



Training Needs Assessment of Key Women Leaders of Purok Women Associations in Iligan City

Resa Mae C. Laygan^{1*}, Martha Joy J. Abing¹, Charlyn M. Capulong¹, Maria Rizalia Y. Teves¹, Gerrich Aldin C. Babanto¹, Julita W. Bokingo², Safa Manala-O³, Earvin John Medina³, Gilceline Dingding⁴

¹ Department of Economics, MSU – Iligan Institute of Technology, Iligan City, Philippines

² GAD-CMO, LGU of Iligan City

³ Department of Marketing, MSU – Iligan Institute of Technology

⁴ Department of Hospitality Tourism Management, MSU – Iligan Institute of Technology

*Corresponding author: resamae.laygan@g.msuiit.edu.ph

Abstract - Women leaders have a vital role in leading their associations for sustainability. Assessing their training needs, given their present competencies, is necessary to enhance their capabilities to manage and sustain the resources of their associations. Thus, this study intends to assess the training needs of the key leaders or officers of various women's associations from the different barangays of Iligan City, considering their leadership and entrepreneurial competencies as well as their financial literacy. There are 170 key women leaders, who are the presidents or who hold key positions in their purok women associations, who participated in the survey. This study utilized descriptive statistics, spearman correlation, and multiple linear regression analysis to analyze the data. Based on the findings, most respondents had a high need for training in leadership, financial literacy, and enterprise development. The analysis also reveals that most of them have a “moderately high” level of leadership and entrepreneurial competencies. However, in terms of their financial literacy, most of them have a low financial literacy score, and this result attests to their need for financial literacy training. Moreover, the spearman correlation analysis reveals that the respondents’ leadership and entrepreneurial competencies are positively and significantly associated with their leadership effectiveness. The findings in the regression analysis show that the leadership competency indicators such as visionary, value creation and self-reflection significantly increase the leader-ship effectiveness of key women leaders. These findings imply the importance of training interventions addressing the needs of key women leaders.

Keywords: entrepreneurial competency, financial literacy, leadership, training needs

I. INTRODUCTION

The Philippines is noted for its positive efforts toward gender equality and has witnessed a strong presence of women leaders, notably among different barangay-level women's associations and advocacy groups. These key women leaders play an important role for the long-term viability of their

associations. The significance of women in leadership positions in establishing more inclusive and varied organization cultures. This inclusiveness is critical for the long-term viability of women's organizations because it creates situations in which members feel respected and empowered (Ibarra et al., 2013).

The national government in the Philippines implemented the Republic Act No. 9710, also known as "The Magna Carta of Women", which encourages women empowerment and participation of women leaders in decision-making bodies in their respective sectors (Congress of the Philippines, 2009). This mandate is also aligned with the Sustainable development goal (SDG) 5, which aims to "achieve gender equality and empower all women and girls" (Philippine Commission on Women, n.d.).

In the local setting of Iligan City, the local government unit (LGU) through the City Mayor's Office - Gender and Development Office (CMO-GAD), has been implementing activities that promote the empowerment of women and gender equality in the city. The office also ensures the continued implementation of the GAD, which promotes women's empowerment and gender equality and development through seminars and workshops for skill training in the fields of enterprise development and organizational management. However, the CMO-GAD of Iligan City is lacking a formal system of assessing the skill capabilities of its women leaders from different purok or barangay-level women associations. As a result, it cannot readily and objectively identify the entrepreneurial and organizational management skills needed by women leaders nor evaluate the effectiveness of any particular skill training it has conducted. There is no inventory of skills among its constituents, and it is difficult to tell what skills are required and what needs to be further developed. Thus, there is a need to assess the training needs of these key women leaders from different purok or barangay-level women associations in Iligan City considering their leadership and entrepreneurial competencies.

To address this research gap, this study aims to conduct a training needs assessment of key women leaders from different associations based on their leadership and entrepreneurial competencies as well as financial literacy. This also attempts to assess how entrepreneurial competencies, financial literacy, and leadership competencies as measured through anticipation, visionary, value creation, mobilization, and self-reflection capabilities (Kozminski, 2015) together with their socio-demographic characteristics influence their leadership effectiveness. In addition, this paper would be significant to the body of literature as this provides insights regarding the training needs of key women leaders in the context of different women associations in Iligan City, considering their leadership and entrepreneurial competencies as well as their financial literacy. This will be significant for CMO-GAD as the findings will serve as the basis for implementing relevant programs that will empower and improve the lives of key women and leaders of purok associations in Iligan City. This can also serve as their reference to support the needs of key women leaders while promoting women's empowerment and gender equality in the locality.

II. LITERATURE REVIEW

Training Needs Assessment

Effective training or development depends on knowing what is needed for the individual, the department and the organization as a whole. The Training Needs Assessment (TNA) is a continuous

process of collecting data to establish what training requirements exist so that training may be produced to assist the business achieve its goals (Indeed Editorial Team, 2023).

