

Analyzing Gender Differences in the Skill Performance of BS Cooperative Management Graduates

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Abstract

Analyzing gender differences in the performance of graduates fosters gender equality and inclusivity in educational and professional opportunities. This study examined the skill performance of male and female BS Cooperative Graduates of Mariano Marcos State University as assessed by their employers. Using a descriptive research approach, data was obtained via a structured questionnaire distributed to 22 employers who provided feedback on the graduates' performance in various essential skills. These skills included fundamental, teamwork, personal management and cooperative management skills.

The findings revealed that male graduates outperformed their female counterparts in all the skill sets. Although the results showed that both male and female graduates performed satisfactorily, this study revealed a significant performance discrepancy for female graduates, suggesting specific areas for improvement. To address the differences, it is recommended that gender-sensitive improvements to the curriculum be implemented to help close the performance gap. The information can assist educational institutions in fostering equitable opportunities for all graduates in the job market.

Keywords: Gender difference, BS Cooperative Management graduates, Skill performance, Fundamental skills, Teamwork skills, personal management skills, Cooperative management skills.

1. Introduction

The Sustainability Development Goal (SDG) 5 aims to achieve gender equality and empower all women and girls, recognizing that equitable societies are fundamental to sustainable development. This objective underscores the necessity of addressing persistent gender disparities in education and employment.

Several studies found gender disparities, particularly in academic and career achievement. McMahon (2020) found that female students may experience delays in completing their degrees even with high academic performance due to external responsibilities and insufficient institutional support. These delays can affect their entry into the job market, emphasizing the need for targeted strategies to help them graduate on time. The study of Blanchflower and Oswald (2020) highlights that although women are increasingly pursuing higher education and demonstrating strong academic performance, they continue to encounter distinct societal challenges. These challenges, including gendered expectations and societal pressures, can profoundly influence their career paths and employment opportunities.

In male-dominated fields, female students face unique challenges. The study of Sweeney (2019) examines these barriers within the accounting sector, noting that variations in confidence and engagement can

greatly affect both academic success and career goals. This highlights the necessity of creating inclusive educational settings that promote the success of female students across various disciplines.

In today's labor market, employers prioritize graduates who can adapt to complex and consistently changing work environments. The research of Yorke and Knight (2006) and Rae (2007) highlights the importance of personal attributes and competencies for employability, stressing the need to align educational programs with labor market demands to ensure fair career opportunities. Ting and Ying (2012) also examine gender differences in employability outcomes, indicating that males often excel in teamwork and leadership situations. This disparity points to a skills gap that may impede female graduates' career advancement, even though they are recognized for their strengths in communication and organizational skills.

Several skills were identified as essential skills in job performance. The Conference Board of Canada's Employability Skills 2000+ framework identifies key skills that are essential for achieving professional success. This framework identifies three workplace competencies such as fundamental skills which encompass communication, problem-solving, numeracy, technological proficiency and continuous learning; teamwork skills which promote effective collaboration, workplace integration and leadership; and personal management skills which include adaptability, accountability, work ethics and positive behaviors. These competencies are essential for achieving professional success.

For BS Cooperative Management graduates' competencies, the Western Visayas State University Specialized Knowledge Competence Assessment Team recognized the importance of understanding cooperative business operations as vital for obtaining employment and succeeding in their careers in cooperatives. Cooperatives function differently from other businesses, focusing on member ownership, democratic decision-making and shared economic benefits.

Moreover, the Caribbean Cooperative Management Training Programme (2017) highlighted key competencies that are crucial for the success of cooperative organizations. Important skills include effective planning to achieve operational goals; financial management for maintaining economic stability, bookkeeping and accounting to promote financial transparency and accuracy; office management for smooth administrative processes; and member education and training to improve members' understanding of their roles, responsibilities and benefits.

This study examined the differences in the skills performance of male and female graduates of the BS Cooperative Management program at Mariano Marcos State University. By examining these differences across various skill sets, the research aims to support the promotion of gender equality, create equal opportunities for all graduates and ultimately improve the quality of the workforce.

2. Methods

The study employed a descriptive research design to examine the gender differences in the skills performance of graduates from the BS Cooperative Management program from 2014 to 2018. The research was conducted at Mariano Marcos State University, College of Business, Economics and Accountancy.

