

Moderating Effect of Demographic Profile on Employee Engagement and Productivity

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Abstract. This study explores the moderating effect of demographic profile on employee engagement and productivity in Cavite, Philippines. The study focused on the 321 service crews working in the Quick Service Restaurants (QSRs), who were selected through a simple random technique. The findings show that productivity is negatively impacted by physical engagement. This suggests an effect between more customer complaints and less physical engagement. Accuracy and quality are affected by emotional engagement, indicating that a drop in emotional engagement could result in a drop in quality. Other types of engagement, such as trait, behavioral, psychological, and cognitive, do not affect productivity. The results are consistent with earlier studies, emphasizing the role that engagement dimensions, including physical, emotional, cognitive, trait, psychological state, and behavioral, play in raising productivity in the service industry. The study also emphasizes how important demographic characteristics are in determining how engagement and productivity are related. Gender does not significantly attenuate this association; nevertheless, other demographic factors that are important to consider are age, marital status, duration of service, and monthly wage. Theoretical implications imply that, in contrast to conventional wisdom, gender may not significantly impact employee productivity in QSRs. In practical terms, the non-significant gender moderation effect highlights how crucial it is to implement gender-neutral engagement tactics to raise worker productivity and levels of engagement. The study suggests future paths for research and offers useful implications for organizational management.

Keywords: Employee Engagement; Productivity; Psychological state engagement; Quick service restaurant.

1.0 Introduction

Nowadays, studying productivity growth is becoming important. As a result, the social aspect of society's growth is strengthened while the firm can maintain its standing in its sector. A successful business knows that most of the growth is because of hardworking employees with excellent productivity. According to research, there is a connection between organizational involvement levels and engagement. Practices in human resources that emphasize people have shown gains in productivity, satisfaction, and financial performance (Ogbonnaya & Aryee, 2021). Other studies showed that productivity was declining in America: The Bureau of Labor Statistics showed that productivity decreased by 1.8 percent. This caused disturbance for both salaried employees and employers. There is a need to look for resources to help employees to become productive (Daisyme, 2015). Moreover, the main root of employee turnover is that they are paid less. All employees wish to be paid fairly for what they worked for. Also, being paid less commonly affects motivation, job satisfaction, and productivity. The different financial and social variables pose challenges to managing the reward process. Supervisors nowadays

ought to work hard toward a restaurant's productivity and at the same time, controllable costs should be managed (Essays, 2015).

Employee engagement influences the company's major corporate goals. An inspired workforce also contributes to the business's image improvement, increasing its attraction to hiring candidates (Adams, 2023). Sinclair (2021) asserts that until Kahn introduced the idea of personal engagement, management tended to assume that excellent work resulted from hiring the "right fit" and providing the right rewards. Kahn raised the topic of employee engagement at work through his study, sparking an array of ideas and hypotheses. Kahn's three pillars of engagement have been around for thirty years; are they still applicable today? Undoubtedly, experts are still discussing this matter (Sinclair, 2021). Employee engagement leads to lower attrition rates and training costs since engaged workers are more committed to the company's goals (Frejas et al., 2015).

Despite high levels of perceived employer support for employee progression, just 53% of millennials in the Philippines, a nation with one of the youngest labor forces in the world, feel appropriately compensated (Nicolas, 2018). To investigate the connection between worker engagement and productivity, this study focuses on Quick Service Restaurants (QSRs) in Cavite, notably McDonald's, Jollibee, and KFC. These eating places are quite prevalent and greatly influence the area (Borres et al., 2021). The importance of employee engagement in determining output and organizational success has grown. Comprehending the moderating impact of demographic profiles on employee engagement becomes imperative as organizations endeavor to improve performance and efficiency. The intricate relationship between employee engagement and demographic parameters, including age, gender, and tenure, has been brought to light in recent studies. This relationship affects productivity (Li & Li, 2021; Albrecht & Bakker, 2023).

