

Exploring Biases among Female Workers in Male-Dominant Industries: Basis for Gender-Inclusive Workplace Framework

Jon Krixter L. Mañebo^{1*}, Ronn C. Roque¹, Joel M. Torres²

¹Department of Technology, Livelihood and Life-Skills Education, College of Education, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines

²Department of Language, Culture, and Arts Education, College of Education, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines

*Correspondence: manebo.jon@clsu2.edu.ph

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Abstract: Despite the increasing number of women in male-dominant industries, biases against them still prevail. As such, the present qualitative descriptive research identified the biases and their effects on the work productivity of female workers in male-dominant industries in a City in Nueva Ecija. Regarding participants' experiences in the workplace, findings showed two kinds of biases they faced. Regarding strategies to cope with biases, findings underscored three recurring themes: disregarding the biases, giving more attention to work, and building self-confidence. Furthermore, developing self-trust and skills, ignoring biases, choosing colleagues they work with, learning to be prepared, and being courageous are the six themes emerging from participants' suggestions to help other female workers adapt to male-dominant industries. The study concludes with a framework for a more gender-inclusive workplace in the digital world.

Keywords: *Gender and Development, Gender Discrimination, Women Empowerment, Work Productivity*

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Introduction

Discrimination is a universal phenomenon in which people are judged based on their gender, ethnicity, religion, sexual orientation, and race. Gender is an essential universal aspect that people of all ages use to classify others and encode experiences. Gender discrimination ranges from the gender pay gap, the difficulties of women advancing in the workplace, the stereotyping of women in leadership roles, and sexual harassment. Özdemir and Albayrak (2015) surmised that gender-related issues are frequently brought up when a person works in a field where most employees are of the opposing gender. For instance, women often struggle in professions where men predominate because they must deal with bias against them based on their gender.

Women entering industrial-related jobs are having difficulties getting hired since some managers prioritize hiring skilled men to increase the workforce in their workplace. Women constantly face biases that directly affect their work experiences and work-related outcomes despite seemingly equal opportunities. Thus, individual experiences with hostile work environments negatively affect the occupational well-being of female workers (Sojo et al. 2015). Moreover, productivity and performance within the organization are affected by the employee's performance, and the employee's performance is affected by gender discrimination (Abbas et al., 2010).

Although studies on biases on women and their effects on the latter's professional advancements and well-being have been done (Foley et al., 2020; Germain et al., 2012; Norberg & Johansson, 2020), no study so far has been undertaken to identify the effects of biases on the productivity of female workers on male-dominant industry. Hence, the researchers explored the biases against female workers in male-dominant industries in the Science City of Muñoz, Philippines. The researchers also determined the effects of biases on the work productivity of female workers. Lastly, they proposed a sustainable framework to help female workers thrive in male-dominated industries.

Research Questions

Generally, this study explored the biases and determined the effects of biases on the work productivity of female workers in male-dominant industries. Specifically, it answered the following questions:

- (1) What biases affect the work productivity of female workers in male-dominant industries?
- (2) How do these biases affect the work productivity of female workers in male-dominant industries?

- (3) How do female workers in male-dominant industries cope with the biases?
 (4) What are the ways to help female workers in male-dominant industries?

Methodology

Research Design and Sample

Given that gender bias in the male-dominant industry is a complex process covering a variety of domains, the study followed the qualitative research design. In particular, it is exploratory and descriptive. According to Tenny et al. (2017), qualitative research analyzes and offers deeper insights into issues in the real world. This was also exploratory due to an inquiry into a new topic: documenting workplace biases and their effects on the work productivity of female workers in the male-dominant industry.

The seven participants are residents from different barangays (i.e., Bagong Sikat, Balante, Bantug, Catalanacan, Poblacion East, Poblacion West, and Poblacion South) in Science City of Muñoz, Nueva Ecija. The researchers used non-probability convenience sampling to select the participants that met the selection criteria. The researchers interviewed seven female workers employed in male-dominant industries. The participants were welders, electricians, policewomen, firefighters, security guards, sculptors, and vegetable porters. Table 1 shows the participants' demographic profile.