Data was collected using a structured questionnaire to assess the skills of graduates along four key dimensions, such as fundamental, teamwork, personal management and cooperative management skills. The first three dimensions – fundamental, teamwork and personal management skills were adopted from the Conference Board of Canada's Framework on employability skills. Understanding the operation of a cooperative business in cooperative management skills was adopted from the instrument designed and

developed by the Western Visayas State University Specialized Knowledge Competence Assessment Team. The rest of the cooperative management skills such as planning, financial management, bookkeeping and accounting, office management and member education training were adopted from the Caribbean Cooperative Management Training Program.

The questionnaire was administered to 22 managers or immediate supervisors or staff at a senior level who have knowledge of the performance of the BS Cooperative Management graduates.

Mean was used to determine the performance of the graduates. A Likert scale was used to measure the extent of performance of graduates as follows:

4.51-5.00 Very Great Extent (VGE)

3.51-4.50 Great Extent (GE)

2.51-3.50 Moderate Extent (ME)

1.51-2.50 Small Extent (SE)

1.00-1.50 Not at all (NA)

The results were tabulated and sex-disaggregated to determine the gender difference among the skills set.

3. Results and Discussion

Table 1. Extent of Performance of Graduates on Fundamental Skills

Indicators	Male		Female	
	Mean	DR	Mean	DR
Communicating				
Can read and understand information presented in a variety of forms.	5.00	VGE	4.69	VGE
Can write and speak in a way that others pay attention and understand.	4.83	VGE	4.69	VGE
Can listen and ask questions to understand and appreciate the points of view of others.	4.67	VGE	4.63	VGE
Can share information using a range of information and communication technologies.	4.83	VGE	4.38	GE
Can use relevant scientific, technological and mathematical knowledge and skills to explain or clarify ideas.	4.50	GE	4.44	GE
Managing Information				
Can locate, gather and organize information using appropriate technology and information systems	4.83	VGE	4.38	GE
Can access, analyze and apply knowledge and explain or clarify ideal skills from various disciplines	4.83	VGE	4.25	GE
Using Numbers				
Can decide what needs to be measured or calculated	4.33	GE	4.44	GE
Can observe and record data using appropriate methods, tools and technology	4.83	VGE	4.63	VGE
Thinking and Problem Solving				
Can assess situations and identify problems.	4.67	VGE	4.32	GE

Continuation of Table 1.

Can seek different points of view and evaluate them based on facts.	4.33	GE	4.38	GE
Can recognize the human, interpersonal, technical, scientific and mathematical dimensions of a problem.	4.50	GE	4.31	GE
Can identify the root cause of a problem.	4.50	GE	4.25	GE
Is creative and innovative in exploring possible solutions	5.00	VGE	4.50	GE
Can readily use science, technology and mathematics as ways to think, gain and share knowledge, solve problems and make decisions.	4.67	VGE	4.50	GE
Can evaluate solutions to make recommendations or decisions.	4.50	GE	4.50	GE
Can implement solutions.	4.83	VGE	4.31	GE
Can check to see if a solution works, and act on opportunities for improvement.	4.67	VGE	4.25	GE
COMPOSITE MEAN	4.68	VGE	4.44	GE

As shown in Table 1, male graduates were rated by their employers with an overall mean performance score of 4.68 interpreted as “Very Great Extent” across all fundamental skills. Female graduates were rated slightly lower with a mean of 4.44 indicating a “Great Extent” of performance. This difference indicates that male graduates are perceived by employers to have higher competency levels in fundamental skills than female graduates.

While both genders exhibit competence in fundamental skills, individual indicators show differing mean scores.

For males, the high performance in “Reading and understanding the information presented in a variety of forms” and “Creativity in problem-solving” may reflect strong analytical and critical thinking skills. Males might excel in tasks requiring problem-solving, creativity and information management.

Female graduates’ high performance in “Reading and understanding the information presented in a variety of forms” and “Can write and speak in a way that others pay attention and understand” showing analytical and in sharing information and engaging others effectively. This skill improves performance in positions including report writing, public speaking and creating training materials. Female graduates showed strong communication skills, excelling in writing, speaking and information sharing.