Numerous productivity factors, alongside physical, emotional, and cognitive engagement, are frequently associated with employee engagement, which play important roles (Bakker et al., 2020). Particularly, emotional engagement has been demonstrated to greatly influence the accuracy and quality of service delivery, whereas physical engagement may affect productivity through higher complaint volumes and inefficiency in operations (Bakker & Demerouti, 2022). How productivity is affected by engagement can be altered by demographic factors. Particularly, age and length of service can influence whether staff perform in their positions and how productive they are (Williams & Anderson, 2022). Designed engagement techniques may boost productivity, as recent systematic reviews have shown the complex interactions between demographic characteristics and engagement levels (Li & Li, 2021).

Different aspects of employee involvement have been linked to productivity in earlier studies. Still, there is a lack of research on the psychological, trait, and behavioral aspects of QSR industry participation (Laake, 2016; Sinclair, 2021). By incorporating these ideas and analyzing their effects on worker productivity in the quick-service restaurant industry, this study seeks to close this gap. This research aims to thoroughly understand employee productivity factors by integrating several theoretical viewpoints. While there is a wealth of literature on employee engagement in general, there is a dearth of empirical research examining the direct effects of targeted employee engagement interventions, modified to the specific challenges faced by QSRs in Cavite, on response to customers' needs, accuracy/quality, time management, performance review, customer complaints, and operating issues while considering the potential moderating effects of demographic variables such as age, gender, marital status, income, and length of service. In doing so, the study hopes to pinpoint tactics that not only immediately lead to increased productivity but also consider the wide range of demographic characteristics of the QSR workforce.

The literature review shows a gap in the study of comprehensive employee engagement dimensions in the setting of quick-service restaurants. Prior research, including that conducted by Lambert, Jones, and Clinton (2021), primarily examined employees' traits and cognitive, emotional, and physical engagement, leaving out other important factors. The study by Lambert et al. (2021) makes a valuable contribution to understanding employee engagement; nevertheless, its breadth is limited since it does not include all engagement dimensions of Macey & Schneider in 2008. Furthermore, traits, psychological states, and behavioral aspects were recognized by Macey and Schneider (2008) as essential elements of employee engagement; nevertheless, there is a paucity of research that fully investigates these dimensions in the context of quick-service restaurants.

Even with these revelations, more localized research is still required, especially in particular contexts like Quick Service Restaurants (QSRs) in the Philippines. Comprehending the variations within these contexts may produce significant insights for theoretical and practical domains. To close this gap and promote more focused engagement tactics and better business results, this study looks at how demographic characteristics in Cavite, Philippines, influence the link between employee engagement and productivity.

2.0 Methodology

2.1 Research Design

In this research, the quantitative method is utilized to ascertain the connection between employee engagement and productivity of quick service restaurants. Employee engagement dimensions such as physical, emotional, cognitive, trait, psychological state, and behavioral engagement are considered independent variables, while employee productivity with the parameters response to customers' needs, accuracy/quality, time management, performance review, customer complaints, and operating issues were classified as the dependent variable.

2.2 Research Participants

The criteria were set: the restaurant should operate for at least two years, and the service crew should work for at least six months and receive their first performance review. The number of service crew per restaurant, which was qualified based on the criteria given by the managers, has a total population of 1,630. With a 5% margin of error and a 95% confidence level, Slovin's formula calculator was employed to calculate the proper number of respondents. It suggested that there be about 321 service crews in the sample.

2.3 Research Instrument

A modified survey instrument from the study conducted by Frejas et al. (2015) was used. The tool was created to collect extensive data on productivity and engagement to guarantee that the measures align with the research goals. The survey questionnaire was pretested with fifteen respondents before the actual data collection. Since it is hard to create a perfect data collection tool, pretesting is the sole method to evaluate and enhance its effectiveness, claim Babonea and Voicu (n.d.). The experts validated the survey questionnaire. The first part of the survey gathered the attributes of the participants. The respondent's age, gender, length of service, and monthly salary were gathered through open-ended questions in the first section of the form. In addition, respondents were asked to select from all the options while providing their gender and marital status. The respondent's identity was safeguarded by not collecting their names. The second part asked the respondents about the details related to their engagement, specifically the physical, emotional, cognitive, trait, psychological state, and behavioral engagement. The managers answered the third part about productivity since they know whether the service crew is productive.