Table 1. Demographic Profile of the Participants.

Participants	Age	Occupation	Highest Educational Attainment	Numbers of Years of Experience in the Profession
P1	29	Welder	2 nd Year College	3
P2	31	Vegetable Porter	Elementary Graduate	6
P3	26	Electrician	Highschool Graduate	2
P4	25	Sculptor	Highschool Graduate	3
P5	37	Policewoman	Bachelor's Degree	8
P6	31	Firefighter	Bachelor's Degree	6
P7	34	Security Guard	Bachelor's Degree	6

Using the data from the interview, the researchers identified emerging themes from the responses of female worker participants. The discussion begins with the different biases that affect the participants' work productivity. It then moves on to how those biases affect their work productivity. The findings on how female workers cope with the biases are then presented. The final part of the discussion illustrates how the participants can thrive in male-dominated industries.

Data Collection and Instruments

After obtaining all the requirements for data gathering, the researchers met with the participants and explained the study's goal. The participants were then asked to sign a consent form indicating their voluntary and free participation. The data were collected via participants' responses in the researcher-made semi-structured interview. The interview form consists of three parts. The first part is the demographic information about the participants; the second part explores the possible factors of gender discrimination in the workplace and the effects of gender discrimination on the work productivity of female workers. The last part determined how the participants dealt with or overcame gender discrimination in their workplace. Data from the last section helped the researchers form ideas in creating recommendations that may help female employees from the male-dominant industry overcome gender discrimination in their workplace.

Semi-structured interviews were conducted from March to April 2023. The researchers adopted the semi-structured format to allow them to use the same general questions for each interview. The interview questions framed adhered to Myers and Newman's (2007) suggestions that semi-structured interview questions must have the following characteristics: openness, flexibility, and improvisation. Hence, it allowed the interviewers some flexibility to respond to participants' answers and ask appropriate follow-up clarificatory questions. The participants were asked general questions along with follow-up questions that were related. Asking follow-up questions and providing prompts helped reveal essential details that a fully structured interview may not have provided. The interview questions underwent content validity by experts in the field of qualitative research. Comments from the validators were incorporated. The

revised version of the interview questions was pilot-tested to non-participants. Based on the pilot testing results, the interview question's final version was drafted; the interviews were audio recorded, transcribed, and then coded.

Data Analysis

To define, analyze, and present themes or patterns connected to data, thematic analysis was employed. It uses interpretations to deal with various information and provides in-depth illustrations and discussions of the topics (Alhojailan, 2012). Further, thematic analysis is a method for characterizing data and linking interpretations when selecting codes and creating themes (Kiger & Varpio, 2020). Following Saldaña's (2009) approach, initial categorization was based on process coding based on the research questions of this study. The themes chosen were initially based on the research questions. In an attempt to capture the themes embodied in the narratives, open coding was initially done. In addition, to fully familiarize themselves with the research data, the researchers adopted Glaser's (1978 as cited in Urquhart 2013; Low et al., 2017) constant comparative method along with the other data analysis techniques such as the recommended open coding (category identification), selective coding (category clustering), and theoretical coding (category connections).

Ethical Consideration

Before conducting the interview, the researchers explained to the participants the nature and purpose of the research, their right to refuse to participate, the protection of the data collected from participants, and an understanding of the boundaries of confidentiality of the study. Participants were requested to sign a full consent form to prove their willingness to cooperate in the study.

Results and Discussion

Biases affecting the work productivity of female workers

Table 2 presents the biases faced by the participants in male-dominated industries. Two themes have emerged from their responses: inadequate working knowledge to perform the task and inadequate physical ability to perform the task. Almost all participants (6 out of 7) were regarded by their male counterparts as having inadequate working knowledge to perform the tasks. The preceding result was also underscored in the study of Black (2021) that female workers were disregarded and underestimated by their co-workers and superiors, faced skepticism and discrimination from male customers, and were underestimated for their emotional firmness. The excerpts below from the six participants illustrate how their male colleagues underestimated their capabilities.