The observed skill performance difference shows that although female graduates typically meet employer expectations, there is still room for skill development. Higher Education Institutions can better prepare graduates for successful careers by integrating curriculum improvements and adopting inclusive learning environments.

Table 2. Extent of Performance of Graduates on Teamwork Skills

Indicators	Male		Female	
	Mean	DR	Mean	DR
Working with Others				
Can understand and work within the dynamics of a group	4.83	VGE	4.56	VGE
Can ensure that a team’s purpose and objectives are clear	5.00	VGE	4.81	VGE

Is flexible and try to respect, be open to and supportive of the thoughts, opinions and contributions of others in a group	5.00	VGE	4.63	VGE
Can recognize and respect people’s diversity, individual differences and perspectives	4.83	VGE	4.63	VGE
Can accept and provide feedback in a constructive and considerate manner	4.83	VGE	4.31	GE
Can contribute to a team by sharing information and expertise	4.83	VGE	4.50	GE
Can lead or support when appropriate, motivating a group for high performance	4.83	VGE	4.31	GE
Can understand the role of conflict in a group to reach solutions	4.67	VGE	4.38	GE
Can manage and resolve conflict when appropriate	4.50	GE	4.31	GE
COMPOSITE MEAN	4.81	VGE	4.49	GE

Table 2 shows the performance of graduates in terms of teamwork skills. Male graduates scored 4.81 on the composite mean which is interpreted as “Very Great Extent” whereas female graduates scored 4.49 which is interpreted as “Great Extent”. These findings imply that male graduates have better teamwork skills compared to female graduates.

Male graduates scored the highest on indicators “Can ensure that a team’s purpose and objectives are clear” and “Is flexible and try to respect, be open to and supportive of the thoughts, opinions and contributions of others in a group” which reflects their leadership abilities and are dynamic participants in team settings. These qualities make them effective for jobs such as project managers or team leaders that call for both collaboration and decision-making.

Female graduates show scored the highest on the indicator “can ensure that a team’s purpose and objectives are clear”. This demonstrates their capacity to communicate effectively and support goal-oriented settings. They are effective in positions like coordinators or team communicators because of their capacity to guarantee that tasks are in line with team goals.

Although both male and female graduates can work in a team, the observed difference in the composite mean scores indicates that male graduates are more skilled in this area. In addition to creating a more inclusive and equitable learning environment, institutions can better prepare graduates for successful careers in cooperative management by addressing the gender gaps through focused interventions and skills development programs.

Table 3. Extent of Performance of Graduates on Personal Management Skills

Indicators	Male		Female	
	Mean	DR	Mean	DR
Participating in Projects and Tasks				
Can plan, design or carry out a project or task from start to finish with well-defined objectives and outcomes.	4.50	GE	4.06	GE
Can develop a plan, seek feedback, test, revise and implement	4.17	GE	4.19	GE
Can work to agreed quality standards and specifications	4.83	VGE	4.31	GE
Can select and use appropriate tools and technology for a task or project	4.50	GE	4.82	VGE

Can adapt to changing requirements and information	4.67	VGE	4.25	GE
Can continuously monitor the success of a project or task and identify the ways to improve	4.50	GE	4.00	GE
Demonstrating Positive Attitudes and Behaviors				
Can feel good about self and is confident	4.83	VGE	4.69	VGE
Can deal with people, problems and situations with honesty, integrity and personal ethics	5.00	VGE	4.50	GE
Can recognize own and other people’s good efforts	4.67	VGE	4.44	GE
Can take care of personal health	4.67	VGE	4.50	GE
Can show interest, initiative and effort	4.67	VGE	4.50	GE
Being Adaptable				
Can work independently or as part of a team	4.83	VGE	4.38	GE
Can carry out multiple tasks or projects	4.67	VGE	4.38	GE
Is innovative and resourceful and can identify and suggest alternative ways to achieve goals and get the job done.	4.67	VGE	4.25	GE
Is open and can respond constructively to change	4.33	GE	4.19	GE
Can learn from own mistakes and accept feedback	4.50	GE	4.31	GE
Can cope with uncertainty	4.50	GE	4.19	GE
Learning Continuously:				
Is willing to continuously learn and grow	4.67	VGE	4.44	GE
Can assess personal strengths and areas for development	4.50	GE	4.06	GE
Can set own learning goals	4.33	GE	4.19	GE
Can identify and access learning sources and opportunities	4.33	GE	4.25	GE
Can plan for and achieve own learning goals	4.33	GE	4.19	GE
Working Safely:				
Is aware of personal and group health and safety practices and procedures, and act in accordance with these	4.67	VGE	4.50	GE
COMPOSITE MEAN	4.58	VGE	4.33	GE