The TNA needs to be conducted first before developing training programs. This involves identifying issues within the organization, getting management support, collecting data that will be used to evaluate post-training outcomes, and assessing the cost and benefits of each training (Brown, 2002). If an organization develops and implements training without first completing the TNA, it risks overtraining, undertraining, or missing the goal entirely.

Furthermore, the TNA not only identify training requirements, but also prioritize them in line with strategic goals, ensuring that training efforts generate the greatest returns in terms of employee performance and organizational efficiency (Puspita & Nurhalim, 2021). In the context of women organizations, the study of Lamug and Elep (2023) employed a quantitative-descriptive method and a structured survey questionnaire to assess the training needs of selected women's groups in Camarines Norte. The study identified two key areas of training. For life skills, the groups required training in leadership, organizational skills, wellness, and mental health. For technical skills, the identified needs included training in digital and ICT skills, basic computer applications, effective communication, bookkeeping, and feasibility study preparation. Therefore, TNA is crucial for ensuring that training programs are not only relevant and up to date but also contribute to the organization's overall growth.

Related Studies on Women Leaders

Early studies on women leaders highlight how their qualities and individual characteristics significantly contribute to leadership effectiveness and organizational success. For example, Pierli et al. (2022) conducted a qualitative analysis of five Italian companies led by women, identifying key traits such as empathy, active listening, and a collaborative mindset. Additionally, these leaders demonstrated holistic thinking, complexity management, and an inclusive leadership style, all essential for fostering sustainability within their organizations. Similarly, Sutanto and Aveline (2021), using quantitative associative analysis, examined women leaders in a textile company in Indonesia. The study revealed a moderate link between individual characteristics such as leadership ability, self-confidence, and work experience and leadership capabilities, highlighting the significance of these traits in enhancing women's leadership effectiveness.

Existing literature also emphasizes the importance of training programs in developing the leadership competencies of women leaders. Through a systematic literature review, Kulkarni and Mishra (2022) found that effective mentoring, well-designed training programs, and supportive workplace cultures can strengthen women's leadership. Likewise, Tessens et al. (2011) conducted a survey of senior women at two Australian universities, identifying critical leadership development needs. These included acquiring knowledge and skills to navigate demanding work environments, highlighting the necessity of implementing targeted leadership programs to strengthen women's leadership capacity. Similarly, Sánchez-Moreno et al. (2015), through a survey of women in leadership roles within higher education organizations in Spain, revealed a significant need for specialized training in leadership and management. The findings underscored the importance of tailored leadership development programs to enhance skills, address specific needs, foster professional growth, and improve organizational outcomes.

In addition, Brue and Brue (2016), using qualitative research with a phenomenological approach, found that women's leadership training programs offer organizations a valuable

opportunity to recognize and cultivate women as vital resources. These programs facilitated cognitive, emotional, and behavioral growth among participants, with engaging learning activities, social capital development, and relational model methodologies proving particularly effective in enhancing leadership skills. Furthermore, Lasisi (2024) investigated the impact of leadership training on the self-efficacy of women leaders in higher education using semi-structured interviews and qualitative analysis. The study highlighted how targeted leadership development programs in equipping women leaders with essential skills, fostering self-efficacy, and overcoming challenges, all of which contribute to improved leadership effectiveness and success.

Moreover, the existing literature and studies on women leaders primarily focus on the context of academia and corporate organizations. These studies highlight how individual characteristics and qualities of women contribute to enhancing their leadership capabilities and effectiveness. Additionally, the studies emphasize the importance of leadership training in developing women's potential as leaders. However, most of these studies do not specifically address the training needs of women leaders in community-based women's associations, such as those in the context of Iligan City. There is a noticeable gap in research assessing the training needs of women leaders within community-based women's associations.

Leadership Effectiveness, Financial Literacy, and Competencies

Some studies indicated that the leadership of an individual is influenced by various factors including the leadership competencies (Damianus et al., 2023; Kozminski, 2015; Kozminski et al., 2022), entrepreneurial competencies (Leitch et al., 2013) financial literacy (Bissessar, 2023; Sejdic, 2023), and even socio-demographic factors such as age, education, employment status, and income (Alenazi et al., 2017; Bell et al., 2015; Berber et al., 2022; Teame et al., 2022). These attributes may influence how leaders are regarded, how they communicate, and their ability to mobilize and inspire others. Leadership competency, which has been defined as the abilities and behaviors of being a leader, is required for exceptional success in leadership positions. As mentioned in the study of Koźmiński (2015), leadership competency is measured in terms of anticipation, visionary, value-creation, mobilization, and self-reflection capabilities of an individual. These encompass both the strategic foresight and the personal attributes necessary for driving organizational success.

