Structural equation analysis of microinsurance dimensions: Basis for sustainability model of the marginalized in the Philippines

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ABSTRACT

The objective of this research is centered on determining different microinsurance dimensions towards promoting the sustainability of the marginalized. This central objective leads to the assumption that microinsurance is a good tool to supplement the lack of or the unavailability of social protection programs intended for those who are socially excluded. Over the years, there have been increased calls among governments all over the world to end poverty. The call puts to order the use of all available means to attain the 2030 Agenda for Sustainable Development. As a background, the 2030 Agenda for Sustainable Development was adopted in 2015 by all United Nations Member States. It encompasses 17 Sustainable Development Goals (SDGs), which is an urgent call for action for all developed and developing countries to form a global partnership in promoting peace and prosperity for people and the planet, now and into the future. The very heart of this framework recognizes that ending poverty and other deprivations must have effective and efficient strategies. The research made use of purely quantitative methods to achieve its objectives. There were 600 questionnaires distributed all over the Philippines but only 422 questionnaires were retrieved. The indicators of microinsurance were factor analyzed using the principal axis method with varimax rotation to determine the underlying dimensions. Since its introduction to the market, microinsurance has been a tool that enables low-income households to become resilient against adversities. In fact, it has been found in various literature that microinsurance has functioned as a social protection mechanism when social services are inadequate or not available. It can be further concluded that microinsurance with its unprecedented growth is eyed as a primary contributor to achieving the majority of the SDG 2030. This monumental role of microinsurance calls for the support of various sectors. As indicated in the results, financial literacy has to increase among the marginalized to embrace the concept of insurance. The government likewise has to intervene in promoting microinsurance particularly in areas that are neglected by social services for whatever reasons.

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Introduction

The call to end poverty has become louder over the years. In fact, it was re-emphasized in the SDG 2030 to use all available means to help achieve its objectives. As a background, the 2030 Agenda for Sustainable Development was adopted in 2015 by all United Nations Member States. It encompasses 17 Sustainable Development Goals (SDGs), which is an urgent call for action for all developed and developing countries to form a global partnership in promoting peace and prosperity for people and the planet, now and into the future. The 17 SDGs which are focused in improving health and education, reduce inequality, and spur economic growth will also pay attention to tackling climate change and working to preserve our oceans and forests. The very heart of this framework recognizes that ending poverty and other deprivations must have effective and efficient strategies.

In a study conducted by the Deutsche Gesellschaft für Internationale Zusammenarbeit in 2017, the research emphasized the role of inclusive insurance in the achievement of the 11 out of 17 2030 Sustainable Development Goals. It can be noted that inclusive insurance is the primary purpose of microinsurance.

In the case of the Philippines, the Government through the Department of Finance-National Credit Council (DOF-NCC) with the cooperation of the private sector has introduced the National Strategy for Microinsurance and the Regulatory Framework for

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Microinsurance in 2010. The National Strategy for Microfinance has expressly underscored the need to have feasible and highly participative microfinance market with the active involvement of both the public and the private sectors.

Additionally, the Regulatory Framework for Microinsurance has established policies and regulatory guidelines to promote a safe and sound microinsurance market in order to encourage the participation of the private sector.

The introduction of these initiatives is aimed at ensuring the access of poor Filipinos to different risk mitigating programs through the conduct of financial literacy programs with emphasis on microfinance, cooperative, and microinsurance.

Microinsurance is an offshoot to microfinance which is primarily aimed at offering insurance products to cover man-made and natural risks. It is specifically designed to meet the requirements of low-income individuals who are not financially able to buy traditional insurance products either because premium is not within their budget or traditional insurance companies consider them within the underwriting restrictions. Its main objective is aligned to making insurance inclusive.

In September 2015, the Philippines, together with 192 other United Nations (UN) member states, committed to achieving the 17 Sustainable Development Goals (SDGs) and their 169 targets by 2030. The SDGs, also called the Global Goals, have a range of economic, social, environmental, and governance targets and there was recognition, early on, that these need to be achieved in order to attain the long-term vision as articulated in *AmBisyon Natin 2040*. The SDGs present a bold commitment to finish what has been started through the Millennium Development Goals (MDGs) in 2015. The Philippines affirms its commitment to achieve the SDGs by 2030, if not sooner, especially as the Global Goals are in sync with the country's development plans and long-term aspirations for 2040.

