table 3. Pearson correlations and (2-tailed) significance. Note: N=343; * - correlation is significant at the 0.05 level (2-tailed); ** - correlation is significant at the 0.01 level (2-tailed).

Correlations continued																		
		Ag	**Ge**	**Ed**	**Ms**	**Em**	**Mi**	**Ho**	**Co**	**Ur**	**Ar**	**BLI**	**BeLI**	**LiE**	**Fs**	**ReB**	**FSa**	**Cno**
Ag	*Pearson Correlation*	1	0.035	.123*	0.051	0.005	0.016	0.007	0.007	0.019	0.012	0.008	0.012	0.011	0.020	0.007	0.007	0.007
	Sig. (2-tailed)		0.520	0.022	0.345	0.919	0.768	0.896	0.896	0.723	0.820	0.889	0.827	0.840	0.711	0.896	0.896	0.896
Ge	*Pearson Correlation*	0.035	1	0.011	0.020	0.013	0.029	0.027	0.027	0.043	0.043	0.031	0.039	0.031	0.050	0.027	0.027	0.027
	Sig. (2-tailed)	0.520		0.839	0.713	0.806	0.596	0.613	0.613	0.432	0.432	0.565	0.474	0.565	0.354	0.613	0.613	0.613
Ed	*Pearson Correlation*	.123*	0.011	1	.855**	.870**	.885**	.406**	.406**	.419**	.424**	.398**	.417**	.408**	.413**	.406**	.406**	.406**
	Sig. (2-tailed)	0.022	0.839		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ms	*Pearson Correlation*	0.051	0.020	.855**	1	.959**	.953**	.425**	.425**	.424**	.414**	.417**	.422**	.428**	.419**	.425**	.425**	.425**
	Sig. (2-tailed)	0.345	0.713	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Em	*Pearson Correlation*	0.005	0.013	.870**	.959**	1	.985**	.446**	.446**	.446**	.435**	.438**	.443**	.448**	.440**	.446**	.446**	.446**
	Sig. (2-tailed)	0.919	0.806	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mi	*Pearson Correlation*	0.016	0.029	.885**	.953**	.985**	1	.449**	.449**	.449**	.439**	.441**	.447**	.452**	.444**	.449**	.449**	.449**
	Sig. (2-tailed)	0.768	0.596	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ho	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Co	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ur	*Pearson Correlation*	0.019	0.043	.419**	.424**	.446**	.449**	.977**	.977**	1	.977**	.971**	.983**	.983**	.977**	.977**	.977**	.977**
	Sig. (2-tailed)	0.723	0.432	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ar	*Pearson Correlation*	0.012	0.043	.424**	.414**	.435**	.439**	.977**	.977**	.977**	1	.971**	.983**	.971**	.977**	.977**	.977**	.977**
	Sig. (2-tailed)	0.820	0.432	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000
BLI	*Pearson Correlation*	0.008	0.031	.398**	.417**	.438**	.441**	.994**	.994**	.971**	.971**	1	.977**	.988**	.971**	.994**	.994**	.994**
	Sig. (2-tailed)	0.889	0.565	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000
BeLI	*Pearson Correlation*	0.012	0.039	.417**	.422**	.443**	.447**	.983**	.983**	.983**	.983**	.977**	1	.988**	.983**	.983**	.983**	.983**
	Sig. (2-tailed)	0.827	0.474	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
LiE	*Pearson Correlation*	0.011	0.031	.408**	.428**	.448**	.452**	.994**	.994**	.983**	.971**	.988**	.988**	1	.971**	.994**	.994**	.994**
	Sig. (2-tailed)	0.840	0.565	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000
Fs	*Pearson Correlation*	0.020	0.050	.413**	.419**	.440**	.444**	.966**	.966**	.977**	.977**	.971**	.983**	.971**	1	.966**	.966**	.966**
	Sig. (2-tailed)	0.711	0.354	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000
ReB	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000
FSa	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
Cno	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Fst	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Correlations continued

		Ag	Ge	Ed	Ms	Em	Mi	Ho	Co	Ur	Ar	BLI	BeLI	LiE	Fs	ReB	FSa	Cno
Re	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ra	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Aff	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
And	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Def	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inf	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pur	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LiPL	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Flit	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PoCo	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LiDe	*Pearson Correlation*	0.007	0.027	.406**	.425**	.446**	.449**	1.000**	1.000**	.977**	.977**	.994**	.983**	.994**	.966**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.896	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

		Fst	Re	Ra	Aff	And	Def	Inf	Pur	LiPL	Flit	PoCo	LiDe
Ag	*Pearson Correlation*	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
	Sig. (2-tailed)	0.896	0.896	0.896	0.896	0.896	0.896	0.896	0.896	0.896	0.896	0.896	0.896
Ge	*Pearson Correlation*	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027
	Sig. (2-tailed)	0.613	0.613	0.613	0.613	0.613	0.613	0.613	0.613	0.613	0.613	0.613	0.613
Ed	*Pearson Correlation*	.406**	.406**	.406**	.406**	.406**	.406**	.406**	.406**	.406**	.406**	.406**	.406**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ms	*Pearson Correlation*	.425**	.425**	.425**	.425**	.425**	.425**	.425**	.425**	.425**	.425**	.425**	.425**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Em	*Pearson Correlation*	.446**	.446**	.446**	.446**	.446**	.446**	.446**	.446**	.446**	.446**	.446**	.446**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mi	*Pearson Correlation*	.449**	.449**	.449**	.449**	.449**	.449**	.449**	.449**	.449**	.449**	.449**	.449**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ho	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Co	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**

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		Fst	Re	Ra	Aff	And	Def	Inf	Pur	LiPL	Flit	PoCo	LiDe
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ur	*Pearson Correlation*	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ar	*Pearson Correlation*	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**	.977**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BLI	*Pearson Correlation*	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BeLI	*Pearson Correlation*	.983**	.983**	.983**	.983**	.983**	.983**	.983**	.983**	.983**	.983**	.983**	.983**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LiE	*Pearson Correlation*	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**	.994**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Fs	*Pearson Correlation*	.966**	.966**	.966**	.966**	.966**	.966**	.966**	.966**	.966**	.966**	.966**	.966**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ReB	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FSa	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cno	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Fst	*Pearson Correlation*	1	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Re	*Pearson Correlation*	1.000**	1	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ra	*Pearson Correlation*	1.000**	1.000**	1	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Aff	*Pearson Correlation*	1.000**	1.000**	1.000**	1	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
And	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000
Def	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000
Inf	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1	1.000**	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
Pur	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1	1.000**	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000
LiPL	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1	1.000**	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000
Flit	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1	1.000**	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000

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		Fst	Re	Ra	Aff	And	Def	Inf	Pur	LiPL	Flit	PoCo	LiDe
PoCo	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1	1.000**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
LiDe	*Pearson Correlation*	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1.000**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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