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Effect of Employee Empowerment on Skilled Workers' Job Performance and Personal Commitment in Manufacturing Companies

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Abstract: This study investigates the dynamic relationship between employee empowerment, individual commitment, and job performance among skilled employees in manufacturing companies. The research explores the extent to which empowerment initiatives influence the dedication and performance levels of skilled workers in the manufacturing sector. Through a comprehensive analysis of survey data and empirical evidence, the study reveals a positive correlation between employee empowerment and both individual commitment and job performance. Skilled employees who perceive themselves as empowered demonstrate heightened commitment to their roles and contribute positively to overall job performance. The findings underscore the strategic importance of fostering an empowered work environment within manufacturing companies to cultivate a dedicated and high-performing workforce. As organizations seek to optimize their operations in the competitive manufacturing landscape, understanding and leveraging the impact of employee empowerment can serve as a key driver for sustained success and employee satisfaction.

Keywords: *Leadership Development Programs, Small and Medium Enterprises, GDP, Skilled Workers, Job Performance.*

1. Introduction

The issue of passing on technology and highly skilled skills, which can be called valuable assets in small and medium-sized manufacturing industries, has been a problem since 2007, when the baby boomer generation (1) who had been responsible for the inheritance all reached retirement age.)," and discussions began in earnest around 2003.When discussing the issue of inheritance of the highly skilled skills possessed by veteran employees, who are generally referred to as craftsmen, it is important to separate them into techniques and skills, and to clarify the differences between them. According to Unno (2015), etc., skills are "non-verbal" and "tacit knowledge" that are difficult to express in words or numbers; It is defined as a ``linguistic system" that can be expressed in words or numbers, and as ``explicit knowledge."In addition, the Ministry of Health, Labor and Welfare defined the Highly Skilled Skills Committee in 1996 as a ``skilled person who can create high-precision, high-quality products by making full use of advanced skills that cannot be replaced by machines." In this paper, citing we define skills that cannot be replaced by mechanization or IT as "highly skilled skills".Initially, the ``2007 problem" was viewed as an issue of skill succession in the IT field, based on the belief that it could be overcome through mechanization and IT. It is true that technology can be inherited by mechanization and IT in place of passing it down from person to person, but highly skilled skills can only be passed down from person to person.Today, approximately 15 years have passed since the ``2007 problem", but has the issue of succession of highly skilled skills in the manufacturing industry been resolved? According to the Japan Institute for Labor Policy and Training (2019) (3), although more than 90% of manufacturing companies recognize the importance of passing on highly skilled skills, more than 50% of companies do not carry out the succession well. The answer is no.

The reason for this is that, according to the Japan Finance Corporation for Small and Medium Enterprises Research Institute, many small and medium-sized manufacturing industries recognize the inheritance of highly skilled skills as one of the important survival issues for companies, and are working to resolve this issue. On the other hand, it has been pointed out that in addition to the difficulty in recruiting young personnel, the aging of the workforce is one of the reasons why the company is not progressing smoothly.

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Many of the manufacturing processes in small and medium-sized manufacturing industries involve commercialization processes that require highly skilled skills, and in particular, the scale of production in small-scale manufacturing industries is often high-mix, low-volume production. This tends to require highly skilled skills compared to mass production. Some small and medium-sized manufacturing industries are attempting to move away from a production system that relies on highly skilled craftsmen by mechanizing or using IT to replace some of their highly skilled skills. On the other hand, in micro manufacturing industries among small and medium-sized manufacturing industries, in addition to human resources problems such as difficulty in recruiting young personnel and aging of employees, the weakness of capital investment required for mechanization etc. has made it difficult to pass on highly skilled skills. It is also a factor that makes it even more difficult.

Many of the permanent workers working in small and medium-sized manufacturing industries are in unstable employment such as dispatched or contracted employees, as will be explained later, they are positioned between the ``regularly employed" and the unemployed," and are classified as the partially employed, in other words, the semi-unemployed. It is said that there is. Furthermore, Ueki argues that even today, many of them are incorporated into the ``employment system of companies that procure the necessary human resources in the necessary amount at the necessary time" (a just-in-employment system). This suggests that employment in this position is by no means the original form of employment from the perspective of how companies employ people.

Many of the permanent foreign workers (hereinafter referred to as "Japanese-Brazilian workers") working in small and medium-sized manufacturing industries are in unstable employment such as dispatched or contracted employees, as will be explained later, and Goga (1988, According to a series of studies, they are positioned between the ``regularly employed" and the ``unemployed," and are classified as the partially employed, in other words, the semi-unemployed. It is said that there is. Furthermore, Ueki argues that even today, many of them are incorporated into the ``employment system of companies that procure the necessary human resources in the necessary amount at the necessary time" (a just-in-employment system). This suggests that employment in this position is by no means the original form of employment from the perspective of how companies employ people.

In his report to the 20th National Congress of the Communist Party of China, General Secretary Xi Jinping emphasized that innovation is the first driving force for development, insisting on the core position of innovation in the overall situation of my country's modernization drive, accelerating the implementation of the innovation-driven development strategy, accelerating the realization of high-level scientific and technological self-reliance, and accelerating the construction of A technological powerhouse. As the main body of technological innovation, enterprises can gain huge core competitiveness due to innovation, allowing them to stand firm in the wave of modern enterprises. It can be seen that innovation plays an indispensable role in the success of enterprises and the development of society. However, enterprises are currently facing many challenges such as resource scarcity and the inability to effectively integrate and utilize data. At the same time, with the development of digital technologies such as big data, blockchain, cloud computing, and artificial intelligence, the strategic position of the digital economy has become increasingly prominent, the automobile manufacturing industry has entered a period of accelerated development, showing a new model of accelerated innovation, iterative innovation and collective innovation, becoming a new driving force for China's economic transformation and modernization.