First, the anticipation capability enables leaders to anticipate and plan for future difficulties and opportunities, which is crucial for keeping a competitive advantage (Horney et al., 2010). Meanwhile, visionary competency allows to generate future visions for the organization and even to their followers motivating them to take action. This also entails establishing a captivating vision of the future that inspires and motivates followers, which has been related to better organizational performance (Bass, 1990; Kozminski et al., 2022). On the other hand, the value-creation competency could be associated with the ability of the leaders to effectively influence their followers by proposing norms, values, and behavioral patterns (Kozminski et al., 2022). This allows leaders to leverage resources by forming alliances and doing collaborations within the organization (Smith et al., 2016). With regards to mobilization competency, this involves leader's capacity to inspire, influence, and guide people towards accomplishing shared objectives, which directly improves organizational success by boosting collaboration and commitment (Kozminski et al., 2022). In addition, self-reflection competency enables a leader to evaluate themselves, recognizing their positive psychological capabilities, strengths, and weaknesses (Hinojosa et al., 2014). These indicators of leadership competency could potentially influence leadership effectiveness.

In terms of entrepreneurial competency, it is hypothesized that this could potentially affect leadership effectiveness. Entrepreneurial competencies have been defined as the fundamental qualities including traits and knowledge that contribute to create new enterprise-related endeavors (Iskandar et al., 2022; Tehseen et al., 2019). Previous literature noted that entrepreneurial competency allows leaders to develop an innovative agenda for their firm, while their functional skills assist them in encouraging their subordinates to embrace innovation in their job (Abdullah Alshammari et al., 2023; Leitch et al., 2013). Leaders with strong entrepreneurial capabilities enable leaders to navigate unpredictable and complicated circumstances, drive change, and build an innovative culture inside their organization (Kuratko et al., 2015). In addition, leaders promote creativity and innovation among their people by exhibiting these traits themselves (Renko et al., 2014). Thus, it is important to develop their entrepreneurial competencies for the benefit of their organization.

Aside from leadership and entrepreneurial competencies, financial literacy could potentially influence the leadership effectiveness of key women leaders. Financial literacy has been defined as the ability of individuals to successfully manage resources for long-term financial well-being (Remund, 2010). This can be measured through financial knowledge and behavior in relation to how to manage financial resources (Dwiastanti, 2015). Previous literature indicated the importance of financial literacy for equipping leaders to make excellent strategic choices. It provides them with the skills needed to negotiate financial issues, make educated decisions, and prepare for both short-term and long-term objectives (Bissessar, 2023).

Additionally, the socio-demographic characteristics of individuals could possibly affect their leadership. Previous studies indicated that age, education, and experience, could significantly affect the leadership effectiveness of individuals (Alenazi et al., 2017; Bell et al., 2015; Berber et al., 2022; Teame et al., 2022). Age often corresponds with experience, giving leaders with the knowledge and insight required for decision-making and problem-solving (Bell et al., 2015). However, other research findings indicated that too much focus on age might neglect the unique ideas younger leaders may give (Vaughan-Johnston et al., 2021). With this, there is a need to further investigate how age could affect leadership. On the other hand, some previous studies indicated that education is an important factor for effective leadership. An individual with a strong educational background has more capacity to lead as they have expertise in leading an organization (Teame et al., 2022). It also significantly influenced both transactional and transformative behaviors (Barbuto et al., 2007; Berber et al., 2022).

In terms of employment status could potentially affect leadership effectiveness as it can improve their flexibility and awareness of diverse organizational cultures and dynamics, resulting in a more holistic leadership approach (Hogan & Kaiser, 2005). However, other literature indicated that a leader of an association who is busy or pre-occupied with other things, including employment, tends to be ineffective and it decreases leadership impact (Stein, 2023). Household income may intricately affect leadership effectiveness, exerting both positive and negative influences. Higher family income indicates high social status that could provide leaders stability and resources, allowing them to concentrate more on their leadership duties. In addition, leaders from high-income backgrounds may struggle to relate to their teams or comprehend the difficulties experienced by their members, especially, from less privileged homes, which might result in disengagement and decreased morale among team members (Fragale et al., 2011). Hence, there is a need to further investigate how income could influence leadership, especially, among key women leaders in a community level, particularly, the purok women associations.

III. METHODOLOGY

This study utilized training needs assessment (TNA) approach in identifying the needs of key women leaders of the purok-level women associations in Iligan City. Out of forty-four (44) barangays of Iligan City, this study only covers forty-one barangays that have active women associations registered on the GAD-CMO database. Using the Slovin's formula and considering the total population of 394 active women's associations in the city, the recommended sample size was 199. Out of 199 target respondents, only 170 of them (85.4%) were captured in the study, considering the acceptance of the invitation and the data clean-up. These respondents were selected using proportionate random sampling. The chosen respondents were given an invitation to participate in the survey in coordination with the Community Coordinators (GAD-CC) of the GAD-CMO.

For the data gathering, the TNA survey questionnaire was used to determine the needs and profiles of the target respondents. The questionnaire is divided into different parts. The first part consists of questions pertaining to the socio-demographic profile of the respondents. The second part of the questionnaire includes statements pertaining to the training needs of the respondents. The third part consists of questions regarding the leadership competencies of the respondents as well as their challenges encountered when leading an association. The statements related to leadership competency and effectiveness were adopted from the study of Kozminski et al. (2022) (Kozminski et al., 2022). The fourth part consists of questions regarding entrepreneurial competency which was adopted from the study of Abdullah Alshammari et al. (2023). The fifth part of the questionnaire consists of questions assessing the financial literacy of the respondents. These questions were already compiled from the study of Abarca et al. (2019).