"They see me as not knowledgeable and does not have skills in the job that I chose." (P1)

"They underestimate me." (P2)

"They view me as incapable and do not possess the required competency to perform the job." (P3)

"They belittle me." (P4)

"They think I do not know what I am doing." (P5)

"Discrimination that is underestimating you, they knew that you cannot do it." (P7)

In addition, participants also experienced discrimination regarding their physical strength to perform the tasks. This biased treatment that female workers face from their male co-workers can be attributed to Ellemers' (2014) claim that men display functional physical attributes, such as muscle strength, as a central part of men's gender identity. The following excerpts show how the participants experience biased treatment from male employees when physical strength is at stake.

"When it comes to production, women were slower." (P4)

"Regarding physical strength, the difference is that women exert less strength than men. For instance, in shops where the job uses power tools, it is easier for men to cope with the task than women. Because they know that we women are weak." (P5)

"In BFP, men are more in demand for driving big trucks. The discrimination against women is more on physical attributes. Maybe because a man's physical ability is crucial because they knew that we women are weak." (P5)

Table 2. Biases that affect the work productivity of female workers.

Themes	Excerpts
Inadequate working knowledge to perform the tasks	<p><i>Tingin nila sa'kin ay hindi marunong at walang kakayahan sa trabahong napili ko.</i> (They see me as not knowledgeable and do not have skills in the job I chose.) P1</p> <p><i>Pangmamaliit sa'kin.</i> (They underestimate me.) P2</p> <p><i>Tingin nila sa'kin ay hindi marunong at walang kakayahan sa trabahong napili ko.</i> (They view me as not knowledgeable and doesn't have skills in the job that I chose.) P3</p> <p><i>Minamaliit nila ako.</i> (They belittle me.) P4</p> <p><i>Ang akala nila ay hindi ako marunong sa ginagawa ko.</i> (They think I do not know what I'm doing.) P5</p> <p><i>Diskriminasyon na minamaliit ka, alam nila na hindi mo kaya yung ginagawa mo.</i> (Discrimination that underestimating you, they knew that you cannot do it.) P7</p>
Inadequate physical ability to perform the tasks	<p><i>Mas mabagal ang production ng babae.</i> (When it comes to production, women were slower) P4</p> <p><i>Kapag sa kababaihan kasi, mas mahina yung strength na naibibigay kaysa sa mga lalaki. Katulad na lang sa mga shop, yung mga power tools ay mas mabilis ma-pick-up ng lalaki kaysa sa babaeng gagamit no'n. Sapagkat alam nila mahina kaming mga babae.</i> (When it comes to physical strength, the difference is that women are to exert less strength than men. For instance, in shops where the job uses power tools, it is easy for men to cope with the task rather than women. Because they know that we women are weak.) P5</p> <p><i>Sa BFP, mas kailangan ang kalalakihan in terms of operation magdrive ng malalaking truck. More on physical attributes and diskriminasyon sa babae. Dahil siguro more needed yung manpower dahil mas needed and physical ability ng lalaki.</i> (In BFP, men are more in demand for driving big trucks. The discrimination against women is more on physical attributes. Maybe because a man's physical ability is crucial because they know that women are weak.) P6</p>

Effects of Biases on the Work Productivity of Female Workers

Table 3 presents how biases affect the work productivity of female workers in male-dominant industries. The participants' responses in the interview revealed three emerging themes.