The "Digital China Development Report (2022)" released at the opening ceremony of the 6th Digital China Construction Summit showed that the scale of my country's digital economy reached 50.2 trillion yuan, ranking second in the world in total, and accounting for 41.5% of GDP. The digital economy has become an important engine for stabilizing growth and promoting transformation. Driven by the dual drive of policy orientation and practical development, digital transformation has been upgraded from a strategic foresight to an inevitable choice for enterprise development.

A large number of automobile manufacturing companies, represented by BYD and Geely, use intelligent digital platforms such as the Internet to embrace digital technology, accelerate their own digital transformation, release innovation vitality, reduce costs and increase efficiency, successfully reverse their business situation during the epidemic, and achieve leapfrog growth. develop. Based on this, it is particularly necessary to clarify the factors that influence digital transformation on enterprise innovation and explore its influence mechanism. The possible marginal contributions of this article are: first, in a research sense, it conducts an in-depth study of the impact of digital transformation on enterprise innovation efficiency and broadens the research boundaries of the impact of digital transformation; second, based on the micro perspective of automobile manufacturing enterprises, it analyzes the relationship between digital transformation and The relationship between enterprise innovation efficiency is tested, and the text analysis method is used to characterize the degree of digital transformation, providing reference opinions for related research to evaluate the level of digital transformation. Third, it specifically analyzes the intermediary impact of digital transformation on enterprise

innovation efficiency and explores its mechanism relationship, which provides reference suggestions for enterprises to promote digital transformation and improve innovation efficiency, and further assists enterprises in high-quality development.Guidelines for Graphics Preparation and Submission

2. Literature Review

Forbes. Et al [2023] Investments in Leadership Development Programs (PDL) have grown and become increasingly important. In 2006, organizations in the United States spent a total of $55.8 billion on training (INDUSTRY REPORT, 2006). Additionally, a report by Berlin and Associates indicates that US organizations increased investments in leadership development by 14% compared to 2011, figures estimated at $13.6 billion in 2012. Currently, the industry remains in rapid development, being valued at more than 300 billion dollars (FORBES, 2020; Rust, 2023).

Goulart et al [2022] Regarding this aspect, explain that coaching is a partnership generally observed between a managerial client and a coach hired by an organization to assist the employee in the process of becoming a more effective and successful manager. At the same time, it involves people, so coach and coachee must be included in any definition of coaching. Regarding this aspect, the coach is the specialized professional who manages a dialogue to help the client (coachee) to reflect and make decisions, and the coachee (client) is the person or team who undergoes the practice and, through systematic monitoring, is encouraged to take action, in a self-responsible way to achieve the expected results. However, despite these different conceptualizations, coaching and its impacts on work still require more in-depth studies (, a fact that this research aimed to elucidate.

Associação et al [2021] Therefore, it is possible to consider the Production Engineering course as being relatively new. According to the PPC, Production Engineering only became a full-fledged engineering in the 1980s, when the Brazilian Association of Production Engineering (ABEPRO) was created, which defined the areas of activity of the production engineer. as: Production Management, Quality, Economic Engineering, Economic Management, Ergonomics and Work Safety, Product Engineering, Operational Research, Strategy and Organizations, Technology Management, Information Systems, Environmental Management and Education in Production Engineering.

Bernardo et. al. [2020], Higher Education must train people with multifunctional skills, including technical and behavioral parts. Behavioral skills, according to the authors, enable graduates to be included in the job market and develop their tasks, being related to personality, attitude and behavior. Technical skills are related to the technical and formal learning acquired during graduation. According to the Institutional Pedagogical Political Project (PPI) of UTFPR, the engineer is expected to have not only technical skills, but also capabilities to deal with different functions, groupings and mobilizations of work, as well as having agile communication and ability to act in the face of unforeseen events.

Eriksson et al [2021] The third theory is the Motivation Theory, which states that rotation has an impact on the motivation of those who rotate, avoiding demotivation due to stagnation in a role or performing repetitive tasks. This theory highlights that this satisfaction has a direct influence on the social interactions promoted during rotations. Eriksson also bring three main arguments for implementing a Work Rotation: rotation as a training instrument, as a way of discovering which job a person excels most in, or as a way to benefit motivation of the workers. For the worker who rotates, according to the author, there is a gain of experience in more areas and it is considered a form of career advancement. It is also considered that the learning of those who rotate will be greater if that person needs more training, that is, people new to the company or recent graduates tend to learn and benefit more from the Job Rotation graduate.

The evolution of technology and the growth of industries have brought new needs to society, for professionals capable of adapting and keeping up with constant changes in technology, integrating activities and also knowing how to deal with large amounts of information. The change in the configuration of productive organizations was what gave rise to the production engineer and this emergence has some milestones. One of them is the emergence of Taylor's scientific management, which changed the way of thinking and seeing organizations, bringing a systematic view of time and movement studies, which is brought within the first subareas of Production Engineering: production management. Another milestone reported by the authors was the growth of Economic Engineering, a subarea with the vision of solving “practical problems of costs, investments, equipment savings, property valuation and applications of financial mathematics”. To consolidate the subareas of Production Engineering, the authors bring the last milestone as Operational Research, which was the use of scientific research in solving production problems, also bringing the advancement of linear programming techniques.