In addition, the survey questionnaire was translated into both English and Bisaya (Cebuano) in order for the respondent to fully understand the questions and statements in the questionnaire. Before the questionnaire was used in the final survey, a pilot test using the initial questionnaire was conducted. The Cronbach alpha test was used to assess the reliability of Likert-scale questions, particularly the statements for leadership competencies, entrepreneurial competency, business and management competency, as well as financial behavior, attitude, and wellness. Based on the Cronbach alpha test results, the question statements under Leadership Effectiveness, Entrepreneurial Competency, Business and Management Competency, Women Perception about Leadership, Financial Behavior, and Financial Attitude obtained an alpha score of greater than 0.9, indicating an "excellent" result. Meanwhile, the statements under financial wellness and leadership competencies such as anticipation competencies, visionary competencies, value-creation competencies, mobilization competencies, and self-reflection competencies obtained an alpha score ranging from 0.7 to 0.9, indicating an "acceptable" to "good" level of reliability.

In addition, during the data gathering phase, the target respondents from different barangays were divided into batches: 4 batches for non-far-flung barangays and 1 batch for far-flung barangays. In coordination with GAD-CMO, the target respondents were gathered together in one place where the face-to-face survey was conducted. The purpose of the research and the instructions on how to fill out the survey, as well as the ethical considerations, including their voluntary participation and the anonymity and privacy of their responses, were emphasized to them.

After the conduct of the survey, the collected data were tabulated and analyzed. Descriptive statistics was used to describe the respondents' socio-demographic characteristics, leadership and entrepreneurial competencies, leadership effectiveness, and financial literacy. Spearmen correlation

analysis was used to determine the association of leadership competency indicators, entrepreneurial competency, and financial literacy on leadership effectiveness. In addition, multiple linear regression analysis was employed to assess how the socio-demographics (e.g., age, education, employment status, household income), financial literacy, entrepreneurial competency, and the leadership competency indicators such as anticipation, visionary, value-creation, mobilization, and self-reflection predict the leadership effectiveness of key women leaders. Moreover, as shown in equation 1, is the empirical model of this study which serves as basis for the analysis.

$$LE_i = \alpha + \beta_1 A_i + \beta_2 educ_i + \beta_3 employ_i + \beta_4 lnincome_i + \beta_5 AC_i + \beta_6 VC_i + \beta_7 VCC_i + \beta_8 MC_i + \beta_9 SC_i + \beta_{10} EC_i + \beta_{11} FL_i + \varepsilon_i$$

Where, LE indicates Leadership effectiveness, A indicates the age of respondents, educ refers to education attainment (1=with tertiary education, 0=otherwise), employ indicates employment status (1= employed, 0 = otherwise), *lnincome* specifies log-form of respondents' household income, AC indicates anticipation competency, VC is the visionary competency, VCC is the value-creation competency, MC refers to mobilization competency, SC indicates self-reflection competency, EC specifies entrepreneurial competency, FL indicates financial literacy score, and ε_i indicates error term.

IV. RESULTS AND DISCUSSION

Based on the socio-demographic profile as shown in Table 1, most of the key women leaders participated in the survey are middle-adults, while least of them are young adults. On the other hand, in terms of their education, the majority of the respondents obtained a non-tertiary level of education (e.g., high school graduate, high school level, elementary level or graduate). This shows that key women leaders have undergone formal basic secondary education. In terms of the employment status of the respondents, as shown in Table 1 shows that most of them are employed full-time. Among those respondents who are employed, most of them are connected to government agencies. Moreover, with regards to the total household income, the majority of the respondents indicated that their monthly household income is less than PHP 10,000. This shows that most of the key women leaders belong to low-income family.

Table 1. Respondents' Socio-demographic Profile

Socio-demographic profile	f	%
Age		
20-39 years old (young adult)	22	13%
40-59 years old (middle adulthood)	111	65%
60 years old and above (old)	37	22%
Education		
Non-tertiary	93	55%
Tertiary	77	45%
Employment Status		
Employed	74	44%
Self-employed and Part-time	63	37%
Unemployed	33	19%
Household income		
10,000 or below	82	48%

10,001 - 20,000	61	36%
20,001 - 30,000	18	11%
30,001 - 40,000	6	4%
40,001 - 50,000	3	2%

Additionally, in Table 2, it shows that the majority of the key women leaders have high need for training on financial literacy and leadership. While, for enterprise development training, the weighted mean reveals that most of them have moderate need for this training.