2.4 Data Gathering Procedure

The researcher secured a letter of permission from the QSR manager to survey their respective stores. The standard questionnaires were distributed via messenger to the employees by their manager. The procedure was repeated in other QSR branches. After answering the questionnaire, the researcher collected the data and discussed the results and the study.

2.5 Ethical Considerations

This research acknowledges the significance of appropriately managing, preserving, and processing personal data, such as service crews' profiles, and enforcing tight anonymity and secrecy. It also pledges to abide by all laws and regulations, including the Data Privacy Act 2012. This study is dedicated to safeguarding and maintaining the confidentiality of the personal information gathered by respondents' right to privacy.

3.0 Results and Discussion

3.1 Profile of the Respondents

Table 1 shows the demographic profile of the survey participants. The average age of the service crew of selected cities in Cavite was 25. 118 out of 321 respondents were 15-20 years old, with the highest percentage of 36.8%. 35.5% were 21-25 years old, 17.4% were 25-30 years old, and 10.3% of the respondents were 30 and above. This means that most of the service crew of selected cities in Cavite were around 15-20 years old. The research carried out by Escoto et al. (2021) shows a youthful workforce because of things like flexible work schedules and chances for entry-level employment.

Table 1. Demographic profile

Characteristic	Frequency	Percentage
Age		
15-20 years old	118	36.76
21-25 years old	114	35.51
26-30 years old	56	17.45
31 and above	33	10.28
Gender		
Male	196	61.06
Female	125	38.94
Marital Status		
Single	83	25.86
Married	238	74.14
Monthly Salary		
1,000-5,000	136	42.37
10,001-15,000	68	21.18
5,001-10,000	117	36.45
Length of Service		
1-2 years	105	32.71
Less than one year	130	40.50
More than two years	86	26.79

Most respondents were female (61.1%), whereas the male respondents accounted for the remaining 38.9%. This means that many of the service crews of selected cities in Cavite were female, the same as the result of the study conducted by De Leon et al. (2022). Also, the result shows that 74.1% of the selected service crew in Cavite were single. This result was supported by the study conducted by Umali et al. (2013), which found that out of 75 respondents, 71 were single, 94.7% of the total respondents. Regarding monthly salary, 136 out of 321 service crew wages range from 1,000-5,000, 117 of them were 5,001-10,000, and 68 were around 10,001-1,5000. In all these, 42.4% of the service crew's monthly salary was around 1,000-5,000. This is in line with the findings of Allegretto et al. (2013) that fast food gives low salaries to service crew. Regarding the length of service, 130 out of 321 respondents worked at quick service restaurants in less than a year, while 105 of them worked around 1-2 years in service, 86 of them worked for more than two years and above. For example, a study conducted in 2016 by Garcia and Martinez discovered that many of the service staff members in fast-food restaurants had comparatively short employment histories, with many of them holding their jobs for less than a year.

3.2 Employee Engagement

In terms of Physical Engagement

Table 2 shows that the participants continuously put high dedication and effort into their work-related tasks. Overall, they exhibit strong physical engagement in their tasks, highlighting their dedication to delivering excellent results.

Table 2. Descriptives of physical engagement

Indicators	Mean	Interpretation
1. I put everything into my work.	4.31	Very High
2. I give my job my all-out effort.	4.21	Very High
3. I work hard at what I do.	4.35	Very High
4. I give my job my all and try to be successful.	4.34	Very High
5. I put all my effort into finishing my work.	4.32	Very High
6. I put much energy into my work	4.31	Very High
Average	4.31	Very High

The physical engagement assessment's findings show that they continuously put high dedication and effort into work-related tasks. Overall, they exhibit strong physical engagement in their tasks, highlighting their dedication to delivering excellent results.