Lahuddin et al [2021] indicates 9 steps for applying Job Rotation. The first step is to meet with the employee to gain engagement and make a presentation about the rotation. The second step is to ensure that the job requirements are accurate and up-to-date for all jobs that will be in the rotations. The third is to check with all work groups involved in the rotations about the logistics and compatibility of the work, ensuring that the logistics of the

rotation are appropriate and the Work Rotation is sensible. The fourth step is to provide employees with the training and tools necessary to perform work across all rotations. The fifth step is to ensure that employees have rest time so that they are fully qualified and in physical condition to carry out new tasks. The sixth stage is the beginning of the Work Rotation itself. The seventh step is to monitor rotations, ensuring flexibility and considering whether workers are having difficulties, assessing whether there is a need for further training for those who are experiencing difficulties. The eighth step is to hold follow-up meetings with employees to evaluate job rotations. At this stage, it is advisable to use questionnaires to be able to compare the results with initial research. If the result is positive, continue with the rotations, if not, decide whether to take any action to improve the situation or end the rotations. Finally, the ninth step is to identify other measures to determine the effects of job rotations. According to the author, Work Rotation develops employee efficiency and in general, everyone who participates in rotations reports in interviews and questionnaires that rotations bring positive effects and that it should be applied in the work field.

Wang et al [2020] The interaction between employees plays a key role in both individual performance and team performance. Communication and interaction are important factors in team work. McGrath pointed out that team member attributes, team structure, task structure and surrounding environment attributes are prerequisites for team interaction. These four attributes can shape the process of team interaction and then affect team performance. Specific factors include team structure, team beliefs, team member characteristics, team member experience, team members Familiarity etc. However, current relevant research is almost all focused-on knowledge-intensive service industries. In the processing-based manufacturing industry, there is currently little relevant research on whether interpersonal interactions between teams have an impact on team output. Compared with the service industry, there are three significant differences in the following three aspects: (1) The demand for knowledge sharing and interpersonal interaction among employees is relatively low, and the work is relatively simple and has higher repeatability; (2)) The schedule is updated daily and the task duration is relatively short; (3) During the production process, employees learn and accumulate experience with repeated operations, but the experience accumulated in production fades quickly.

Yue et al [2020] The "14th Five-Year Plan" states that "by 2035, green production and lifestyle will be widely formed, carbon emissions will stabilize and decline after peaking, the ecological environment will fundamentally improve, and the goal of building a beautiful China will be basically achieved." However, in reality, the extensive economic development model has posed serious threats to China's economy, environment and public health. Research by Yue et al. shows that the number of deaths caused directly or indirectly by PM2.5 pollution in China has increased by 36.1% since 2000-2017. If air pollution control measures are still not taken by 2030, China's economic losses caused by PM2.5 and O3 pollution damaging health could reach 2% and 0.09% of GDP respectively. Faced with this severe situation, how to adhere to the path of green development and improve green development performance has become an urgent practical issue in China.

Yuan et al [2020] Green development performance refers to the total objective effects produced by the whole society driven by the green development model. It is specifically manifested in the level changes of green development, the efficiency transfer of green development, and the welfare increase or decrease of green development. Improving the ecological environment, promoting high-quality economic development, and improving green development performance are not only urgent problems that China needs to solve, but also major challenges faced by countries around the world. A global health survey and related studies show that more than 95% of the world's population lives in an unsafe air environment. So how to protect the ecological environment, increase human welfare, and improve green development performance while promoting sustainable economic development? In the final analysis, we should focus on the laws and characteristics of industrial development. Manufacturing is an indispensable part of a healthy economy, the foundation for national development, and the main reason for the sharp increase in CO2 emissions. Due to the close input-output relationship between manufacturing industries, large labor demand and knowledge spillover, the manufacturing industry tends to develop in an agglomeration manner. Theoretically, manufacturing agglomeration can improve environmental quality through labor pool effect, knowledge spillover effect and intermediate input sharing. But the reality is that China has become the world's largest energy consumer and largest carbon emitter.

Badr et al [2019] Throughout the existing literature, research on the relationship between manufacturing agglomeration and green development performance mainly focuses on the impact of manufacturing agglomeration on economic growth and environmental pollution. Regarding the impact on economic growth, many scholars have confirmed that manufacturing agglomeration has a significant positive effect on economic growth. Some scholars believe that as the level of agglomeration increases, manufacturing agglomeration has a non-linear impact on production efficiency. For example, Badr et al.'s research, taking into account resource and environmental constraints, found that the impact of manufacturing agglomeration on green economic efficiency shows an inverted "U"-shaped trajectory. Regarding the impact of environmental pollution,

the academic community has not reached a consensus on research conclusions. Specifically, Zeng et al. believe that manufacturing agglomeration can alleviate the "pollution haven" phenomenon; Badr pointed out that manufacturing agglomeration will intensify pollutant emissions; Guo Ran et al. found that manufacturing agglomeration is related to environmental pollution. It is not a simple linear relationship Fang et al. also found that the impact of manufacturing agglomeration on pollution emissions has a significant spatial spillover effect.