Table 3 presents the skills performance of graduates in terms of personal management skills. Employers gave male graduates a composite mean score of 4.58 which is interpreted as “Very Great Extent” while female graduates received a lower composite mean score of 4.33 which is classified as “Great Extent”. The difference implies that male graduates are thought to have better personal management skills than female graduates.

Male graduates show remarkable competence in indicators “Can work to agreed quality standards and specifications”, “Can feel good about self and is confident” and “Can work independently or as part of a team”. These qualities suggest that they are effective for positions that call for a high degree of individual responsibility, leadership and cooperative participation.

Female graduates show high performance on “Can select and use appropriate tools and technology for a task or project”. This skill implies that they are effective for jobs requiring technical know-how, including technical support or jobs that heavily rely on digital tools to complete projects.

Female graduates' slightly lower performance in personal management skills emphasizes the need for more focused skills training to improve their proficiency in personal management.

Table 4. Extent Performance of Graduates on Cooperative Management Skills

Indicators	Male		Female	
	Mean	DR	Mean	DR
Understanding the Operation of a Cooperative Business				
Understand the cooperative's services and priorities	5.00	VGE	4.67	VGE
Appreciates the political dynamics that exist inside and outside the organization.	5.00	VGE	4.17	GE
Understands how the job impacts the business of the coop	5.00	VGE	4.50	GE
Responds to both the external and internal forces affecting the environment of the business	4.00	GE	4.33	GE
Composite Mean	4.75	VGE	4.42	GE
Planning				
Formulate long and short-term objectives for the cooperative	5.00	VGE	3.33	ME
Decide on general policies in the cooperative's various fields of operation	5.00	VGE	3.17	ME
Plan the cooperative's trading operations and prepare staff and facilities for these operations	5.00	VGE	3.33	ME
Prepare plans for projects outside the routine operations of the cooperative and assess their feasibility	5.00	VGE	3.17	ME
Composite Mean	5.00	VGE	3.25	ME
Financial Management				
Identify internal and external sources of funds	4.00	GE	3.50	ME
Determine the need for working capital	5.00	VGE	3.50	ME
Prepare annual budgets	4.00	GE	3.67	GE
Estimate total requirement for fixed assets according to the volume and structure of business	5.00	VGE	3.33	ME
Design and implement a system of cost accounting for operations and product	4.00	GE	3.83	GE
Bookkeeping and Accounting				
Maintain books of accounts and prepare financial statements.	4.00	GE	4.00	GE
Composite Mean	4.33	GE	3.64	GE
Office Management				
Plans work to be done, delegate specific tasks to office staff and supervise their implementation.	5.00	VGE	4.17	GE
Conducts efficient and result-oriented meetings in the cooperative.	5.00	VGE	4.17	GE
Maintain required records of members, shares, bonds, mail, inventory etc.	5.00	VGE	4.33	GE
Prepare reports as required in the by-laws and regulations;	5.00	VGE	4.50	GE

File correspondence, reports, staff records, minutes of meeting and other important documents.	4.00	GE	4.67	VGE
Composite Mean	4.80	VGE	4.37	GE
Member Education and Training				
Recruit new members for the cooperative.	5.00	VGE	4.17	GE
Determine education requirements of the membership through social research, demand and opinion surveys.	5.00	VGE	3.83	GE
Prepare relevant educational material for members.	5.00	VGE	3.83	GE
Design a training program that responds suitably to identified needs in consultation with cooperative training institutions or competent trainers.	4.00	GE	3.67	GE
Composite Mean	4.75	VGE	3.88	GE
OVERALL MEAN	4.70	VGE	3.91	GE

Table 4 presents the skills performance of graduates in terms of cooperative management skills. Male graduates earned a composite mean of 4.70 which is interpreted as “Very Great Extent”. Female graduates have a lower composite mean of 3.91 which is defined as “Great Extent”. This implies that male graduates exhibit better performance in cooperative management skills than their female counterparts.