In terms of Emotional Engagement

As shown in Table 3, the findings of the emotional engagement assessment show a very high and favorable degree of connection and fulfillment with the participants' work. Their positive feelings about their professional function,

such as being happy with their work and feeling good about their employment, further demonstrate a positive emotional connection to their professional function.

Table 3. Descriptives of emotional engagement

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Indicators	Mean	Interpretation
1. I take pride in what I do	4.24	Very High
2. I feel energized at work	4.09	High
3. My work interests me.	4.17	High
4. I am pleased with my work.	4.14	High
5. I have a good feeling about my job.	4.17	High
6. I am enthusiastic about my work	4.17	High
Average	4.16	High

In terms of Cognitive Engagement

Table 4. Descriptives of cognitive engagement

Table 11 Bescriptives of cognitive engagement		
Indicators	Mean	Interpretation
1. I only have work on my mind when I'm working.	4.13	High
2. I focus a lot on my work when I'm there.	4.11	High
3. I pay much attention to my job when I'm at work.	4.27	Very High
4. I am engrossed in my task while at work.	4.09	High
5. At work, I give my task my full attention.	4.27	Very High
6. I give my job much attention when I'm at work	4.23	Very High
Average	4.19	High

Table 4 displays data indicating that employees have high to extremely high levels of cognitive engagement, with an average mean score of 4.19. These results imply that quick-service restaurants greatly increase their overall performance and operational efficiency by promoting cognitive engagement. By comprehending the function of demographic attributes as moderating factors, engagement tactics may be further optimized to meet the various needs of employees, thus increasing overall productivity.

In terms of Trait Engagement

Table 5. Descriptives of trait engagement

Indicators	Mean	Interpretation
1. I'm seen as diligent by my coworkers.	4.18	High
2. My manager would describe me as diligent.	3.96	Average
3. I'm seen as ambitious by my friends.	4.08	High
4. I have faith in my skills.	4.26	Very High
5. My colleagues enjoy the creativity I bring to the workplace.	4.14	High
6. I tend to be proactive rather than reactive.	4.13	High
7. I frequently take the initiative to complete a task.	4.18	High
Average	4.13	High

The results of the trait engagement in Table 5 point to a consistently high degree of favorable traits and attributes connected to the participants' professional attitudes. The manager's description of diligence shows a tiny decline. Still, generally, the impression is one of high trait engagement, indicating that the person has a proactive work ethic and self-confidence and is acknowledged by friends and coworkers for their positive traits.

In terms of Psychological State Engagement

Table 6. Descriptives of psychological state engagement

Indicators	MeanInterpretation
1. My employment is meaningful to me and has a purpo	se. 4.39 Very High
2. I'm passionate about what I do.	4.20 High
3. My work motivates me to give it my all.	4.30 Very High
4. While I'm working hard, I feel happy.	4.21 Very High
5. I find the work I do challenging.	4.27 Very High
6. While working, I tend to become irrational.	3.95 High
Average	4.22 Very High

The psychological state engagement assessment results reveal a remarkably optimistic and purposeful attitude toward work (Table 6). Even with a slight decline in the statement about irrationality, the total psychological state engagement is exceptionally high, indicating a constructive and intentional mentality in the work environment.

In terms of Behavioral Engagement

Table 7. Descriptives of behavioral engagement

Indicators	Mean	Interpretation
1. When I'm working, time goes by quickly.	4.30	Very High
2. I only pay attention to something else while working.	3.78	Average
3. I feel like going to work when I wake up.	4.06	High
4. I can work continuously for a very long time.	4.05	Very High
5. I have a hard time separating myself from my work.	3.90	High
6. I never give up on my work, even when things are not going well	.4.19	High
Average	4.05	High

Table 7 shows the results of the behavioral engagement survey, which point to a continuously high degree of dedication and involvement in the person's work-related actions. Although the statement regarding multitasking receives a relatively low score, overall behavioral engagement indicates a focused and committed work style that emphasizes a strong dedication to and attention to work-related tasks.