Pe et al [2019] The development process of manufacturing industry is inseparable from the mutual complementation of scientific and technological innovation. In the era of knowledge economy, R&D and innovation have become an important measure for enterprises to improve performance and enhance competitiveness. The skills, knowledge and core technologies contained in employees constitute an integral part of the relationship between enterprises and enterprises. The most closely related dimension of core competencies is technological innovation, which effectively improves the competitiveness of enterprises from different aspects such as learning capabilities, R&D capabilities, and knowledge acquisition capabilities. It can be said that innovation creates the foundation for an enterprise's competitive advantage and helps enterprises continue to reach higher levels. A new level of competitiveness. The competition process itself is constantly honing and shaping the competitiveness of enterprises. The optimal competitive intensity theory of German economist Konzenbach pointed out that the competition process enables enterprise production activities to maintain changing demands. Flexible adaptability of structure and production technology. This adaptive function of remote competition is conducive to maximizing output and minimizing costs, thus ensuring efficiency and competitiveness. Nowadays, competitive confrontation has always been the core issue in the study of competition dynamics. Characteristics such as strength, weakness, complexity, and heterogeneity affect the business performance and competitiveness of enterprises in different ways.

Mahajan et al [2020] The positive effect of R&D innovation on corporate competitiveness has been empirically supported from multiple angles. Engelbrecht found that R&D-intensive industrial sectors show stronger competitive advantages. Research by Greenhalgh et al. confirmed that R&D investment has a positive impact on mature industrial sectors in the UK. and high-tech industry sectors have varying degrees of competitiveness-enhancing effects Remote Montobbio based on macro data from developing countries, Yuan proved that technological innovation activities can significantly enhance the competitiveness of high-tech industries. Remote's latest research by Mahajan Zhongyuan also believes that technological change and technical efficiency reflect an enterprise's ability to rationally utilize invested resources and play a key driving role in the competitiveness of enterprises remote R&D activities can help enterprises take the initiative in competition. For enterprises with R&D as their lifeblood, for high-end manufacturing companies, technological innovation is the only way for companies to create superior competitive advantages.

Dinh et al [2020] The process of enterprises building competitive advantages through R&D and innovation will be affected by the intensity of competition. It is in fierce competition that enterprises develop strong competitiveness. As Dinh said, maintaining the passion for competition is an important reason for the improvement of enterprise competitiveness. Competitive threats from the same industry and expected excess profits are the source of motivation for corporate R&D activities. Competition and gaming behavior among companies lead to innovation entities constraining each other. At the same time, it also stimulates a series of selective adaptation activities for example, Yuan Competition from multinational companies has a positive effect on local enterprises to increase the frequency of R&D and enhance competitiveness. Looking further, market-oriented economic policies and related institutional arrangements have also affected the industrial innovation model and promoted industry because they can effectively promote competition. Improvement of competitiveness.

Yuji et al [2020] Points out that companies that are successful at passing on highly skilled skills tend to be relatively large-scale manufacturers, but companies that use machines and IT to replace the skills of veteran employees By doing so, we can reduce the number of technical fields that are passed down between employees, standardize some of the highly skilled skills that are considered difficult, create manuals, create databases, and share some of the know-how within the company. The company says it is making the work easier for even young workers, and as a result, it is encouraging the passing on of highly skilled skills, although this is a rare field. In addition, Yuji used the highly skilled skills of pilotage operations, which are not closely related to the manufacturing industry, as an example, and found that by expressing tacit knowledge and making it explicit knowledge, highly skilled skills can be improved in this industry. It argues that highly skilled skills are not necessarily something that cannot be converted into explicit knowledge, pointing out that they can be inherited. However, this research is not suitable for the manufacturing industry and is only a part of highly skilled skills.

3. Methodology

The methodology incorporated statements addressing distinctions between genders in aspects like labor costs, productivity, workplace behavior, and job attributes. Respondents were tasked with expressing their agreement

levels, and these statements were chosen based on their frequent mention in business circles. The goal was to capture prevailing beliefs about gender in the professional realm, either aligning with common assertions or challenging persistent stereotypes. This selection aimed to offer insights into prevalent attitudes surrounding gender dynamics at work.

3.1 Perceptions about Performance at Work

The first thing we wanted to evaluate is whether there is a generalized idea among employers that indicates that men or women, as a group, are considered better or worse workers. Although it is assumed that there are no explicit statements of this type, it is common to hear generalizations such as: "Women earn less because they present more problems as workers."For this evaluation, the respondents were asked to rate the workers from 1 to 7 in 16 work characteristics8 considered beneficial for the proper functioning of companies, which were selected based on the importance attributed to them by employers, according to studies carried out previously and business literature. In addition, a series of statements were included in the survey that introduced differentiations between men and women (referring to labor costs, productivity, behavior at work, attributes and quality of the job offer), for which it was required to answer the degree OK. These statements were chosen because they are frequently mentioned by businessmen and executives or, in some cases, because the opposite is persistently stated.

3.2. Women are Better Evaluated

The general average of grades that the respondents assigned to the workers was 5.5 points for women and 5.3 points for men, therefore showing a non-significant difference, but slightly favourable to women. This implies that women as workers are evaluated at a similar level to working men, thus dismissing some claims that women would be less suitable for paid work outside the home.