Noticeably, 4 out of 7 respondents reported losing concentration because of the biases. The discrimination they receive affects their focus on performing their task. This is congruent with the study of Brescoll (2016), which underscored that women are more emotional than men. Women are frequently perceived as having less control over whether their emotions influence their thoughts and behavior. This indicates that biases can affect their emotions and behaviors, which could cause a loss of concentration. As a result, it affects their work productivity. The transcript excerpts are as follows:

"I cannot focus on my work that much." (P1)

"I cannot work well." (P3)

"It is hard to work properly." (P4)

"I lose focus on working." (P6)

Moreover, loss of motivation is one of the effects of biases on the work productivity of female workers. The excerpts *"I am losing my interest to work sometimes."* (P1) and *"I have no interest in work."* (P2) illustrate the due to those biases, they lose motivation. Gonzales (2022) states that about 3 out of 10 female workers in the US leave their jobs because of the unfair treatment of their colleagues and managers. It shows that these women lose their motivation to continue striving to get promoted from their jobs.

Despite the negative effect of biases on work productivity, 1 out of 7 participants responded that biases become her inspiration to thrive and excel. The excerpt "*It became my inspiration that even though you are a woman, you can gain the man's job. It is not on the gender but it is in the capability of a person.*" (P7) illustrates that biases or discrimination do not always harm female workers in the male-dominant industry. This claim concurs with the study of Berman (2018), which underscored that women work 10 percent harder than men in the factories even though they have physical strength disadvantages.

Table 3. Effects of biases on the work productivity of female workers.

Themes	Excerpts
Loss of concentration	<i>Hindi ako masyadong makapag focus ng mabuti sa aking trabaho.</i> (I cannot focus on my work that much.) P1 <i>Di ako makapagtrabaho ng maayos.</i> (I cannot work well.) P3 <i>Mahirap mag trabaho ng maayos.</i> (It is hard to work properly.) P4
Loss of motivation	<i>Nawawalan ako ng focus sa pag-trabaho.</i> (I lose focus on working.) P6 <i>Nakakawalang ganang mag trabaho minsan.</i> (I am losing my interest to work sometimes.) P1
Serves as Inspiration	<i>Wala akong interes sa trabaho.</i> (I have no interest in work.) P2 <i>Ito ay nagiging inspirasyon ko, na kahit babae ka, kaya mong gawin ang trabaho ng lalaki. Hindi sa kasarian nakikita kundi sa kakayahan ng isang tao.</i> (It became my inspiration that even though you are a woman, you can gain the man's job. It's not on the gender but it's in the capability of a person.) P7

Ways to Cope with Biases

Table 4 presents how female workers in male-dominant industries cope with the biases. Three themes are enumerated that illustrate their strategies for coping with biases. Noticeably, most participants (4 out of 7) disregard the biases. The participants explained that to cope with biases, it is important to disregard them in the workplace to be productive. Taylor (2015) claims that performance in the workplace can be improved by focusing on motivation. This proves that ignoring biases while focusing on motivation will improve workers' productivity. The following excerpts support the preceding data:

- "*I just let them. I am already used to what they have been showing me.*" (P1)
- "*I am stabilized with their insults.*" (P3)
- "*I got along with them properly.*" (P6)
- "*I just let them be.*" (P7)

Additionally, 3 out of 7 participants also pointed out that giving more attention to work will help female workers cope with the biases in the workplace. The excerpts, "*I focus more on my work for my family.*" (P1), "*I chose to take charge of myself because if I think of them, my work will be delayed.*" (P2), "*I focus on improving in my work.*" (P3), suggest that concentrating more on work will help female workers face and conquer the biases in the workplace. The welder participant in the study emphasized that focusing on work for her family, instead of the biases, will be helpful to cope with the biases. Metcalf (2021) pointed out that focusing on problems typically fails, often resulting in dissatisfaction. Thus, turning or focusing it on others, like at work, will probably improve an employee's performance.

While there has been a perception that boosting self-confidence can help to cope with biases in male-dominated industries. 1 out of 7 participants responded that it is helpful to increase self-confidence, not to be affected in the workplace, and to have good productivity at work. The excerpt "*I trust myself that I am capable of doing what I must do.*" (P7) emphasizes that trusting oneself will help face such biases. This corroborates with Fernando et al.'s (2014) claims that to succeed in one's career, an employee should have self-confidence. One of the vital elements of success in the construction industry is building self-confidence.

Table 4. Ways to cope with biases.