Table 2. Training Needs of Key Women Leaders on financial literacy, leadership, and enterprise development trainings

Training	Weighted Mean (Std. Dev.)	Interpretation
Leadership	3.40 (0.93)	High Need
Financial Literacy	3.36 (0.98)	High Need
Enterprise Development	3.24 (1.05)	Moderate Need

Note: 1.00 – 1.74 = No Need; 1.76 – 2.50 = Low Need; 2.51 – 3.25 = Moderate Need; 3.26 – 4.00 = High Need

It is shown that out of 170 respondents, 109 (64%) of them have high need for leadership training. The high need for leadership training could be associated with the fact that the respondents are key leaders or officers who hold important positions on their associations. This underscores the need for these women to improve their leadership skills for their associations and in overcoming their leadership challenges. On the other hand, 107 (63%) of them have a high need for financial literacy training. This could be associated with the findings shown in Table 3, where the majority of the respondents have low financial knowledge score. This indicates that most of them have low level of financial literacy, which could be associated with low knowledge and mismanagement of finances (Lusardi, 2019). Therefore, improving the financial knowledge and skills of women through financial literacy trainings and programs are necessary.

Table 3. Financial Literacy Score

Score	f	%
<60% (Low Financial Knowledge)	144	85%
60-80% (Average Financial Knowledge)	25	15%
>80% (High Financial Knowledge)	1	1%

With regards to leadership effectiveness, as shown in Table 4, the majority of the respondents have moderately high level of leadership effectiveness. This indicates a positive perception with regards to their effectiveness as leaders of their respective associations.

In addition, Table 4 shows that among the leadership competency indicators, most of the respondents have a very high level of mobilization competency. This result signifies that most key women leaders have a transformative impact in their respective associations. This competency also allows leaders to mobilize the resources and processes required for change to occur (Kozminski et al., 2022), which is important to be an effective leader. It is also shown in Table 4 that, on average, most

of the key women leaders have moderately high level of leadership competencies, specifically, on value-creation, anticipation, self-reflection, and visionary capabilities. Developing these competencies is necessary to improve their leadership effectiveness (Kozminski, 2015; Kozminski et al., 2022). Moreover, Table 4 reveals that the majority of the respondents have moderately high levels of entrepreneurial competency. This highlights the significance of these key female leaders in driving innovation and entrepreneurial venture success in their respective associations.

Table 4. Leadership and Entrepreneurial competencies, and Leadership Effectiveness of Key women leaders

Variables	Weighted Mean (Std. Dev.)	Interpretation
Leadership Effectiveness	4.02 (0.61)	Moderately High
Leadership Competencies		
Mobilization Competency	4.23 (0.61)	Very High
Value-creation Competency	4.10 (0.64)	Moderately High
Anticipation Competency	4.04 (0.73)	Moderately High
Self-reflection Competency	3.98 (0.66)	Moderately High
Visionary Competency	3.95 (0.77)	Moderately High
Entrepreneurial Competency	4.17 (0.61)	Moderately High

Note: 1.00-1.80= Strongly Disagree (Very Low); 1.81-2.60 = Disagree (Moderately Low); 2.61-3.40 = Neutral (Average); 3.41 - 4.20 Agree (Moderately High); 4.21 - 5.00 Strongly Agree (Very High)

However, in Table 5, it shows that all of the leadership competency indicators are positively and significantly correlated with the leadership effectiveness. This result indicates that improvements in these competencies are likely to enhance a leader's ability to be effective in their role. Likewise, entrepreneurial competency has positive and significant association on leadership effectiveness. This shows that leaders with strong entrepreneurial competencies empower them to negotiate unexpected and complex situations, implement change, and foster an innovative culture inside their organization (Kuratko et al., 2015). However, financial literacy appeared to be statistically insignificant on leadership competency. This implies that while financial literacy is beneficial for them, it may not have a substantial impact on their effectiveness as leaders of their association.

Table 5. Spearman Correlation Result

Variables	Rho
Mobilization Competency	0.5625***
Value-creation Competency	0.6001***
Anticipation Competency	0.6315***
Self-reflection Competency	0.5953***
Visionary Competency	0.7080***
Entrepreneurial Competency	0.5392***
Financial Literacy	0.0652

*Note: *** p<0.01; ** p<0.05; * p<0.10*

Moreover, the result of the regression analysis in Table 6 reveals that indicators of leadership competency such as visionary, value-creation, and self-reflection significantly predict the leadership effectiveness of key women leaders of purok women associations in Iligan City.

Table 6. Regression Result on the factors influencing Leadership Effectiveness

Variables	Coefficient (std. error)
Age	-0.0041 (.004)
Educational Attainment (0 = non-tertiary education; 1= With Tertiary education)	0.0064 (0.071)
Employment Status (0 = Full-time employed)	
Self-employed/ Part-time	0.0095 (0.075)
Unemployed	0.031 (0.093)
Household Income (log-form)	-0.0961* (0.051)
Anticipation Competency	0.0322 (0.068)
Visionary Competency	0.1112* (0.063)
Value-creation Competency	0.2246*** (0.083)
Mobilization Competency	0.0641 (0.091)
Self-reflection Competency	0.4084*** (0.083)
Entrepreneurial Competency	0.0343 (0.078)
Financial Literacy	-0.0167 (0.010)
Constant	1.7425*** (0.555)
R-squared	0.6119
Prob>F	0.000
No. of observations	157

The number of observations was reduced to 157 as there are observations that were omitted due to outliers, especially, in financial literacy scores. Note: Standard errors in parenthesis – *** p<0.01; p<0.05; * p<0.10

The regression analysis in Table 6 shows that an increase of one-point unit of value-creation competency will cause the respondents' perception on their leadership effectiveness to increase by 0.225 point, assuming that other factors are constant. This suggests that key women leaders may optimize their value-creating abilities may expand resources by forming relationships and cooperating with others with similar values (Smith et al., 2016). A leader with good value-creation competency seeks out new opportunities by supporting emerging tactics, learning lessons, and improving procedures (Kozminski et al., 2022).