If the average grades for each of the characteristics are analyzed according to the sex of the worker, it is observed that the differences are not significant either. The average grades of men fluctuate, depending on the characteristic considered, between a minimum of 4.7 points and a maximum of 5.7, while those of women fluctuate between 5 and 5.8; Therefore, here too the qualifications assigned by employers to women are slightly higher.

Although the grades obtained by women are, for all the characteristics investigated, higher than those of men, the maximum of the differences is 3 tenths of a point: a somewhat higher percentage of businessmen believe that women are more committed to the business. work, they have an easier time adapting to innovations and are more reliable, disciplined and responsible.

That assessment differs by sector. The average grades assigned to women are higher than those of men in most sectors (significantly in the case of Agriculture, with an average of 6.1 for women and 5.2 for men), are equal in one of them (Commerce, where the worst evaluations are found for both: average 5.0), and lower only in the Transportation and Communications sector (6.2 and 6.6 points respectively), where both are evaluated very positively. The best or worst evaluated characteristics also vary by sector, which is possibly related to the characteristics of the jobs and the positions held by men and women, in each case.

For example, women have a significantly better evaluation in the items ease of adapting to innovations and speed in learning new procedures in the Agricultural and Financial sectors, and worse in Transportation and Communications. Interest in training is evaluated worse in the Financial sector and better in the Agricultural sector, in both with differences of almost two points. At the same time, they are considered more flexible in the Financial sector and noticeably less in Transportation and Communications.

In only one of the sectors considered (Transport and Communications) do businessmen attribute grades higher than 6 to men. On the other hand, for women these grades can be found in almost all sectors (except Commerce), and the characteristics that are Most frequently, the best evaluated are commitment to work and punctuality. It is interesting to note that the Financial Sector, considered the most modern and with frequent changes in technology, regulations and work organization, evaluates women's ease in adapting to innovations and speed in learning very positively.

But it is also important to relate the more positive evaluation made by businessmen and executives about women's work to the type of insertion and occupational opportunities that are granted to them. For example, in the Agricultural sector, 89% of workers are classified as low-specialization operators, which is where they would find opportunities, which seems contradictory to the quality attributed to them of adapting to innovations and their interest in training. On the other hand, when asked about the perception of change in the sex composition of workers, only 1% of those surveyed in the Agricultural sector indicated that more women are entering or will enter. The vast majority perception among employers and executives in this sector that the sex composition of workers will not change reflects the rigidity of the occupational segregation that exists there, valuing the work characteristics of women only in the activities that they are supposed to be able to and /or they must occupy.

Consequently, we can affirm that behavioural characteristics at work are expressed and appreciated differently depending on the position, the type of company, the environment and working conditions, among other

factors, which it is not possible to analyse from this survey. The fact that certain characteristics of workers are manifested or not and are valued positively or negatively by companies will therefore depend, to a large extent, on the positions to which one or the other sex has access.

In the in-depth interviews, it was possible to analyse some of these differences and the problems derived from the characteristics of certain jobs, which are sometimes confused with those attributed to the sex of the worker who mostly occupies them. For example: the management of a telecommunications company points out that the working conditions in the position of telephone operator are very stressful, leading to higher absenteeism in that function than in the company average. The fact that all telephone operators are women increases the female absenteeism rate, but this does not derive from the fact that they are women, but fundamentally from the characteristics of the job they occupy. Furthermore, those interviewed consider that women are chosen for this position because they have greater resistance to these working conditions. This leads to the contradiction that they become subject to a negative evaluation for an attribute considered positive in that job. On the other hand, the characteristics that define a "good worker" vary considerably depending on the occupation performed. For example, the punctuality of a manager is not valued in the same way as that of a salesperson. Therefore, the evaluation of men and women as workers is mediated by the positions they hold.

3.3 What is Said and What is Willing to Acknowledge

One of the results of this research is the demystification of the unanimity of opinion that would exist among employers regarding certain characteristics of workers. When respondents are asked to express their opinion (their degree of agreement or disagreement) regarding common statements in the business environment, although it is true that some trends can be identified, in most cases they are not absolutely homogeneous or not even a majority. On the other hand, there is a high proportion of respondents who say that they "neither agree nor disagree" with the statements that the survey proposes. Only in one case is the percentage in single digits; the rest fluctuates between 20% and 60%. This type of response could indicate the lack of a formed criterion regarding the statement, a rejection of the terms in which it was stated, or a more active desire not to speak out than the simple "does not know" or "does not respond", which which seems to occur especially in the responses regarding value statements, such as the honesty or reliability of workers.

a. Labour Costs and Productivity

There is a majority perception that women's indirect costs are higher (54%). However, it is interesting to draw attention to the fact that an idea that, in business discourse, is usually considered "common sense", when stated in a survey, appears as the opinion of only half of those surveyed. The percentage that expresses disagreement with the statement, although much lower, is significant (23%).

There is only one sector (Transport and Communications) in which the percentage of respondents who consider that women's indirect costs are higher is insignificant (2.8%). In all the others, agreement exceeds disagreement and, in cases as different as those of the Agricultural and Financial sectors, there is almost unanimous agreement with this statement. At the same time, the majority (54%) of medium-sized companies do not agree with the statement that women's indirect costs are higher, while in small companies this percentage is much lower (less than 10%).