Themes	Excerpts
Disregarding the biases	<i>Hinahayaan ko nalang sila, nasanay na rin naman ako sa mga pinapakita nila sakin. (I just let them. I am already used to what they have been showing me.) P1</i> <i>Nagpakatatag ako sa panlalait nila. (I am stabilized with their insults.) P3</i> <i>Pinakisamahan ko sila ng maayos. (I got along with them properly.) P6</i>
Giving more attention to work	<i>Basta hinayaan ko nalang sila. (I just let them be.) P7</i> <i>Mas nag focus nalang ako sa trabaho ko para sa pamilya ko. (I focus more on my work for my family.) P1</i> <i>Inintindi ko na lamang ang sarili ko kasi, kung iisipin ko pa sila, maantala lang yung trabaho ko. (I chose to take charge of myself because if I think of them, my work will be delayed.) P2</i>
Boosting self-confidence	<i>Ginalingan ko pa sa aking trabaho. (I focus on improving in my work.) P3</i> <i>Nagtiwa na lang ako sa sarili ko na kaya kong gawin yung mga dapat kong gawin. (I trust myself that I am capable of doing what I must do.) P7</i>

Ways to Help Female Workers in Male-Dominant Industries

Table 5 presents ways to help female workers who experience biases in male-dominated industries. The interview participants' responses revealed six emerging themes, which means that the participants have different advice and techniques for helping female workers in male-dominated industries. Three out of 7 participants responded to learn self-trust. This is illustrated in the following responses:

"My advice to my fellow women who are working in a man's job work field is to trust themselves." (P3),

"What I can say to my fellow women is that you need to be brave enough and stronger and show them your capabilities. Because what men can do, can also be done by women as well." (P5),

"Be strong, do your work efficiently, it was said that you should do your duty. Show them that you can even if you are a woman." (P7),

The preceding responses from P3, P5, and P7 show that trusting themselves will benefit female workers in male-dominant industries. From the perspective of Sandberg (2015), self-assurance and faith in one's talents are critical components for women to succeed and hold leadership positions. In addition, women should assert themselves, overcome self-doubt, and lean in. This proves that women workers need to trust their strengths and abilities to overcome the challenges in the workplace.

The three participants also pointed out that honing their skills will help other female workers in male-dominant industries. If female workers improve their skill requirements, it will lessen the biases since women workers can keep up with men in terms of skills. It is evident from the excerpts of the participants that to help other women workers in male-dominated industries; women workers must learn to hone skills to overcome women's incapacities. Diwakar and Ahamad (2015) claim that women will benefit greatly from skill development through vocational training, especially rural women who engage in physical labor or traditional crafts, where women can compete against men in all occupations, including pilots, loco pilots, engineers, doctors, and laborers. Thus, equal opportunities and training must be given to women regardless of gender discrimination to improve their productivity and our nation's economy. The following excerpts support this discussion:

"Just show them that you can do it and your capabilities. If you do not know about other things, you can always learn." (P1)

"For women who work in male-dominated industries, you need to study all things, it is not instantly, but if you exert much effort and be persevere, you can keep up with others." (P4)

"You can recuperate in terms of other skills. Strength is not just the basis for work. Then, overcome your physical incapacities." (P6)

Moreover, two participants reported that learning to let and ignore biases is vital to helping women workers in male-dominated industries. The following responses support the preceding claim:

"Just let and ignore them because it can cause depression to us. They will discriminate against us more if we always pay attention to their insults." (P2)

"Do not let yourself be affected by other's perceptions of you, especially when you know to yourself that you did not do anything wrong." (P3).

The study of Gipson et al. (2017) pointed out that raising awareness that women with a double-bind bias may be able to disregard contradictory messages. Instead, they should focus their energies on their task. Ignoring biases and focusing on work instead will help female workers to overcome the challenges of male-dominated industries.