With these national and global objectives, there is no denying that poverty reduction can be achieved if those who are socially and economically excluded are given access to buy and/or be covered with insurance. This is a good strategy in support of poverty reduction programs. The failure of anyone to manage the effects of unforeseen events like sudden death of a family member, loss of livelihood, loss or damage of properties and other assets, illness that require hospitalization can lead to extreme poverty. While there are social protection programs available, the coverage are either minimal or subject to a lot of conditions and exclusions. In these types of situations, insurance services are needed and appreciated. Insurance, whether traditional or microinsurance can play a significant role to ease the losses as a result of unforeseen risks. With this, insurance as a risk mitigating tool now serves as a mechanism to promote sustainability and economic development in areas where vulnerability exists.

Essentially, the marginalized which include the poor people are vulnerable to risks and their exposure to these leads to poverty. It is therefore necessary for the government to introduce a mechanism that will accommodate these types of segments in the society that are either not covered with conventional insurance products due to underwriting restrictions, incapability of poor people to pay insurance premium, or totally excluded for whatever reasons to avail of social protection programs. Microinsurance is a tool that can be used to support the poor in times of vulnerability. It is a tool that the government can use to supplement its existing social protection programs in order to assist those who are in the brink of chronic poverty. The government has the responsibility in preserving inclusiveness to promote a sense of financial confidence amidst considerable vulnerability.

As the next revolution in the insurance sector, microinsurance has significantly grown according to number of persons covered from 135 million in 2009 to 500 million in 2015. According to Swiss Re, the global market potential of microinsurance is pegged at 4 billion.

The increase in the number of persons indicates that the various sectors advocating the use of microinsurance as key tool for risk mitigation and sustainable development have gained enormously in awareness campaigns, financial literacy, insurance inclusiveness advocacy, and poverty alleviation campaigns.

It is thus timely to conduct a research with the objective of determining different microinsurance dimensions towards promoting sustainability of the marginalized. This objective leads to the assumption that microinsurance is a good tool to supplement the lack of or the unavailability of social protection programs.

The results of the study are valuable to the government being the regulator of the insurance industry. Being the regulator, the government can refine its existing policies to align with the current situation and address areas that may seem to be lacking. Additionally, microinsurance providers will benefit from the results of the study which will help them innovate their current product offerings or develop new products to address the gap in the market.

Literature Review

Microinsurance and Sustainability

A study conducted in Ghana in 2014 found that microinsurance has a positive impact with regard to accumulation of household assets. The results imply that with microinsurance in place, the possibility of pawning or selling these assets at a low price are prevented. Microinsurance therefore cushions low income households from experiencing recurring poverty issues. Additionally, microinsurance is considered as a tool that financially empowers low income households to cope up with risks, escape from the miseries of being poor, and become sustainable in the face of vulnerabilities (Akotey & Adjasi, 2014).

A separate study found that that microcredit works best if integrated with microinsurance. The results suggest that a stand alone microcredit does not in any way promote welfare improvement. It is thus recommended that microcredit must be combined with microinsurance to achieve the goal of empowering the poor to become sustainable (Akotey & Adjasi, 2016).

In 2019 a research was conducted to determine the impact of mutual microinsurance on the recovery of those affected by Typhoon Haiyan in the Philippines. The results indicate that mutual microinsurance if regulated adequately can contribute to achieving the SDGs by providing increased protection and resilience to low-income communities. Additionally, the results indicate that mutual microinsurance has the capacity to contribute into achieving 10 of the SDGs through making communities financially literate, empowering them, making them resilient and insurable. The benefits of mutual microinsurance on the recovery post Typhoon Haiyan exemplify the importance of having a mechanism that protects low income communities from vulnerabilities (Gonzalez-Pelaez, 2019).