The efficiency and productivity of men and women at work is a frequent topic in the debate on labor costs according to the sex of workers. The underlying idea is that maternity is a problem for companies and it is often said that maternity protection is excessive. Given that the direct costs of maternity leave are assumed by the State through the health system, the issue arises especially in relation to possible productivity problems generated by replacements with people who need to adapt to the position. But, at the same time, the idea appears in the debate that this eventual decrease in productivity could be compensated by the greater efficiency of women.

The opinion “maternity leave is a problem for productivity” garners the agreement of 47% of those surveyed. Considering that this is a statement that is frequently presented as an absolute truth, it is interesting to verify that the agreement does not reach 50% and that the disagreement reaches almost 30%.

It is important to remember here that the evaluation that companies carried out on productivity, assigning marks to male and female workers, favors women, even if only slightly. This could mean – as a hypothesis – that the problem of possible negative effects of maternity leave on productivity is more than compensated by the greater productivity of female workers and that, in addition, this affects a limited percentage of the female active population, due to the low fertility rate and the short period of active life occupied in biological reproduction.

In two sectors (Financial and Transportation and Communications) the percentage of agreement is insignificant. This means that the vast majority of respondents do not consider maternity leave to be a problem for productivity. In the Services and Commerce sectors, characterized by a high percentage of female workforce and in which, for this reason, a higher incidence of maternity-related leaves can be expected, almost half of the respondents (40% in one case and 46% in another) do not consider that these are a problem for productivity (while 31

and 43% express the opposite opinion). Finally, three sectors (Agriculture, Electricity, Gas and water, and Industry), the agreement is broadly.

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The Agricultural sector should not suffer the consequences of maternity leaves, since a large proportion of women are hired seasonally. In the case of the Electricity, Gas and Water, and Industrial sectors, although the vast majority of respondents consider that maternity leaves negatively affect productivity, they declare that they prefer women between 25 and 40 years of age when hiring, a range of ages where reproduction is concentrated. That same age group is the one preferred by 95% of the Financial sector, at the same time that those surveyed do not agree with the idea that maternal leave would have a negative effect on productivity. The Agricultural sector, in turn, almost unanimously prefers to hire women under 25 years of age.

The differentiation of opinions that occurs according to the percentage of women in the company is also relevant. In those in which female participation is greater (over 40%), the proportion of respondents who consider that maternal leave has a negative impact on productivity is lower (19% in companies that have between 40 and 59%, and 33% in companies with more than 60% women); In turn, in companies with less than 40% women, the proportion of respondents expressing that opinion increases. If these licenses affect productivity, at first glance it could be assumed that the problem would be more pronounced where there is a greater proportion of women. Does this mean an inconsistency in business discourse, where there are more myths than results of an objective evaluation of the effects of maternity leave on women's work performance and company productivity? Another hypothesis is that companies that hire a high proportion of women find that their "specific" productivity compensates for the inconveniences and/or that they, by preferring female labor, develop strategies to face the problems that could arise as a consequence of maternity.

Another interesting finding of the research is that, while for all the companies surveyed a considerable percentage states maternity leaves as a problem, only 20% agree that maternity protection is excessive, and almost 50% disagree with that statement. This reveals that, even considering that maternity leaves affect productivity, this is not seen by the majority of respondents as a reason to reduce maternity protection, which also encompasses other rights of working mothers. In a workshop held with businessmen and executives in the context of this research, along with advocating for maintaining maternity protection, more flexible ways of using pre- and post-natal leave were proposed. Depending on the job, the possibility of collaborating from home – taking advantage of the advantages of communication technologies – with the people who have to replace the licensed worker was also considered.

The majority of respondents have no opinion about whether women are more efficient than men (53%). However, the percentage that believes that yes, women are more efficient (28%) is higher than that which disagrees with this idea (18%). The difference by sector is important, although, except in the case of the Agricultural sector, the percentage that is not pronounced is no. This sector, almost entirely (97%) considers that women are more efficient than men. This is probably related to the fact that women's work is considered irreplaceable there, an opinion based on their supposed “natural” manual skill and neatness.

b. Behavior of Men and Women at Work

Four statements related to the work behavior of women and men were investigated: Women have a low rate of external rotation, Men are absent less than women, Men have a better disposition for work, and Men are more disciplined.

The statement that men miss less than women is the only case in which the response "neither agree nor disagree" is less than 10%, which shows that there are defined positions on the matter, whether to agree or disagree. Although the majority of those surveyed (54%) believe that yes, men miss work less than women, 38% of them do not share that opinion. At the same time, there are sectors in which no magnitude differences are observed between agreement and disagreement, which should warn against one of the most common ideas about women's work performance, almost never supported by statistics. According to a study carried out in Spain10 with a survey of 2 thousand cases, absenteeism rates are explained by differences in working conditions, while sex has no explanatory power: the differences by sex recorded are minimal, although male absenteeism is slightly higher than the female.

As for another idea that is frequently heard among employers, that is, that female turnover rates are higher than male turnover rates, the majority of respondents believe that

this is not the case. 43% affirm that women have a low rate of external rotation and 28% disagree, while 23% do not express their opinion. Furthermore, in interviews with employers it is mentioned, in some sectors, that the stability of women in the company compensates for other problems, such as absences related to childcare.

The statement that men are better disposed to work garners only 28% agreement, also questioning a very strong idea. The rest is distributed evenly between those who disagree (35%) and those who neither agree nor disagree (35%).