Participant 1 suggested that learning to choose colleagues in group work is necessary. The response from P1, *"When you were given a task, you must be with women as well so there would be no discrimination. Different tasks for men and women,"* highlighted that women must be with women to avoid being discriminated by male workers. The participant also emphasized that there have to be different tasks for men and women so male workers will not discriminate against the latter. The study by Hoffman et al. (2014) does not explicitly emphasize women at work but highlights the point of choosing co-workers. It emphasizes the value of forging alliances with peers and developing relationships based on trust and mutually beneficial objectives.

Furthermore, 1 out of 7 participants suggested that female workers should learn and be prepared to be self-reliant. The excerpt, *"You must ready yourself where you chose to enter yourself and overcome your physical incapacities" (P6),* implies that being ready and prepared always will improve themselves in a male-dominated industry where biases are presented. Alves and English (2018) pointed out that many universities and colleges have not given much effort to prepare female students for a male-dominated field. Notably, the policies have not considered changes in the formality and flexibility of the workplace. The relevance of including this in curricula, where preparation for female students in fields with a male-dominant would aid women in these fields. These would enable the appropriate parties to ensure that the graduates are admitted into diverse, inclusive, and democratic job environments that uphold the inclusion ideal.

Lastly, Participant 2 also suggested that female workers must learn not to be afraid. The response, *"If possible, we can report them to the supervisor if you have that,"* underscores the need to report the bully at work to the higher-ups whenever possible. This claim supports Hämmig (2017), in which supervisors have a major role in health and well-being, at least if such assistance is unavailable and issues arise at work. However, Couto et al. (2023) say that some supervisors lack knowledge or abilities to deal with the situation effectively, are challenging to approach, unsupportive and dismissive of domestic violence situations. This proves that it is okay to avoid reporting biases at the workplace, but female workers should always be cautious about whom they report to.

Table 5. Ways to help female workers in male-dominant industries.

Themes	Excerpts
Trust one's self	<p><i>Ang payo ko sa mga katulad kong babae na nagtatrabaho sa panlalaking trabaho ay magtiwala sa sarili.</i> (My advice to my fellow women who are working in a man's job work field is to trust themselves.) P3</p> <p><i>Ang masasabi ko lang sa aking mga kapwa babae na maging matapang at malakas na ipakita ang ating kakayanan sapagkat kung ano ang kayang gawin ng lalaki ay kaya din gawin ng babae.</i> (What I can say to my fellow women is that you need to be brave enough and stronger and show them your capabilities. Because what men are able to do, can also be done by women as well.) P5</p> <p><i>Maging matatag, gawin ng trabaho ng maayos, do your duty sabi nga. Ipakita mo na kaya mo kit babae ka.</i> (Be strong, do your work efficiently, it was said that you should do your duty. Show them that you can even if you're a woman.) P7</p>
Hone skills	<p><i>Basta ipakita sa kanila na kaya mo pati ng kakayahan mo. Kung wala kang alam sa ibang mga bagay, pwede ka naman na mag-aral.</i> (Just show them that you can do it and your capabilities. If you don't know about other things, you can always learn.) P1</p>

Yung mga girl na nagtrabaho rin ng panlalaking trabaho, kailangan pag-aralan mo lahat, hindi ito kaagad-agad matutuhan pero 'pag pinagtiyagaan mo at natutuhan mo, makaksabay ka. (For women who work in male-dominated industry, you need to study all things, it is not instantly but if you exert a lot of effort and be persevere, you can keep up with others.) P4

Pwede ka naman bumawi in terms of other skills. Hindi lang naman palakasan ang basehan sa trabaho. At i-overcome mo yung physical incapacabilities. (You can recuperate in terms of other skills. Strength is not just the basis for work. Then, overcome your physical incapacabilities) P6

Let go and ignore *Hayaan niyo nalang sila at wag intindihin kasi maari pang magdulot ng depresyon sa'tin kung iintindihin natin sila. Mas lalo rin nila tayong kukutyain kung palagi nating papansinin mga pangungutya nila (Just let and ignore them because it can possibly cause depression to us. They will discriminate us more if we will always give attention to their insults.) P2*