As regards the healthcare system, microinsurance for health currently offered in many countries has increased the access and use of basic health services among excluded populations (Wernerm, 2009). Other countries are into Micro health insurance (MHI) as means of risk pooling in order to reduce health expenditures coming from the pockets of low income individuals and reducing out of pocket health expenditures (Habib, Perveen, & Perveen, 2016).

Microinsurance and Social Protection

Article 22 of the Universal Declaration of Human Rights (1948) and Article 9 of the International Covenant on Economic, Social and Cultural Rights (1976) have internationally recognized social protection as a human right. Additionally, more than 110 nations have also enshrined in their very own constitutions that social protection is indeed a basic right of its constituents.

In the Philippines, Article XIII, Section 1 of the Constitution clearly States that the state through the Congress shall give utmost priority and enact measures that will among others protect and enhance the right of all the people including reducing social inequalities.

Interestingly as universally defined, social protection is a fundamental human right and is now viewed as essential components to reduce poverty and promote sustainability, equality and decency. It is also considered to have a crucial role to attain the objectives of the Millennium Development Goals (MDGs).

However, social protection programs remain elusive to more than 50% of the world's population (Jacquier et al., 2006) as the poor's vulnerability has become a daily reality (Cohen and Sebstad, 2015). Vulnerability is increased by exposures to risks which deteriorate the poor's socioeconomic capability, which in turn reduces their ability to cope up and become resilient (Traerup, 2012). Hinkel (2011) further defines that vulnerability covers the functions of exposure, sensitivity and the capacity to adopt of an entire system as the concept applies not only to an individual level but also includes the society and institutions.

However, a study conducted in Thailand found that social protection schemes may not be able to fulfill its objective to uplift the lives of the poor out of poverty due to the fact that the allocated government spending per person is less than the poverty line (Chalamwong & Meepien, 2012).

Various microeconomic researches and impact assessments in Ethiopia in its programs in social protection found out that microinsurance payouts that are predictable is a significant step towards the country's poverty alleviation and this has concretized the belief that the poor need microinsurance (Tadesse & Brans, 2012). In India, the study of Kishor (2013) stressed that microinsurance complements other financial services including social security, thus, there is a clear need for India to include microinsurance in their strategy to reduce poverty. This was further explored by Geetha and Viayalakshmi (2014) in India such that in the event that social measures are either not enough nor not distributed equally, microinsurance can take part the essential role as an instrument to comprehensively facilitate reduce poverty, inequality and vulnerability. Moreover, microinsurance offers innovative partnerships between the government and the private sector and collaboration among voluntary, rural and urban groups for the development and extension of social protection to the underserved population in the coming years (Yarumba & Kazungu, 2014).

Lastly, microinsurance can be viewed not just a business that is intended solely to make profit because if it is rightly done, it can absolutely make profit and perform its social development role at the same time. The social development role is fundamental to alleviate those that are at the bottom of the pyramid (Moura, 2010).

Methodology

The research made use of purely quantitative method to achieve its objectives. There were 600 questionnaires distributed all over the Philippines but only 422 questionnaires were retrieved. The sample of 422 respondents is more than enough for factor analysis to proceed as indicated by Kaiser-Mayer Olkin measure of sampling adequacy. The indicators of microinsurance were factor analyzed using principal axis method with varimax rotation to determine the underlying dimensions. A reliability coefficient (Cronbach Alpha) was computed for each factor dimension to estimate the computed reliability of each scale. All factors reliability with a reliability coefficient above 0.700 were considered acceptable in this study. This resulted to reliability coefficients ranging from .782 to .903 for all factor dimensions of the constructs. Final reduction in the number of items was done by discarding all items with factor loading and communalities of less than 0.40, eigenvalue of less than 1 and percent variance of less than 4%.

Research Questions

Is there a significant difference in the level of agreement of the respondents on the dimensions of microinsurance when grouped according to *Gender*; *Age*; *Educational attainment*; *Employment status*; *Monthly income*; and *Religion*? Do motivational dimensions of microinsurance affect the sustainability of the marginalized?

What is the role of microinsurance as tool to supplement existing social protection programs for the marginalized?