The disagreement regarding the supposed better disposition of men for work is notable in the Agricultural sector (97%) and in the Financial sector (87%) and almost doubles the average in the Services sector (61%), these being the sectors that would present the most favourable opinions towards women in this regard. In Transportation and Communications, disagreement is also greater than the average (46%), but agreement is expressed in an equivalent percentage. The Commerce sector is the one that would have the most unfavourable perception of women in this sense: it shows the lowest level of disagreement (5%), an agreement that reaches 46%, with 49% that does not express a position.

We have seen that respondents' opinions on different topics generally differ by sector, size and percentage of women in the company. However, it is difficult to establish any regularity. Firstly, none of the independent variables taken in isolation allows us to conclusively explain the differences in the responses, since the size of the survey is not sufficient to cross the different variables and detect finer categories of companies by combining the aforementioned variables. On the other hand, the analysis of the survey results, complemented by the interviews carried out with a subsample of companies, allows us to review and refine the hypotheses. We believe that it is mainly in specific occupations and in the work spaces in which they are developed, where the feminine or masculine character of work is built, which generates true masculine and feminine territories, which affect the possibilities of access for women and men to work. and in the assessment made of them.

The opinions of businessmen and executives about men and women at work will depend, therefore, on the place they occupy, the characteristics of the jobs and the social constructions that indicate what men and women should or can do. At the same time, the organization of the work process does not depend only on technical factors, but also on these ways of conceiving social organization and production in terms of gender. In this way, it may or may not make it possible to make work tasks compatible with the private life of workers, and with the needs of social reproduction. The possibilities of improving the relationship between different social and personal needs will depend on factors that do not always evolve at the same speed and in the same direction.

3.4. Job Profiles of Men and Women: Feminine Virtues and Masculine Defects?

When you talk to businessmen and executives in unstructured interviews, without closed questions that establish more rigid parameters for the answers, as happens in surveys, they expand on a series of virtues and defects of men and women at work. It is striking that executives associate working women with a much greater number of virtues than with their male colleagues. And vice versa, they associate a greater number of defects with men. However, it is necessary to carefully analyse the virtues and defects attributed to each of them, based on the possibilities that they could open to each of them at work.

In relation to the characteristics they attribute to female workers, employers highlight virtues and order, neatness and delicacy, discipline, tolerance for routine work, efficiency, concentration and responsibility, adaptability and ability to establish human relationships, honesty, commitment and loyalty. And they point out as defects: physical weakness, the “abuse”, in certain situations, of an image of weakness, conflict, competitiveness and a certain overlapping violence between women.

For its part, among the virtues attributed by businessmen and executives to men, physical capacity, “strength of character” to face problematic situations, and rigor and agility to change stand out. Among the defects, mention is made of disorder, lack of neatness and coarseness, impulsivity and low tolerance for routine work or work that requires staying in the same place for several hours, less ability to concentrate and "think about several things at once", less responsibility and commitment to the company's objectives, in addition to a certain rigidity that makes adaptability to various situations difficult, as well as the aggressiveness that tends to arise in groups of male workers.

As can be seen, many of the virtues and defects are defined by contrast, or clear opposition, between men and women: they are neat and orderly, they are rough and messy; They have a greater tolerance for routine work, they are more impulsive and have a lower ability to concentrate; They have greater physical strength and they are weaker.

What is interesting is to know how employers’ value these 'differences' between men and women workers, and to identify what type of functions and occupations they would be enabling men and women. To this end, along with analysing the sex composition of the occupational structure through the information provided by the survey, the interviews delved into the characteristics that employers assigned to the jobs performed by men and women.

It can be seen that, in general, masculine virtues are associated with positions that involve power management, decision making, grant greater status, on the one hand, or require greater physical strength and a certain aggressiveness, on the other; For their part, feminine virtues link women, to a large extent, with occupations with little decision-making power, less qualifications, of a more routine nature, stressful, of great thoroughness and related to the treatment of people.

The role that the sex difference plays in the job qualification that employers make of male and female workers seems evident, since jobs, as Maruani12 maintains, are not defined independently of who performs them. The difference between sexes is present in business discourse as a criterion to prioritize and value jobs. This explains why many of the skills and abilities attributed to women, which are surely very important to guarantee the quality of products and services, the efficiency and productivity of companies, are not characterized as professional qualifications, but as personal attributes. natural, whether physical or psychological. It also explains that the way in which some interviewees name female workers, regardless of their qualifications and occupational situations, express, on the one hand, an association with images of the domestic sphere (by naming them as "mothers" or "wives"), and on the other hand, another, much more frequently, with what Reygadas calls the non-adult status of the workers (by naming them as "girls", regardless of their age).

These discourses about men and women at work, and the gender images underlying them, influence business decisions regarding the hiring, promotion and training of workers of both sexes. The masculine or feminine character attributed to certain occupations is a central element of these images and of the process of configuring true masculine and feminine territories at work.

3.4.1. Men's Territories and Women's Territories

The configuration of these masculine and feminine territories, which mark the field in which the characteristics of the occupations or functions considered most appropriate for men or women are defined, is one of the ways through which the perception of businessmen is expressed. of gender identities associated with male and female workers. What is interesting to analyze here is: a) the way in which employers characterize the different occupational categories based on these gender images and, from there, define them as more or less appropriate for women or men; b) how these definitions affect both the evaluation of the performance of men and women at work and the reproduction of sex segregation that continues to characterize the occupational structure of companies.