Summary of Employee Engagement Level

Table 8. Summary of employee engagement level

Dimensions	Mean	Interpretation	
Physical Engagement	4.31	Very High	
Emotional Engagement	4.16	High	
Cognitive Engagement	4.19	High	
Trait Engagement	4.13	High	
Psychological State Engagement	4.22	Very High	
Behavioral Engagement	4.05	High	
Average	4.17	High	

Table 8 shows the verbal interpretations and mean scores for the several engagement dimensions—physical, emotional, cognitive, trait, psychological state, and behavioral—involved in a person's work-related tasks. "High" is the classification given to the average score obtained from all items (Mills, 2014). These results imply that the employees at the quick service restaurants in Cavite have a solid work ethic, a good outlook, and a well-rounded professional demeanor.

3.3 Productivity

In terms of Response to Customers' Needs

Table 9. Descriptives of response to customers' needs

Indicators	MeanInterpretation
1. The crew can respond to customers' requests for condiments,	4.63 Very High
assistance in carrying orders, etc.	
2. The crew immediately attends to the customer's order before	4.27 Very High
doing other tasks.	
3. The crew is friendly and approachable to customers.	4.49 Very High
Average	4.46 Very High

The crew's evaluation of how well they respond to customer demands indicates high customer care and attentiveness (see Table 9). These findings show that the crew provides exceptional customer service and responsiveness, demonstrating a proactive, kind, and attentive staff that efficiently meets customers' demands.

In terms of Accuracy and Quality

The crew's accuracy and quality rating indicate high performance and dedication to meeting the restaurant's goals (see Table 10).

Overall, these findings show that the employees achieve excellent standards for precision and caliber and actively help the restaurant reach its larger goals.

Table 10. Descriptives of accuracy/quality

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Indicators	MeanInterpretation
1. The crew contributes towards the achievement of the restaurant's targets	. 4.37 Very High
2. The crew gives the customers the right food orders and quality products.	. 4.28 Very High
3. The crew is careful to prevent wastage.	4.43 Very High
Average	4.36 Very High

In terms of Time Management

Table 11. Descriptives of time management

Tuble 11. Descriptives of time management			
Indicators	MeanInterpretation		
1. The crew comes to work on time.	4.40 Very High		
2. The crew can give the customers fast service.	. 4.23 Very High		
3. The crew serves the customer on time.	4.32 Very High		
Average	4.32 Very High		

The crew's evaluation of their time management demonstrates an exceptional dedication to timely and effective service (see Table 11). This crew excels at providing clients with prompt and effective service, as shown in their overall high score. They also place a high importance on punctuality. The findings indicate that a punctual and well-organized staff enhances patrons' dining experiences.

In terms of Performance Review

Table 12. Descriptives of performance review

Indicators	Mean	Interpretation
1. The crew passed the employee performance review.	4.47	Very High
2. The crew communicates effectively and enthusiastically.	4.22	Very High
3. The crew performs secondary responsibilities without being told.	4.41	Very High
Average	4.37	Very High

The crew's performance review scores show high proficiency, proactive task engagement, and communication (see Table 12). The crew's strong performance assessment ratings highlight their proficiency in communication, proactive attitude toward their duties, and overall competency.

In terms of Customer Complaints

Table 13. Descriptives of customer complaints

Indicators	MeanInterpretation				
1. The crew never had customer complaints.	4.27 Very High				
2. The crew knows the customer recovery process	. 4.16 High				
3. The crew maintains a positive disposition	4.42 Very High				
Average	4.28 Very High				

The crew's evaluation of client complaints shows remarkably high customer satisfaction and effective complaint handling (see Table 13). These findings point to a customer-focused and service-oriented team that not only helps them avoid customer complaints but also manages and resolves problems promptly and courteously.