The Hypothesized Model

Figure 1: Hypothesized Model with specific variable

The hypothesized model shows the different socio-demographic factors such as gender, age, education, employment status, monthly income, and religions that affect microinsurance dimensions like government intervention, socio-cultural factors, premium, financial literacy, and social protection characteristics into promoting sustainability among the marginalized.

Results

The Emerging Model

Figure 2: Emerging Model

Emerging Model of the causal relationship between demographic profile, social cultural beliefs, dimensions of microinsurance and the sustainability aspect of microinsurance

Table 1: Model Fit Indices of Hypothesized and Emerging Model

Model Fit Indices	Hypothesized Model	Emerging Model	Recommended Value
χ^2/df (Cmin/df)	3.035	1.420	≤ 3.00
Root Mean Square Error of Approximation (RMSEA)	.070	.032	≤ 0.06
Comparative Fit Index (CFI)	.863	.976	≥ 0.90
Normed Fit Index (NFI)	.809	.925	≥ 0.90
Incremental Fit Index (IFI)	.863	.977	≥ 0.90

To show the acceptability of the emerging model as compared to the hypothesized model, the table shows a list of model fit indices. Table 30 depicts the model fit statistics of the resulting model specifically the χ^2/df (CMIN/df), root mean square error of approximation (RMSEA), incremental fit indices (IFI), normed-fit indices (NFI) and comparative fit index (CFI). The value 1.420 of χ^2/df stresses compatibility of the emerging model. The RMSEA value of 0.032 coincides within the .06 and below acceptable range which associates the fitness of the proposed model. IFI, NFI and CFI with 0.977, 0.925 and 0.976 values, respectively, falls within the acceptable level of 0.90, which indicates a good model fit of the proposed model.

Is there a significant difference in the level of agreement of the respondents on the sustainability aspect of microinsurance when grouped according to education attainment?

Table 2: Level of Agreement of the Respondents on the Sustainability aspect of Microinsurance When Grouped According to Education Attainment

Sustainability Aspect	Elementary Graduate N = 50		High School Graduate N = 160		Tech Vocation N = 33		F-value	df	p-value
	Mean	SD	Mean	SD	Mean	SD			
I am confident that microinsurance will help me and my families recover from both man-made and natural calamities.	5.12(SIA)	2.219	4.95(SIA)	2.226	5.18(SIA)	1.895	.829	416	.530
Microinsurance enhances our ability to survive even after a catastrophe.	5.14(SIA)	2.167	4.87(SIA)	2.366	4.82(SIA)	2.098	1.293	416	.266
We do not have enough savings to be used during emergency situations.	5.68(MA)	2.084	4.93(SIA)	2.289	5.03(SIA)	1.845	1.453	416	.204
I want to have additional funds to be used during catastrophic events.	6.10(MA)	2.140	5.11(SIA)	2.413	5.03(SIA)	2.257	3.942	416	.002
Microinsurance is a safety net against any untoward incident in the future.	5.44(MA)	2.168	5.03(SIA)	2.282	5.18(SIA)	1.862	1.418	416	.217
Microinsurance is a relevant mechanism to supplement existing social protection programs.	5.62(SIA)	1.872	4.98(SIA)	2.189	5.42(MA)	1.786	1.983	416	.080
I feel more secure to have microinsurance.	5.18(SIA)	2.362	4.95(SIA)	2.279	5.24(SIA)	1.904	1.768	416	.118
Microinsurance helps me to be more sustainable.	5.02(SIA)	2.308	4.89(SIA)	2.205	5.52(MA)	2.078	1.379	416	.231
Overall Sustainability	5.413(MA)	1.747	4.950(SIA)	1.963	5.178(SIA)	1.515	2.162	416	.057

SA- Strongly Agree, A- Agree, MA-Moderately Agree, SIA-Slightly Agree, SD- Strongly Disagree, D- Disagree, MD-Moderately Disagree, SIA-Slightly Disagree