The highest performance for male graduates is in planning skills (5.00) while female graduates performed best in office management (4.37). This suggests that male graduates are more prepared for managerial and decision-making roles in cooperatives. Female graduates are suitable for clerical and operational management roles.

The lowest performance for males is in financial management skills (4.33) while planning (3.25) for female graduates. This suggests a need for development programs focused on financial decision-making and leadership.

In terms of understanding the operation of a cooperative business, male graduates scored a composite mean of 4.75 which is interpreted as “Very Great Extent” while female graduates scored 4.42 classified as “Great Extent”. This implies that males have a higher level of understanding of the operations of a cooperative business than their female counterparts.

Male graduates show high performance on indicators “Understand the cooperative’s services and priorities”, “Appreciates the political dynamics that exist inside and outside the organization” and “Understands how the job impacts the business of the coop”. This suggests that they are better prepared for leadership roles where knowledge of cooperative priorities, governance and external influence is crucial. They outperformed females in three out of four indicators.

Female graduates show high performance on “Understand the cooperative’s services and priorities”. The only indicator where females slightly outperformed males is on “Responds to both the external and internal forces affecting the environment of the business”. This implies that they are more adaptable in handling environmental and organizational changes.

In terms of planning, male graduates scored 5.00 interpreted as “Very Great Extent” while female graduates scored 3.25 classified as “Moderate Extent”. Male graduates performed significantly better than female graduates. Female graduates consistently score at the moderate extent level. This suggests a weaker ability in planning.

Male graduates gained the highest score in all indicators which suggests that they are highly capable in setting objectives, creating policies, managing trading operations and preparing projects. They are effective for leadership and decision-making roles.

Female graduates show high performance on the indicators “Formulate long and short-term objectives for the cooperative” and “Plan the cooperative’s trading operations and prepare staff and facilities for these operations”. This implies that they are strong in goal-setting and operational planning roles. They are best suited for roles in operations management, business development and project coordination.

In terms of financial management, male graduates scored 4.33 interpreted as “Great Extent” while female graduates scored 3.64 classified as “Great Extent”. This implies that male graduates performed better in financial management compared to female graduates.

Male graduates show high performance on the indicators “Determine the need for working capital” and “Estimate total requirement for fixed assets according to the volume and structure of business”. This implies that male graduates are suited for financial planning, investment decision-making and cooperative financial management roles.

Female graduates show high performance on the indicator “Maintain books of accounts and prepare financial statements”. This implies that female graduates are more suited for clerical, record-keeping and auditing roles.

In terms of member education training, male graduates scored 4.33 interpreted as “Great Extent” while female graduates scored 3.64 classified as “Great Extent”. This suggests that male graduates significantly performed better than female graduates.

Male graduates show high performance on the indicators “Recruit new members for the cooperative”, “Determine education requirements of the membership through social research, demand and opinion surveys”, and “Prepare relevant educational material for members”. This implies that male graduates are suited for roles in membership expansion, training development and policy research.

Female graduates show high performance on the indicator “Recruit new members for the cooperative”. This also implies that they are suited for membership expansion roles.

4. Conclusion

The study identifies significant gender differences in the skill performance of BS Cooperative Management graduates from Mariano Marcos State University. Findings indicate that males consistently exhibit greater proficiency in key areas such as teamwork, leadership, financial management and cooperative management skills whereas female graduates demonstrate strong capabilities in administrative support and organizational skills. However, when it comes to cooperative management skills, particularly planning and financial management, female graduates perform relatively lower.

Based on the results, the following are recommended:

The university undertakes gender-sensitive curriculum review to incorporate training that specifically strengthens female graduates’ skills in areas where performance gaps are evident, such as leadership and financial management.

The university establishes mentorship programs pairing male and female graduates with experienced professionals in the cooperative management field to foster skill development.

The university continuously assesses the performance of graduates and gathers feedback from employers to track the effectiveness of the curriculum and ensure that it meets labor market needs.

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