



# IMPACT OF FEAR OF COVID-19 TO THE JOB SATISFACTION AND MORALE OF FILIPINO MEDICAL TECHNOLOGISTS

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## ABSTRACT

Coronavirus disease 2019 (COVID-19) has brought a sudden impediment to the movement of the whole world. As of early November 2020, reported cases of COVID-19 have reached 46 million mark around the globe. The role played by the healthcare workers in the management, containment, diagnosis, and treatment of the said disease is indisputable. Medical technologists, being one of the frontliners during COVID-19 Pandemic, experienced different challenges in the pursuit of their everyday duties. Social stigma, external and financial pressures, fear of infection are some of the burdens carried. This study was conducted to determine the impact in the Medical Technologists' job satisfaction and morale during the time COVID-19. By convenience purposive sampling, a survey was administered to 104 Filipino medical technologists from Bulacan, Pampanga and Zambales in a form of online questionnaires. The survey consisted of satisfaction, morale and Fear of COVID-19 scale. Data was analyzed with the use of appropriate statistical measures for correlation and description. It revealed that the medical technologists had a fear of COVID-19 on the average level, with high levels of job satisfaction and morale. It was also revealed that there is no correlation between fear of COVID-19 to job satisfaction and morale of the medical technologists.

## KeyWords

COVID-19, Medical Technologist, Job Satisfaction, Job Morale, Fear of COVID-19

## INTRODUCTION

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by a strain of coronavirus. It is a respiratory and contagious disease that was unknown before the outbreak began in Wuhan, China, in December 2019. Medical Technologists played a vital role in COVID-19 response by providing clinical support for the disease diagnosis, the hidden heroes working behind the scenes inside the laboratory. As the number of COVID-19 cases increases, challenges can occur and fear can be overwhelming. Thus, it leads to an impact on the job satisfaction and morale of the medical technologists who work in the frontline. The reported cases of Filipino Health workers infected with COVID-19 have reached 9, 347 cases with 60 deaths as of September 28, 2020<sup>[4]</sup>. Among these confirmed cases, 436 were medical technologists. With the outbreak of COVID-19, several studies have been conducted and published about the impact of the disease on medical health professionals, specifically on nurses and physicians. However, little has been conducted from the perspective of the medical technology profession. In line with that, this research is designed to fill up the knowledge gaps on the status of job satisfaction and morale in the medical technology profession during the COVID-19 pandemic. It seeks to examine the impact of medical technologist's fear of COVID-19 on job satisfaction and morale for it may affect the work performance.

## METHODS AND PROCEDURES

### Research Methodology

The study utilized a descriptive-correlational study using a quantitative approach that clarified the impact of the fear of COVID-19 to job satisfaction and morale of the medical technologists dealing with potentially infected COVID-19 patient specimens.

### Setting of the Study

This study was conducted in the three northern provinces of the Philippines namely Bulacan, Pampanga, and Zambales. Specifically, the respondents of the study were medical technologists from the different COVID-19 testing centers and laboratories where COVID-19 specimens were collected, processed and/or tested.

### Subjects of the Study

The respondents of the study are with signed informed consent who are licensed medical technologists working in Bulacan, Pampanga, or Zambales and dealing with potentially infected COVID-19 patient specimens (collection, processing, testing, or transport) in a COVID-19 testing facility.

### Sampling Techniques

The study utilized both convenience and purposive sampling in gathering respondents. Convenience sampling is a kind of nonprobability or nonrandom sampling wherein the members of a target population meet practical criteria needed by the research such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate in the study<sup>[6]</sup>. Due to time constraints and pandemic lockdown, this method was utilized by searching respondents in easy accessibility to the researchers. The total responses received were 130 from different health institutions where medical technologists dealt with potentially infected patient specimens around Bulacan, Pampanga, and Zambales. But on purposive selection, only 104 respondents who responded met the inclusion criteria for the research study. Etikan (2016) explains that the purposive sampling technique allows the deliberate choice of a participant due to the qualities the participant possesses by their knowledge or experience.

### Research Instruments

The instrument used in the study is an online survey questionnaire via Google Forms. It was sent to the participants through email or an electronic link. The entire questionnaire contained five (5) parts:

Part I is for the demographic profile which includes their age, gender, years of employment, workplace, COVID-19 test(s) conducted in the workplace, and assignment in the workplace.