Wag papaapekto sa sinasabi ng iba lalo na kung alam mong wala kang ginagawang mali (Don't let yourself be affected on what other's perceptions of you especially when you know to yourself that you did not do anything wrong.) P3

Choose colleagues to be with *Kapag binigyan kayo ng task ay dapat ang mga kasama mo sa task ay babae rin para walang diskriminasyon. Iba ang task para sa mga lalaki, iba rin naman para sa mga babae. (When you were given a task, you must be with women as well so there would be no discrimination. Different tasks for men and women.) P1*

Be prepared *Dapat ready ka sa papasukin mo, lalo na kung babae ka at i-overcome mo yung physical incapacabilities. (You must prepare yourself where you choose to enter yourself and overcome your physical incapacabilities.) P6*

Be courageous *Kung maari naman, pwede natin silang isumbong sa mga supervisor, kung meron kayo no'n. (If possible, we can report them to supervisor if you have that.) P7*

Gender Inclusive Workplace

Based on the preceding findings, the researchers propose a Gender Inclusive Workplace Framework (Figure 1) to help decrease, if not eradicate, gender discrimination among female workers in male-dominant industries. Following the Input-Process-Output model, the Framework highlights strategies that female workers may adopt to address both physical and mental discriminations they receive. The Input Phase consists of women workers in male-dominant industries and the discrimination they face. The Process Phase consists of three sub-components (i.e., approaches in dealing with discrimination, specific strategies in line with those approaches, and applying intellectual, technical, and social skills in the workplace). After applying those approaches and specific strategies, the Output Phase envisions empowered women in male-dominant industries, which can be translated to decrease gender discrimination among female workers.

Digital technologies rapidly transform society, driving unprecedented changes and generating profound challenges. The digital revolution can contribute to generating conditions for women to enjoy full political, economic, and social equality and participate in innovation processes, or they can widen pre-existing gender gaps and generate new gaps (Gurumurthy et al., 2018). To enhance the inclusion scenario and reduce the risk of increasing gender inequality in the new dynamics of the digital era, it is critical to formulate appropriate comprehensive policies that address the structural challenges of gender inequality with proactive policies and regulations that guarantee the exercise of rights in the digital era and advances in affirmative measures to foster equality between women and men. Otherwise, there is a risk of perpetuating and deepening existing discriminatory patterns (Muñoz Rojas, 2021; Bercovich & Muñoz, 2022).

In line with the digital transformation and the development model, the proposed Framework acknowledges and heeds the urgency of moving towards new models of growth and development with more sustainable and inclusive consumption and production patterns while recognizing technologies as a means to do so. In particular, "enhancing the use of enabling technology, particularly information and communications technology, to promote women's empowerment." As such, our Framework places itself in the digital world as it hopes to seek support from the

available digital resources such as online reading materials, tutorial and self-help videos, webinars, and online consultants, among others, to help female workers thrive in male-dominated industries.