Sustainability Aspect	College N = 164		Master's Degree N = 8		Post Graduate N = 7		F-value	df	p-value
	Mean	SD	Mean	SD	Mean	SD			
I am confident that microinsurance will help me and my families recover from both man-made and natural calamities.	5.27(SIA)	1.954	5.25(SIA)	2.252	6.29(MA)	1.604	.829	416	.530
Microinsurance enhances our ability to survive even after a catastrophe.	5.32(SIA)	1.953	5.50(MA)	2.330	6.29(MA)	1.604	1.293	416	.266
We do not have enough savings to be used during emergency situations.	5.39(MA)	1.927	5.63(MA)	1.847	5.00(MA)	3.000	1.453	416	.204
I want to have additional funds to be used during catastrophic events.	5.94(MA)	1.925	5.50(MA)	2.070	7.00(MA)	2.646	3.942	416	.002
Microinsurance is a safety net against any untoward incident in the future.	5.54(MA)	1.995	5.63(MA)	1.996	6.43(MA)	2.440	1.418	416	.217
Microinsurance is a relevant mechanism to supplement existing social protection programs.	5.58(MA)	1.793	5.63(MA)	2.264	6.00(MA)	1.826	1.983	416	.080
I feel more secure to have microinsurance.	5.53(MA)	1.923	6.00(MA)	1.690	6.29(MA)	1.704	1.768	416	.118
Microinsurance helps me to be more sustainable.	5.33(SIA)	1.909	6.00(MA)	2.268	5.86(MA)	1.864	1.379	416	.231
Overall Sustainability	5.485(MA)	1.443	5.641(MA)	1.729	6.143(MA)	1.707	2.162	416	.057

SA- Strongly Agree, A- Agree, MA-Moderately Agree, SIA-Slightly Agree, SD- Strongly Disagree, D- Disagree, MD-Moderately Disagree, SIA-Slightly Disagree

Table 2 shows the level of agreement of the respondents in terms of the sustainability aspect of microinsurance when grouped according to educational attainment. Notably, results indicate that there is no significant difference ($f(416) = 2.162, p > .05$) on their level of agreement in terms of the sustainability aspect of microinsurance when grouped according to educational attainment.

Analysis of the data showed that the elementary graduate (mean=6.10, SD = 2.140), college graduate (Mean=5.000, SD= 2.481), master's degree graduate (Mean=5.50, SD= 2.070), and post graduate (mean=7.00, SD = 2.645) moderately agree that "they want to have additional funds to be used during catastrophic events." While High school graduate (Mean=5.11, SD= 2.413) and Tech Vocational graduate (Mean=5.03, SD= 1.845) slightly that "they want to have additional funds to be used during catastrophic events."

Nevertheless, results show no significant relationship in the overall level of agreement in terms of the sustainability aspect of microinsurance when grouped according to educational attainment.

Is there a significant difference in the level of agreement of the respondents on the sustainability aspect of microinsurance when grouped according to employment status?

Table 3: Level of Agreement of the Respondents on the Sustainability aspect of Microinsurance When Grouped According to Employment Status

Sustainability Aspect	Employed N = 244		Businessman N = 45		F-value	df	p-value
	Mean	SD	Mean	SD			
I am confident that microinsurance will help me and my families recover from both man-made and natural calamities.	4.984(SIA)	2.172	5.489(SIA)	1.950	2.538	418	.056
Microinsurance enhances our ability to survive even after a catastrophe.	5.074(SIA)	2.174	5.289(SIA)	2.085	1.469	418	.223
We do not have enough savings to be used during emergency situations.	5.139(SIA)	2.169	5.356(MA)	1.932	1.510	418	.211
I want to have additional funds to be used during catastrophic events.	5.525(SIA)	2.245	5.773(MA)	2.144	.453	418	.716
Microinsurance is a safety net against any untoward incident in the future.	5.250(SIA)	2.200	5.556(MA)	2.232	1.358	418	.255
Microinsurance is a relevant mechanism to supplement existing social protection programs.	5.287(SIA)	2.055	5.733(MA)	1.814	1.046	418	.372
I feel more secure to have microinsurance.	5.205(SIA)	2.154	6.111(MA)	1.824	3.589	418	.014
Microinsurance helps me to be more sustainable.	5.107(SIA)	2.146	5.889(MA)	1.837	2.877	418	.036
Overall Sustainability	5.196(SIA)	1.774	5.639(MA)	1.566	2.122	418	.097
SA- Strongly Agree, A- Agree, MA-Moderately Agree, SIA-Slightly Agree, SD- Strongly Disagree, D- Disagree, MD-Moderately Disagree, SD-Slightly Disagree							