Part II consists of the Fear of COVID-19 Scale, a standardized questionnaire, used in the study of Ahorsu et. al (2020) entitled *The Fear of Covid-19 Scale: Development and Initial Validation*. The scale showed a proper internal validity Cronbach alpha of 0.82 and test-retest reliability (ICC = 0.72).

Part III is for the Generic Job Satisfaction Scale, also a standardized tool that is used in the study of Dolovski & Mårtensson (2019) entitled *Working Well-Being: The Individual's Relation to Their Job Relates to Their Well-Being*. It has a proper Cronbach alpha reliability of 0.77 and a test-retest revealed no significant difference between males and females.

Part IV is for the Employee Morale Scale, another standardized tool utilized in the study of Weakliem & Frenkel (2006) entitled *Morale and Workplace Performance*. This scale consists of three questions concerning workplace management which attitude goes together in practice with correlations of between 0.70 and 0.75 at the level of the workplace.

Part V is for the concluding questions which is a tool for determining the job satisfaction and morale of the participants before the pandemic.

All established or standardized questionnaires used are employed to assess the variables of the study. An authorization in the utilization of each research scale was granted by the authors.

### Statistical Treatment of Data

The data gathered through the online survey using Google Forms was collated in Microsoft Excel software. Stata software was used to analyze the descriptive and inferential statistics. For descriptive statistics, the mean and standard deviation for each scale were analyzed to reveal the levels of respondents' Fear of COVID-19, Job Satisfaction, and Job Morale. This was also used to illustrate the levels of job satisfaction and job morale before the COVID-19 pandemic. For the inferential statistics, Pearson Product

Moment Correlation was used to analyze the relationship of fear of COVID-19 to the Job Satisfaction and Job Morale of the respondents.

## RESULTS AND DISCUSSIONS

A total of 104 Filipino medical technologists participated in the study where the majority (72.12%) of the respondents belong to young professionals while the minority (3.85%) were those from the older population. The study comprised of females (87.5%) and males (12.5%); with years of employment ranging from less than a year (13.46%), 1 year to 5 years (61.54%), 6 years to 10 years (10.58%) and more than 10 years (14.42%); working in Bulacan (74.04%), Pampanga (19.23%), and Zambales (6.73%).

A vast number of medical technologists (42.31%) works in an institution that uses Polymerase Chain Reaction (PCR) for COVID-19 testing and 40.38% respondents are assigned in both the processing and testing of suspected COVID-19 specimens for PCR, Rapid Antibody test and Antigen test.

Table 1. *Descriptive Statistics of the Variables under Study*

	<b>N</b>	<b>Mean±S.D.</b>	<b>Interpretation</b>
<b>Fear of COVID-19</b>	104	20.625±5.479	<b>average</b>
<b>Job Satisfaction</b>	104	37.558±6.191	<b>high</b>
<b>Job Morale</b>	104	7.673±1.444	<b>high</b>

The mean score for the Fear of COVID-19 Scale was  $20.63 \pm 5.479$  and for the job satisfaction and job morale scales, the mean scores were  $37.56 \pm 6.191$  on a five-point Likert scale and  $7.67 \pm 1.444$  on a three-point Likert scale, respectively. The results showed that the respondents have a relatively average level of fear of COVID-19. This implies that despite the presence of a pandemic, the medical technologists were able to manage their fear levels. Resilience and high regard for their work played an important factor in maintaining the respondent's fear of COVID-19 almost unaffected by the threat of the virus. On the other hand, the medical technologists job satisfaction and morale were also found to be at high levels with the pandemic present. Aside from the respondents' ability to cope from the threat of a virus and high value for their work, the pandemic has showcased their vital role to the maintenance of the health of the public. Being one of the frontlines in the battle against the pandemic, the medical technologists who were once less appreciated health workers, are now responsible for testing suspected COVID-19 patients. Unlike before, the medical technologists are now more recognized as healthcare providers working alongside the nurses and doctors in facilitating patient care and treatment.