In terms of Operating Issues

The crew's evaluation of operational issues highlights their exceptional competence and resiliency in trying situations (see Table 14). The crew routinely performs effectively despite encountering various operational obstacles, including machine breakdowns, power outages, and a shortage of raw materials. Overall, the crew's strong performance in the face of operational challenges shows that they are a strong, capable team that successfully negotiates and overcomes challenges to continue producing work of the standard job.

Table 14. Descriptives of operating issues

Indicators	MeanInterpretation
1. The crew is still performing well even though there	4.38 Very High
are some problems like machine breakdown, power interruption, etc	2.
2. The crew still performs well even when there are times	4.17 High
when raw materials are unavailable.	
3. The crew still performs well despite absences from	4.34 Very High
his/her colleagues.	
Average	4.30 Very High

Summary of Productivity Level

Table 15. Summary of productivity level

Tuble 13: Summary of productivity level				
Indicators	MeanInterpretation			
Response to customers' nee	ds 4.46 Very High			
Accuracy/Quality	4.36 Very High			
Time Management	4.32 Very High			
Performance Review	4.37 Very High			
Customer Complaints	4.28 Very High			
Operating Issues	4.30 Very High			
Average	4.35 Very High			

The study is supported by Singh (2016), who discusses the significance of employee engagement in driving organizational performance, including productivity outcomes. Alvi et al.'s (2020) study on the hospitality industry further supports consistency between productivity and physical engagement. These standards include handling customer complaints and operating issues, time management, performance reviews, accuracy and quality, and response to customers' needs. It shed light on how various aspects of employee engagement affect overall productivity in quick-service restaurants.

3.4 Effect of Employee Engagement on Productivity

Table 16 demonstrates the effect between productivity and physical engagement. The study shows no discernible effect between physical engagement and overall productivity. Physical engagement is measured by responding to customers' needs, accuracy/quality, time management, performance reviews, customer complaints, and operational concerns. Johnson et al. (2018) looked at physical engagement metrics, including time management and response to customers' needs, while examining the factors affecting productivity in the restaurant industry. Furthermore, Smith and Brown's (2020) study delves into the function of employee engagement in the service sector, illuminating the effect of employee engagement dimensions on productivity. Emotional, cognitive, trait, psychological state engagement, and behavioral engagement show weak effects (around 0) and are not statistically significant. This shows that the effect between these engagement characteristics and production is not linear. The effect between accuracy/quality and emotional engagement is significantly negative (-0.113*) (p-value = 0.044). This suggests that there might be a tendency for accuracy or quality to drop as emotional engagement does.

There is no discernible effect between productivity and cognitive engagement, including customer service, accuracy and quality, time management, performance reviews, handling customer complaints, and operational problems. Martinez and Garcia (2020) found no evidence of a significant effect between cognitive engagement and productivity in the service sector. This is consistent with the findings and raises the possibility that productivity may not be accurately predicted by cognitive engagement of employee engagement. Only in the case of accuracy/quality does trait engagement—which includes meeting customer requests, time management, performance reviews, customer complaints, and operational issues—show a strong effect on productivity. A study by Gramillano et al. (2023) indicated that trait engagement strongly increased accuracy and quality outcomes in fast-food outlets, which aligns with the results and emphasizes the significance of trait engagement in enhancing overall productivity. Only accuracy/quality significantly affects productivity when emotional engagement—which encompasses elements like meeting customer demands, time management, performance reviews, customer complaints, and operational issues—is examined. Consistent with the results, Choo's (2016) study found that emotional engagement substantially impacted productivity, especially in areas of quality and accuracy.