Sustainability Aspect	Unemployed N = 33		Retired N = 164		F-value	df	p-value
	Mean	SD	Mean	SD			
I am confident that microinsurance will help me and my families recover from both man-made and natural calamities.	5.235(SIA)	1.947	6.385(MA)	1.446	2.538	418	.056
Microinsurance enhances our ability to survive even after a catastrophe.	4.966(SIA)	2.190	6.231(MA)	1.739	1.469	418	.223
We do not have enough savings to be used during emergency situations.	5.218(SIA)	2.076	6.385(MA)	1.557	1.510	418	.211
I want to have additional funds to be used during catastrophic events.	5.613(MA)	2.225	6.154(MA)	1.951	.453	418	.716
Microinsurance is a safety net against any untoward incident in the future.	5.314(SIA)	1.973	6.385(MA)	1.325	1.358	418	.255
Microinsurance is a relevant mechanism to supplement existing social protection programs.	5.286(SIA)	1.918	5.923(MA)	1.706	1.046	418	.372
I feel more secure to have microinsurance.	4.992(SIA)	2.125	5.923(MA)	1.754	3.589	418	.014
Microinsurance helps me to be more sustainable.	4.950(SIA)	2.029	5.923(MA)	2.100	2.877	418	.036
Overall Sustainability	5.180(SIA)	1.657	6.163(MA)	1.443	2.122	418	.097
SA- Strongly Agree, A- Agree, MA-Moderately Agree, SIA-Slightly Agree, SD- Strongly Disagree, D- Disagree, MD-Moderately Disagree, SD-Slightly Disagree							

Table 3 shows the level of agreement of the respondents in terms of the sustainability aspect of microinsurance when grouped according to employment. Based from the results there is no significant difference ($f(418) = 2.122, p > .05$) on the level of agreement of the respondents in terms of the sustainability aspect of microinsurance when grouped according to educational attainment.

Despite the fact that employed (mean=5.196, SD = 1.774) and unemployed respondents (Mean=5.180, SD= 1.657) slightly agree while businessman(mean=5.639, SD = 1.566) and retired respondents (mean=6.163, SD = 1.443) moderately agree on the overall sustainability aspect of microinsurance when grouped according to educational attainment.

Nevertheless, results show no significant relationship ($f(418) = 2.122$, $p = .097$) in the overall level of agreement in terms of the sustainability aspect of microinsurance when grouped according to educational attainment.

Is there a significant difference in the level of agreement of the respondents on the sustainability aspect of microinsurance when grouped according to monthly income?

Table 4: Level of Agreement of the Respondents on the Sustainability aspect of Microinsurance When Grouped According to Monthly Income

Sustainability Aspect	Less than P10,000		P10,001 – P20,000		F-value	df	p-value
	N = 305		N = 76				
	Mean	SD	Mean	SD			
I am confident that microinsurance will help me and my families recover from both man-made and natural calamities.	5.049(SIA)	2.125	5.421(MA)	1.995	1.442	418	.230
Microinsurance enhances our ability to survive even after a catastrophe.	4.961(SIA)	2.182	5.487(MA)	2.088	2.523	418	.057
We do not have enough savings to be used during emergency situations.	5.079(SIA)	2.151	5.803(MA)	1.883	2.518	418	.058
I want to have additional funds to be used during catastrophic events.	5.480(MA)	2.294	5.882(MA)	2.046	2.760	418	.042
Microinsurance is a safety net against any untoward incident in the future.	5.168(SIA)	2.156	5.776(MA)	1.984	2.065	418	.104
Microinsurance is a relevant mechanism to supplement existing social protection programs.	5.177(SIA)	2.030	5.908(MA)	1.675	3.644	418	.013
I feel more secure to have microinsurance.	5.105(SIA)	2.128	5.487(MA)	2.182	3.243	418	.022
Microinsurance helps me to be more sustainable.	4.980(SIA)	2.079	5.539(MA)	2.075	3.006	418	.030
Overall Sustainability	5.115(SIA)	1.749	5.663(MA)	1.635	2.122	418	.019