On the other hand, the positive and significant effect of self-reflection competency as shown in Table 6 indicates that an increase of one-point unit of value-creation competency will cause the respondents' perception of their leadership effectiveness to increase by 0.406 point, assuming that other factors held constant. This result coincides with the prior studies indicating that the ability of the leader to evaluate themselves, especially, their capabilities, strengths, and weakness could improve effectiveness in leading their organization (Hinojosa et al., 2014). Hence, self-reflection

competency is important for an effective leader who can influence his/her members towards the attainment of organizational goals.

In addition, the significant result for visionary competency indicates that assuming that other factors held constant, a one-point unit increase in visionary competency will cause the respondents' perception about their leadership effectiveness to rise by 0.111 points. This shows that improving the visionary competency of key women leaders could improve leadership effectiveness. This conforms the prior studies indicating that a leader who has a vision for the organization and the future could inspire and motivate his/her members to perform better, and thus, this could improve organizational performance (Bass, 1990; Kozminski et al., 2022).

Moreover, among the socio-demographic variables, the household income appeared to be statistically significant at the 10% level. The negative and significant effect of income suggests that leaders from higher-income status could have difficulty relating to their team members, especially those who belong to low-income status, and thus, affecting their effectiveness as a leader to their members (Fragale et al., 2011). This also implies that it is not necessary for a leader to be part of the high-income status in order to be effective when leading an association.

Furthermore, the socio-demographic variables such as age, education, and employment status, financial literacy, entrepreneurial competency, and other leadership competencies such as mobilization, anticipation, and visionary are statistically insignificant to predict leadership effectiveness. The result also suggests that other factors might play a more critical role in shaping effective leadership. Given this contrasting result with the related literature, further studies are needed.

V. CONCLUSION

This study mainly aims to assess the training needs of key women leaders of different women associations in Iligan City, considering their leadership competency and effectiveness, entrepreneurial competency, and financial literacy. According to the results, the majority of the respondents have a high need for training in leadership and financial literacy. The findings also found that most of the key women leaders have low financial literacy scores, which justifies their need for financial literacy training.

In addition, it was also found that most of the key women leaders have a moderately high level of leadership effectiveness and competency. This suggests the importance of addressing their needs for leadership training to improve their capabilities and effectiveness when leading their associations. Based on the spearman correlation, the leadership and entrepreneurial competencies are positively and significantly correlated with leadership effectiveness. This highlights the vital role of these competencies for successful leadership outcomes. Moreover, the regression analysis reveals that value-creation, visionary, and self-reflection competencies are among the leadership competencies that could significantly predict to improve the leadership effectiveness of key women leaders. This underscores the importance of addressing the needs of key women leaders for leadership training, emphasizing how to improve their competencies in terms of visioning, value creation, and self-reflection.

VI. RECOMMENDATIONS

Given the findings of this study, this suggests to the concerned organization, particularly with the GAD-CMO of Iligan City, the partnership of academic institutions and other organizations to conduct financial literacy and leadership development trainings for key women leaders. These leadership training programs should be tailored to enhance their leadership competencies, particularly their visionary, value-creation, and self-reflection competencies.

Additionally, future research could evaluate the impact, particularly the long-term effects, of the training programs highlighted in the findings on leadership effectiveness. It could also explore the specific challenges faced by women leaders in various purok women's associations or other community-based organizations. Considering that leadership and financial literacy have been identified as the most highly needed training programs for key women leaders in various associations, future studies could prioritize evaluating the impact of these specific initiatives. Such assessments could provide valuable insights into how these initiatives influence the leadership capabilities and overall effectiveness of women leaders in their respective organizations. Furthermore, future researchers may explore similar studies in different contexts or with broader scopes, employing alternative methodologies to enrich the findings and provide diverse perspectives.

ACKNOWLEDGMENTS

The authors of this paper would like to express their gratitude to MSU-IIT and the Office of the Vice Chancellor for Research and Enterprise (OVCRE) of the Institute, for allowing them to conduct this patriotic research. Big thanks to the Local Government Unit of Iligan City and to the Gender and Development City Mayor's Office (GAD-CMO) for the partnership, funding, and organizing the venue for the survey, which played an important part in making this study successful. Heartfelt gratitude is also given to the GAD-community coordinators for their help in inviting the key women leaders and facilitating the survey. A big thanks is also given to the key women leaders from the different women associations in Iligan City for their time and effort to participate in the survey.