Table 16. Analysis of the effect of employee engagement on productivity

Table 16. Analysis of t			<u> </u>	
	Coefficient	p-Value	Interpretation	Hypothesis
Physical Engagement	-0.081	0.147	Not Significant	Fail to reject
Response to customers' needs	0.006	0.921	Not Significant	Fail to reject
Accuracy/Quality	-0.080	0.153	Not Significant	Fail to reject
Time Management	-0.010	0.860	Not Significant	Fail to reject
Performance Review	-0.053	0.345	Not Significant	Fail to reject
Customer Complaints	-0.120	0.032	Significant	Reject
Operating Issues	-0.075	0.181	Not Significant	Fail to reject
Emotional Engagement	0.004	0.939	Not Significant	Fail to reject
Response to customers' needs	0.024	0.669	Not Significant	Fail to reject
Accuracy/Quality	-0.113	0.044	Significant	Reject
Time Management	0.043	0.438	Not Significant	Fail to reject
Performance Review	0.005	0.935	Not Significant	Fail to reject
Customer Complaints	-0.045	0.425	Not Significant	Fail to reject
Operating Issues	0.060	0.280	Not Significant	Fail to reject
Cognitive Engagement	0.003	0.959	Not Significant	Fail to reject
Response to customers' needs	0.083	0.137	Not Significant	Fail to reject
Accuracy/Quality	-0.057	0.305	Not Significant	Fail to reject
Time Management	0.048	0.393	Not Significant	Fail to reject
Performance Review	-0.010	0.852	Not Significant	Fail to reject
Customer Complaints	-0.046	0.410	Not Significant	Fail to reject
Customer Complaints	-0.029	0.603	Not Significant	Fail to reject
Operating Issues	0.067	0.230	Not Significant	Fail to reject
Psychological State Engagement	-0.052	0.355	Not Significant	Fail to reject
Response to customers' needs	-0.024	0.665	Not Significant	Fail to reject
Accuracy/Quality	-0.088	0.116	Not Significant	Fail to reject
Time Management	0.010	0.863	Not Significant	Fail to reject
Performance Review	-0.077	0.167	Not Significant	Fail to reject
Customer Complaints	-0.073	0.192	Not Significant	Fail to reject
Operating Issues	-0.050	0.375	Not Significant	Fail to reject
Behavioral Engagement	0.014	0.808	Not Significant	Fail to reject
Response to customers' needs	-0.053	0.346	Not Significant	Fail to reject
Accuracy/Quality	-0.030	0.594	Not Significant	Fail to reject
Time Management	0.036	0.516	Not Significant	Fail to reject
Performance Review	0.033	0.561	Not Significant	Fail to reject
Customer Complaints	-0.013	0.810	Not Significant	Fail to reject
Operating Issues	0.055	0.329	Not Significant	Fail to reject

The discovery that physical engagement has a marginally detrimental influence on productivity — a negative effect that is not statistically significant—corresponds with a study conducted in 2022 by Fan et al. that examined the subtleties of employee engagement and how they affect productivity. Furthermore, Tripathi et al.'s (2021) study examined the effect of productivity and physical engagement in the hospitality sector, which gives context to the results. Research by Bakker and Demerouti (2014), who examined the effect of emotional engagement on job performance, supports the considerable negative link between emotional engagement and accuracy/quality. To support the findings of Islam et al. (2019), they examined the significance of emotional engagement in service quality.

Only in the case of accuracy/quality does trait engagement—which includes meeting customer requests, time management, performance reviews, customer complaints, and operational issues—show a strong effect on productivity. The general productivity of quick service restaurants is positively affected by employees who display specific qualities and accuracy-related features. A study by Gramillano et al. (2023) indicated that trait engagement strongly increased accuracy and quality outcomes in fast-food outlets, which aligns with the results and emphasizes the significance of trait engagement in enhancing overall productivity.

Customer complaints, operational problems, accuracy/quality, time management, performance reviews, and response to customers' needs all point to a lack of significant effect between psychological state engagement and productivity, which raises the possibility that psychological factors are unreliable indicators of output levels in quick-service restaurants. This result is consistent with earlier research by Jones et al. (2018), who discovered no meaningful effect between productivity in the service sector and psychological engagement. Furthermore, in their investigation of the effect of employee engagement on organizational performance, Smith & Brown (2016) found comparable outcomes.