Sustainability Aspect	P20,001 – P30,000		More than P30,000		F-value	df	p-value
	N = 30		N = 11				
	Mean	SD	Mean	SD			
I am confident that microinsurance will help me and my families recover from both man-made and natural calamities.	5.033(SIA)	1.991	6.091(MA)	1.758	1.442	418	.230
Microinsurance enhances our ability to survive even after a catastrophe.	5.167(SIA)	2.102	6.364(A)	1.690	2.523	418	.057
We do not have enough savings to be used during emergency situations.	5.067(SIA)	1.911	5.455(MA)	2.423	2.518	418	.058
I want to have additional funds to be used during catastrophic events.	5.300(SIA)	2.003	7.182(SA)	1.250	2.760	418	.042
Microinsurance is a safety net against any untoward incident in the future.	5.600(MA)	2.044	5.818(MA)	2.359	2.065	418	.104
Microinsurance is a relevant mechanism to supplement existing social protection programs.	5.367(SIA)	2.059	6.273(A)	1.618	3.644	418	.013
I feel more secure to have microinsurance.	5.867(MA)	1.889	6.636(A)	1.206	3.243	418	.022
Microinsurance helps me to be more sustainable.	5.833(MA)	2.151	5.818(MA)	2.089	3.006	418	.030
Overall Sustainability	5.404(MA)	1.576	6.205(MA)	1.166	2.122	418	.019

SA- Strongly Agree, A- Agree, MA-Moderately Agree, SIA-Slightly Agree, SD- Strongly Disagree, D- Disagree, MD-Moderately Disagree, SID-Slightly Disagree

Table 4 shows the level of agreement of the respondents in terms of the sustainability aspect of microinsurance when grouped according to monthly income. Results indicate that there is a significant difference ($f(418) = 2.122$, $p < .05$) on the level of agreement of the respondents in terms of the sustainability aspect of microinsurance when grouped monthly income. The respondents with monthly income less than P20,000 (Mean=5.480-5.5582, SD=2.046-2.294) moderately agree, those with P20,001 to P30,000 slightly agree while the respondents with more than P30,000 monthly income strongly agree that “they want to have additional funds to be used during catastrophic events.” These indicate that monthly income has a significant relationship to the sustainability aspect of microinsurance.

Is there a significant difference in the level of agreement of the respondents on the sustainability aspect of microinsurance when grouped according to religion?

Table 5: Level of Agreement of the Respondents on the Sustainability aspect of Microinsurance When Grouped According to Religion

Sustainability Aspect	Catholic		Islam		Others		F-value	df	p-value
	N = 338		N = 5		N = 79				
	Mean	SD	Mean	SD	Mean	SD			
I am confident that microinsurance will help me and my families recover from both man-made and natural calamities.	5.036	2.139	5.000	2.000	5.608	1.815	2.432	419	.089
Microinsurance enhances our ability to survive even after a catastrophe.	5.080	2.167	5.800	2.168	5.177	2.153	.324	419	.723
We do not have enough savings to be used during emergency situations.	5.077	2.127	6.800	0.447	5.722	1.980	4.494	419	.012
I want to have additional funds to be used during catastrophic events.	5.291	2.224	6.200	1.643	6.797	1.828	15.915	419	.000
Microinsurance is a safety net against any untoward incident in the future.	5.142	2.165	6.400	0.894	6.038	1.870	6.454	416	.002
Microinsurance is a relevant mechanism to supplement existing social protection programs.	5.251	2.003	6.000	1.000	5.734	1.899	2.182	416	.114
I feel more secure to have microinsurance.	5.166	2.119	5.800	2.775	5.671	2.068	1.984	416	.139
Microinsurance helps me to be more sustainable.	5.074	2.101	5.000	2.739	5.557	2.030	1.718	416	.181
Overall Sustainability	5.131	1.740	5.875	1.474	5.788	1.549	5.085	416	.007