REFERENCES

- Abarca, V. S. L., Dayot, G. O., Gani, F. A. M., & Patayon, C. R. (2019). *An evaluation of financial knowledge, behavior, attitude and wellness among DTI priority sectors business owners in Iligan City* [Unpublished research project]. Integrated Developmental School, Mindanao State University - Iligan Institute of Technology.
- Abdullah Alshammari, S., Rehman, A. U., Abdullah Alreshoodi, S., & Abdul Rab, M. (2023). How entrepreneurial competencies influence the leadership style: A study of Saudi female entrepreneurs. *Cogent Business & Management*, 10(2). <https://doi.org/10.1080/23311975.2023.2202025>
- Alenazi, F., Muenjohn, N., & McMurray, A. (2017). The effect of demographic characteristics on leadership behaviour. *World Journal of Management*, 8(1), 15–31. <https://doi.org/10.21102/wjm.2017.03.81.02>

Barbuto, J. E., Fritz, S. M., Matkin, G. S., & Marx, D. B. (2007). Effects of gender, education, and age upon leaders' use of influence tactics and full range leadership behaviors. *Sex Roles*, 56, 71–83. <https://doi.org/10.1007/s11199-006-9152-6>

Bass, B. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). Free Press. <https://psycnet.apa.org/record/1990-98476-000>

Bell, C., Rvanniekerk, R., & Nel, P. (2015). The relationship between some demographic variables and leadership effectiveness among local government managers in South Africa. *African Journal of Business Management*, 9, 50–58. <https://academicjournals.org/journal/AJBM/article-full-text-pdf/ECAB20950097>

Berber, N., Strugar Jelača, M., Bjekić, R., & Marić, S. (2022). Effects of social demographic factors on leadership style in Serbian banking industry. *Anali Ekonomskog Fakulteta U Subotici*, 58(47), 117–130. <https://doi.org/10.5937/AnEkSub2247117B>

Bissessar, S. (2023). Building financial literacy: Empowering leaders for strategic decision-making excellence. *LinkedIn*. https://www.linkedin.com/pulse/building-financial-literacy-empowering-leaders-scott-bissessar-dazqc?trk=public_post_main-feed-card_feed-article-content

Brown, J. (2002). Training needs assessment: A must for developing an effective training program. *Public Personnel Management*, 31(4), 569–578. <https://doi.org/10.1177/009102600203100412>

Brue, K. L., & Brue, S. A. (2016). Experiences and outcomes of a women's leadership development program: A phenomenological investigation. *Journal of Leadership Education*, 15(3), 75–97. <https://eric.ed.gov/?id=EJ1130242>

Congress of the Philippines. (2009). *The Magna Carta of Women Act*, R.A. 9710. <https://www.officialgazette.gov.ph/2009/08/14/republic-act-no-9710/>

Damianus, A. D., Julian, F. P., & Calipjo, G. M., & Nicolas, M. T. (2023). Examining the influence of leadership competencies on employees' work engagement. *Divine Word International Journal of Management and Humanities*, 2(2), 242–267. <https://hal.science/hal-04101992>

Dwiastanti, A. (2015). Financial literacy as the foundation for individual financial behavior. *Journal of Education and Practice*, 6, 99–105. <https://files.eric.ed.gov/fulltext/EJ1083664.pdf>

Fragale, A. R., Overbeck, J. R., & Neale, M. A. (2011). Resources versus respect: Social judgments based on targets' power and status positions. *Journal of Experimental Social Psychology*, 47(4), 767–775. <https://doi.org/10.1016/j.jesp.2011.03.006>

Hinojosa, A. S., Davis McCauley, K., Randolph-Seng, B., & Gardner, W. L. (2014). Leader and follower attachment styles: Implications for authentic leader–follower relationships. *The Leadership Quarterly*, 25(3), 595–610. <https://doi.org/10.1016/j.leaqua.2013.12.002>

Hogan, R., & Kaiser, R. B. (2005). What we know about leadership. *Review of General Psychology*. <https://doi.org/10.1037/1089-2680.9.2.169>