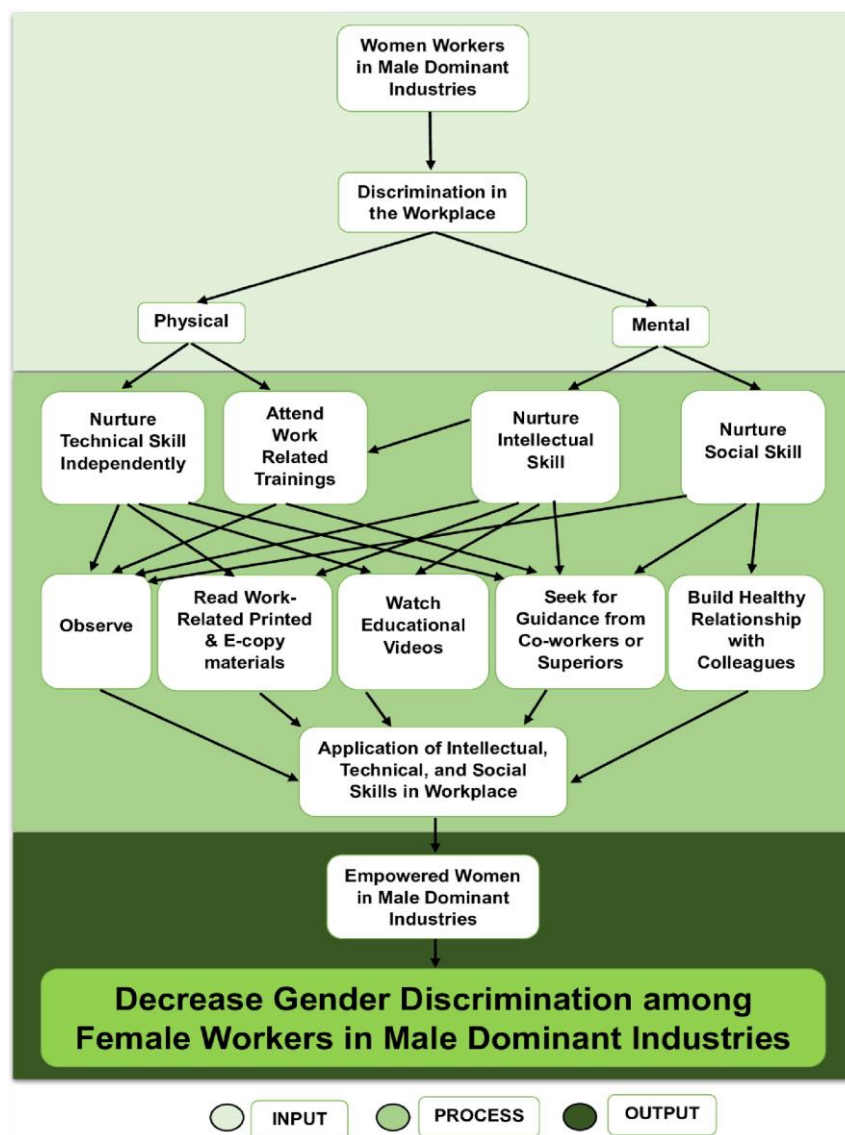


Figure 1. Gender inclusive workplace framework.

Conclusion and Recommendations

The findings revealed that women employees have faced different biases in male-dominated industries. The biases include inadequate working knowledge to perform the tasks and inadequate physical ability to perform the tasks. Moreover, it can be deduced from the results that those biases affect participants' work productivity. Those biases have both negative and positive effects. The negative effects of biases were loss of concentration and motivation, affecting their work performance and productivity. However, biases have a positive impact as female workers have become more inspired and exert more effort even though there are biases in the workplace. Regarding how women workers cope with biases, the participants showed different strategies that help them continue working in an environment where biases exist. Participants suggested that disregarding the biases, giving more attention to work, and boosting self-confidence would be the keys to their success in coping with the biases in the workplace. Moreover, strategies to help female workers thrive in male-dominated industries were also identified. The proposed framework captured those strategies to help decrease, if not eradicate, biases among women in male-dominated industries in the Philippines.

To help female workers cope with the biases they experience in their workplace, participants suggested trusting themselves, honing skills, learning to let and ignore biases, learning to choose colleagues whom they work with, being prepared, and being courageous in industries where men are dominant. Based on the results, there are approaches to help women workers adapt to the workplace where biases exist. In addition, female workers can hone their physical, social, and intellectual skills by following the Gender Inclusive Workplace Framework. For future researchers, try for a more extensive environment; other biases in the workplace might exist, and therefore, other solutions to those biases might appear. In addition, future researchers could also test the effectiveness of the proposed Gender Inclusive Workplace Framework.

Declarations

The authors declare no conflict of interest. The researchers personally funded the study.

Author Contribution

Mañebo (40%): Concept and design, data acquisition and analysis, writing the manuscript. Roque (40%): Concept and design, data acquisition and analysis, writing the manuscript. Torres (20%): Conceptualization, data interpretation, supervision, editing the manuscript.

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