3.5 Moderating Effect of Demographic Profile on Employee Engagement and Productivity

Table 17 shows that physical, emotional, cognitive, personality, psychological state, and behavioral engagement are significant engagement characteristics that demonstrate how important these elements are to improving productivity. This result is consistent with other research highlighting the beneficial relationship between productivity and engagement in the service sector (Alarcon & Ramos, 2014; Gagne & Cummings, 2014). The moderating variables imply that these demographic characteristics affect the link between productivity and engagement. These variables include age, marital status, length of service, and monthly wage. This finding bolsters the hypothesis that individual traits and professional background can affect engagement and, in turn, productivity (Hartog, 2014).

Table 17. Analysis of the moderating effect of demographic profile on employee engagement and productivity

	Coefficient	Std. Err.	z	p- value	Interpretation	Hypothesis
Productivity						
Engagement	-0.026	0.040	-0.650	0.517	Not Significant	Fail to reject
Demographic profile	0.002	0.018	0.110	0.913	Not Significant	Fail to reject
Physical engagement	4.307	0.029	148.2	0.000	Significant	Reject
Emotional engagement	1.215	0.095	12.73	0.000	Significant	Reject
Cognitive engagement	1.196	0.096	12.46	0.000	Significant	Reject
Trait engagement	1.215	0.099	12.27	0.000	Significant	Reject
Psychological engagement	1.193	0.091	13.09	0.000	Significant	Reject
Behavioral engagement	1.105	0.101	10.89	0.000	Significant	Reject
Response to customers' needs	4.461	0.024	184.0	0.000	Significant	Reject
Accuracy/quality	1.114	0.200	5.560	0.000	Significant	Reject
Time management	1.174	0.200	5.870	0.000	Significant	Reject
Performance review	1.227	0.206	5.960	0.000	Significant	Reject
Customer complaints	1.512	0.232	6.520	0.000	Significant	Reject
Operating issues	1.476	0.248	5.950	0.000	Significant	Reject
Age	2.012	0.054	36.93	0.000	Significant	Reject
Gender	0.017	0.037	0.470	0.642	Not Significant	Fail to reject
Marital status	0.315	0.033	9.680	0.000	Significant	Reject
Monthly salary	0.609	0.062	9.870	0.000	Significant	Reject
Length of service	0.620	0.064	9.730	0.000	Significant	Reject

The discovery that gender does not significantly moderate employee engagement and productivity in quick-service restaurants (QSRs) has important ramifications for theory and practice. Given the possibility of gender disparities in workplace dynamics, the lack of a substantial effect could appear unexpected. Still, it is consistent with some recent research indicating that gender may not necessarily affect employee productivity (Kulik & Ryan, 2019). Theoretically, this finding contradicts accepted beliefs regarding the diverse ways gender influences productivity. The lack of significant moderation by gender in the context of employee engagement and productivity suggests that other factors may be more influential in QSR settings, even though previous studies have frequently highlighted gender disparities in various organizational outcomes, such as pay equity and career advancement (Blau & Kahn, 2017). This emphasizes how important it is for researchers to look at other factors that can help explain why there are variations in organizational results connected to gender.

4.0 Conclusion

The research offers insightful information about the complex interactions between various aspects of employee engagement and demographic variables affecting organizational productivity. The results shed light on tactics for maximizing performance in QSRs by revealing substantial connections between age, pay, length of service, and various engagement and productivity parameters. The study highlights the prevalent view that increased productivity directly results from increased employee engagement. It found that, at the customary significance level, none of the engagement dimensions—behavioral, trait, emotional, cognitive, physical, or psychological state—exhibited statistically significant effects on productivity. This implies that factors other than employee engagement may be more crucial for productivity.

5.0 Contributions of Authors

Maria Regina C. Belostrino: Conceptualization, Writing the original draft, Writing review and editing, Writing the analysis, and revising the manuscript. Renalyn C. Estiller: Conceptualization, Writing review and editing, Writing the analysis, Checking the revision of the manuscript

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7.0 Conflict of Interests

There is a conflict of interest between the authors

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