- Horney, N., Pasmore, B., & O'Shea, T. (2010). Leadership agility: A business imperative for a VUCA world. *Human Resource Planning*, 33(4), 34–43. <https://luxorgroup.fr/coaching/wp-content/uploads/Leadership-agility-model.pdf>
- Ibarra, H., Ely, R. J., & Kolb, D. M. (2013). Women rising: The unseen barriers. *Harvard Business Review*. <https://hbr.org/2013/09/women-rising-the-unseen-barriers>
- Indeed Editorial Team. (2023, March 11). What is a training needs assessment? *Indeed*. <https://www.indeed.com/career-advice/career-development/training-needs-assessment>
- Iskandar, Y., Joeliaty, J., Kaltum, U., & Hilmiana, H. (2022). Entrepreneurial competencies, competitive advantage, and social enterprise performance: A literature review. *Advances in Economics, Business and Management Research*, 207(1), 192–203. <https://doi.org/10.2991/aebmr.k.220204.020>
- Kozminski, A. K. (2015). Bounded leadership empirical study of the Polish elite. *Polish Sociological Review*, 425–253. <https://polish-sociological-review.eu/Bounded-Leadership-Empirical-Study-of-the-Polish-Elite,119726,0,2.html>
- Kozminski, A. K., Baczyńska, A. K., Skoczeń, I., & Korzynski, P. (2022). Towards leadership effectiveness: The role of leadership individual competencies and constraints. Introduction of the Bounded Leadership Model. *Leadership & Organization Development Journal*, 43(4), 596–611. <https://doi.org/10.1108/LODJ-04-2020-0157>
- Kulkarni, A., & Mishra, M. (2021). Aspects of women's leadership in the organisation: Systematic literature review. *South Asian Journal of Human Resources Management*. <https://doi.org/10.1177/23220937211056139>
- Kuratko, D. F., Morris, M. H., & Covin, J. G. (2015). Corporate entrepreneurship. In *Wiley encyclopedia of management*. <https://doi.org/10.1002/9781118785317.weom030017>
- Lamug, G., & Elep, G. (2023). Training needs assessment of women's organizations in Camarines Norte, Philippines. *International Journal of Research Studies in Education*, 4(4), 438–442. <https://www.researchgate.net/publication/373174624>
- Leitch, C. M., McMullan, C., & Harrison, R. T. (2013). The development of entrepreneurial leadership: The role of human, social and institutional capital. *British Journal of Management*, 24(3), 347–366. <https://doi.org/10.1111/j.1467-8551.2011.00808.x>
- Lusardi, A. (2019). Financial literacy and the need for financial education: Evidence and implications. *Swiss Journal of Economics and Statistics*, 155(1), 1–8. <https://doi.org/10.1186/s41937-019-0027-5>
- Philippine Commission on Women. (n.d.). Gender equality and the Sustainable Development Goals. <https://pcw.gov.ph/gender-equality-and-the-sustainable-development-goals/>
- Pierli, G., Murmura, F., & Palazzi, F. (2022). Women and leadership: How do women leaders contribute to companies' sustainable choices? *Frontiers in Sustainability*, 3, 930116. <https://doi.org/10.3389/frsus.2022.930116>

Puspita, S., & Nurhalim, A. D. (2021). Importance of training needs analysis for human resources development in organizations. *Jurnal Ekonomi Manajemen dan Bisnis*, 22(2), 151–160. <https://doi.org/10.29103/e-mabis.v22i2.702>

Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, 44(2), 276–295. <https://doi.org/10.1111/j.1745-6606.2010.01169.x>

Renko, M., Tarabishy, A. E., Carsrud, A. L., & Brännback, M. (2014). Understanding and measuring entrepreneurial leadership style. *Journal of Small Business Management*, 53(1), 54–74. <https://doi.org/10.1111/jsbm.12086>

Sánchez-Moreno, M., López-Yáñez, J., & Altopiedi, M. (2015). Leadership characteristics and training needs of women and men in charge of Spanish universities. *Gender and Education*, 27(3), 255–272. <https://doi.org/10.1080/09540253.2015.1024618>

Sejdic, A. (2023). The crucial role of financial literacy in school leadership. *Faculty Focus*. <https://www.facultyfocus.com/articles/academic-leadership/the-crucial-role-of-financial-literacy-in-school-leadership/>

Smith, W. K., Lewis, M. W., & Tushman, M. L. (2016). Both/and leadership. *Harvard Business Review*. <https://hbr.org/2016/05/both-and-leadership>

Stein, K. (2023, August 16). Why being busy reduces your leadership impact. *The CEO Magazine*. <https://www.theceomagazine.com/opinion/busy-leaders/>

Sutanto, E., & Aveline, V. (2021). Women leadership and its association with individual characteristics, social support, and diversity of work environment. *International Journal of Business and Society*, 22(3), 807–817. <https://doi.org/10.33736/ijbs.3760.2021>

Teame, K., Debie, A., & Tullu, M. (2022). Healthcare leadership effectiveness among managers in public health institutions of Addis Ababa, Central Ethiopia: A mixed methods study. *BMC Health Services Research*, 22(540), 1–12. <https://doi.org/10.1186/s12913-022-07879-6>

Tehseen, S., Ahmed, F. U., Qureshi, Z. H., Uddin, M. J., & T., R. (2019). Entrepreneurial competencies and SMEs' growth: The mediating role of network competence. *Asia-Pacific Journal of Business Administration*, 11(1), 2–29. <https://doi.org/10.1108/APJBA-05-2018-0084>

Tessens, L., White, K., & Web, C. (2011). Senior women in higher education institutions: Perceived development needs and support. *Journal of Higher Education Policy and Management*, 33(6), 653–665. <https://doi.org/10.1080/1360080X.2011.621191>

Vaughan-Johnston, T., Imtiaz, F., Lee, A., & Ji, L. J. (2021). Age differences in leadership positions across cultures. *Frontiers in Psychology*, 12, 703831. <https://doi.org/10.3389/fpsyg.2021.703831>

Article History

Received: May 18, 2024; Revised: June 10, 2024; Accepted: June 20, 2024; Published: August 30, 2024