SA- Strongly Agree, A- Agree, MA-Moderately Agree, SIA-Slightly Agree, SD- Strongly Disagree, D- Disagree, MD-Moderately Disagree, SIA-Slightly Disagree

SA- Strongly Agree, A- Agree, MA-Moderately Agree, SIA-Slightly Agree, SD- Strongly Disagree, D- Disagree, MD-Moderately Disagree, SIA-Slightly Disagree

Table 5 shows the level of agreement of the respondents in terms of the sustainability aspect of microinsurance when grouped according to religion. Results indicate that there is a significant difference ($f(419) = 5.085$, $p < .01$) on the level of agreement of the respondents in terms of the sustainability aspect of microinsurance when grouped according to religion. The respondents who were Catholic (Mean=5.077, SD=2.127) slightly agree, while Muslim respondents (Mean=6.800, SD=.447) agree, and the rest of the respondents with other religion moderately agree that “they bought microinsurance because they do not have enough savings to be used during emergency situations.”

Furthermore, Catholic respondents (Mean=5.291, SD=2.224) slightly agree, Muslim respondents (Mean=6.200, SD=1.643) moderately agree, and the rest of the respondents with other religion (Mean=6.797, SD=1.828) agree that “they want to have additional funds to be used during catastrophic events.”

Moreover, Catholic respondents (Mean=5.142, SD=2.165) slightly agree, Muslim respondents (Mean=6.400, SD=.894) agree, and the rest of the respondents with other religion (Mean=6.038, SD=1.870) moderately agree that “microinsurance is a safety net against any untoward incident in the future.”

Hence, these indicate that religion has a significant relationship to the sustainability aspect of microinsurance.

Table 6: The Effect of Social Cultural Beliefs on the Perception of the Respondents on Microinsurance Dimension

		Estimate	SE	p-value	f ²
Financial literacy	→ Sustainability Dimension	.507	.046	< .001	.400
Premium	→ Sustainability Dimension	-.025	.049	.303	.015
Government Intervention	→ Sustainability Dimension	.037	.048	.224	.024
Social Protection	→ Sustainability Dimension	.374	.046	< .001	.275

Table 6 reveals that effect of the perception of the respondents on financial literacy ($\beta = 0.507$, $p < .001$, $f^2 = 0.400$) to the sustainability dimension of microinsurance to the marginalized is significant. This indicates that financial literacy has a moderate positive effect on the sustainability dimension of microinsurance. Hence, the higher the financial literacy the greater is their awareness on the sustainability dimension of microinsurance.

The results reveal that the effect of the perception of the respondents on premium ($\beta = -.025$, $p > .05$, $f^2 = .0150$) to the sustainability dimension of microinsurance is not significant. This indicates that premium has no effect on the sustainability dimension of microinsurance.

Also, results show that effect of government intervention ($\beta = .037$, $p > .05$, $f^2 = 0.024$) to the perception of the respondents in terms of sustainability dimension of microinsurance is not significant. This indicates that government intervention has no effect on the sustainability dimension of microinsurance.

Furthermore, the social protection of microinsurance ($\beta=0.374$, $p<.001$, $f^2=0.275$) to the perception of the respondents in terms on sustainability of the marginalized is significant. This indicates that the social protection positively affect the awareness of the respondents on the sustainability dimension of microinsurance.

Conclusions

Sustainable development can be best achieved if all actors in the society work together. The government being a regulator has important roles to play; government instrumentalities prepare and implement policies. The private sector which includes microinsurance providers has to cooperate with the government. The people which include the insuring public must adhere to the call of both the government and the private sector to participate in the efforts of financial empowerment like inclusive insurance.

Since its introduction to the market, microinsurance has been a tool that enables low income household to become resilient against adversities. In fact, it has been found in various literature that microinsurance has functioned as a social protection mechanism when social services are inadequate or not available.

It can be further concluded that microinsurance with its unprecedented growth is eyed as a primary contributor into achieving majority of the SDG 2030. This monumental role of microinsurance calls for the support of various sectors. As indicated in the results, financial literacy has to increase among the marginalized to embrace the concept of insurance. The government likewise has to intervene in promoting microinsurance particularly in areas that are neglected by social services for whatever reasons.

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