Table 1. Educational level of Employees

Gender	Frequency	Percentage
Male	57	59%
Female	40	41%
Total	97	100%

Table 1 above shows that, of the total respondents, approximately 59% of the employees who responded to the survey were male (57), with the remaining 41% being female (40).

Table 2. Age of Employees

Age	Frequency	Percentage
20-25	20	20.56%
26-35	41	43%
36-45	28	27.91%
46+	8	8.52%
Total	97	100%

Table 2 above displays the age distribution of Investo Global employees. The smallest proportion, accounting for 8.52%, belonged to the age group of 41 and above, predominantly comprising upper-level management. Following this, 20.56% of respondents fell into the 20-25 age group, while 27.91% were in the 36-45 age range. Additionally, 41% of the participants were in the 26-35 age group.

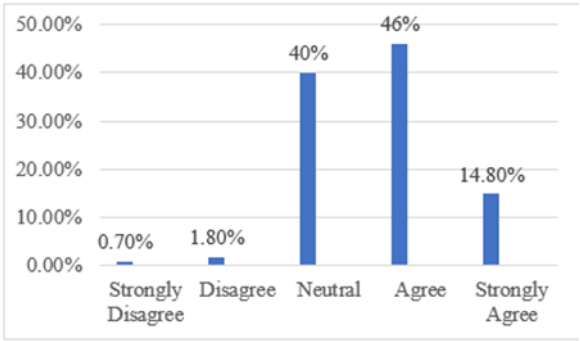

Fig 1. Supervisors' Support Influences Improvement in Work Performance

The respondents exhibited a notably positive inclination towards the need for supervisor support in enhancing the work environment, as indicated in the figure. A substantial majority, comprising 46% of the respondents, agreed with the statement, while approximately 14.80% expressed strong approval of the support required from supervisors to enhance performance at work. About 40% of respondents maintained a neutral stance on the issue, whereas only 1.80% disagreed, and a mere 0.70% strongly disagreed with the notion that supervisor support plays a role in work performance.

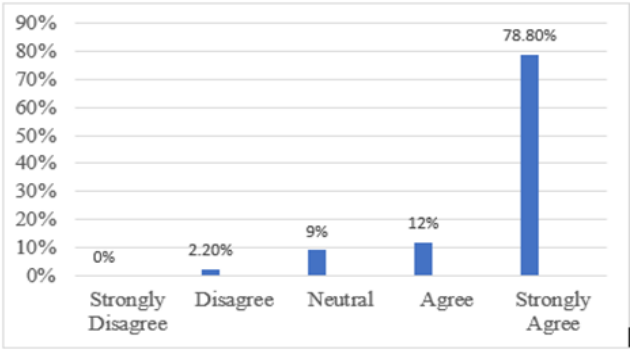

Fig 2. Good Relationship with Co-workers Helps in Building Good Work Environment

When surveying respondents about their interactions with co-workers and its impact on fostering a positive work environment within their respective organizations, the findings, illustrated in Figure 2, highlight a substantial agreement. A significant 78.80% of the total respondents expressed strong agreement on the positive influence of their good relationships with co-workers. Additionally, 12% acknowledged agreement with this statement, while 9% maintained a neutral stance. A minimal 2.20% of respondents disagreed with the notion of the importance of relationships with co-workers in the workplace.

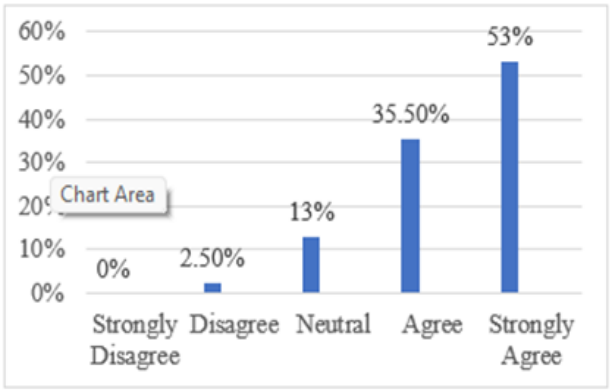

Fig 3. Training & Development Influences Work Environment

Effective and systematically structured training and development programs, aligned with organizational objectives and tailored to equip employees with the necessary skill sets, can ultimately enhance the overall work environment of the organization. The majority of respondents, evident in the bar chart above, demonstrated a positive perspective, with 53% strongly agreeing and 35.5% agreeing with the statement. A small portion, 13%, remained neutral, while only 2.50% of respondents disagreed with the statement.

4. Conclusion

In conclusion, the study on the "Impact of Employee Empowerment on Individual Commitment and Job Performance of Skilled Employees in Manufacturing Companies" reveals significant insights into the interplay between empowerment, commitment, and performance within this specific workforce. The findings suggest a positive correlation between employee empowerment and both individual commitment and job performance. Empowered skilled employees, as evidenced by the data, exhibit higher levels of commitment to their roles and contribute positively to job performance. These outcomes underscore the importance of fostering an empowered work environment in manufacturing companies, highlighting the potential for enhanced commitment and performance among skilled employees. As organizations continue to navigate the dynamic landscape of the manufacturing sector, understanding and implementing effective employee empowerment strategies can prove instrumental in cultivating a dedicated and high-performing workforce.

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