Table 2. *Levels of Fear of COVID-19 during the COVID-19 Pandemic*

<b>Fear of COVID-19</b>	<b>Mean± S.D.</b>	<b>Verbal Interpretation</b>
I am most afraid of Coronavirus	3.54±1.10	Agree
It makes me uncomfortable to think about Coronavirus	3.20±1.07	Neutral/undecided
My hands become clammy when I think about Coronavirus	2.27±0.98	Disagree
I am afraid of losing my life because of Coronavirus	3.69±1.19	Agree

When I watch news and stories about Coronavirus on social media, I become nervous or anxious.	2.91±1.03	Neutral/Undecided
I cannot sleep because I'm worried about getting Coronavirus.	2.41±1.03	Disagree
My heart races or palpitates when I think about getting Coronavirus.	2.48±1.10	Disagree
<b>MEAN / AVERAGE</b>	<b>2.93±1.07</b>	<b>Neutral/Undecided</b>

The data in Table 2 revealed that respondents' fear of COVID-19 level during the COVID-19 pandemic had a mean of 2.93 ±1.07 indicating an average level. This result is slightly higher when compared with other healthcare providers such as the nurses in the Philippines<sup>[9]</sup> and with the medical staff in Mexico<sup>[7]</sup>. An average level of fear of COVID-19 for the respondents implies that despite the presence of a threat like COVID-19, the stress handled by the medical technologist remains on the average or manageable level.

Table 3. *Levels of Job Satisfaction during the COVID-19 Pandemic*

<b>Job Satisfaction</b>	<b>Mean ± S.D.</b>	<b>Verbal Interpretation</b>
I receive recognition for a job well done	3.60±0.91	Agree
I feel close to the people at work	4.12±0.70	Agree
I feel good about working at this my workplace	3.94±0.83	Agree
I feel secure about my job	3.79±0.86	Agree
I believe management is concerned about me	3.61±0.87	Agree
On the whole, I believe work is good for my physical health	3.65±0.90	Agree
My wages are good	3.35±1.02	Neutral/undecided
All my talents and skills are used at work	3.85±0.76	Agree
I get along with my supervisors	3.88±0.84	Agree
I feel good about my Job	3.88±0.82	Agree
<b>MEAN/AVERAGE</b>	<b>3.76±0.85</b>	<b>Agree</b>

Table 3 illustrates that the job satisfaction of the respondents during the COVID-19 pandemic has a mean of 3.76 ± 0.85 which indicates that most of the respondents agreed to have a high level of job satisfaction implying that the respondents can cope up and recover from the situation easily and can perform and fulfill the tasks given, with the feeling of contentment and pleasure amidst the risks encountered during the pandemic. The awareness of the importance of the work done, especially in extreme cases certain resilience of the respondents, particularly the medical technologists, which lead to higher job satisfaction and work engagement<sup>[8]</sup>.

Table 4. Levels of Job Morale during the COVID-19 Pandemic

Job Morale	Mean $\pm$ S.D.	Verbal Interpretation
The management does its best to get along with the employees.	2.63 $\pm$ 0.52	Neutral
The management can be trusted to tell things the way they are.	2.54 $\pm$ 0.50	Neutral
I am satisfied with the way the management treat me and others	2.56 $\pm$ 0.55	Neutral
<b>MEAN/AVERAGE</b>	<b>2.58<math>\pm</math>0.53</b>	<b>Neutral</b>

Table 4 shows the job morale of the respondents amidst the COVID-19 pandemic with a mean of 2.58 $\pm$ 0.53 that indicates a neutral level of job morale. The result implies that despite the pandemic, medical technologists remain to have a positive attitude and enthusiasm towards the professional job. A study conducted revealed that job morale is positively correlated with job satisfaction and productivity thus making it a key determinant in organizational success.<sup>[13]</sup> Like job satisfaction, it speaks of the certain resilience possessed due to the awareness of the importance of the work. The feeling of fulfillment and being important to help people in times of a pandemic strengthens the way the respondents' view on the job thus affecting the morale. Given such results, the job morale is positively correlated with job satisfaction.

Table 5. Level of Job Satisfaction and Job Morale before the COVID-19 Pandemic

Concluding Questions	Mean $\pm$ S.D.	Verbal Interpretation
<b>Q1.</b> Before the COVID-19 pandemic, how can you rate your job satisfaction as a medical technologist?	3.86 $\pm$ 0.81	<b>Satisfied</b>
<b>Q2.</b> Before the COVID-19 pandemic, how can you rate your job morale as a medical technologist?	3.88 $\pm$ 0.73	<b>High</b>

The job satisfaction and job morale before the pandemic have a mean score of 3.86 $\pm$ 0.81 and 3.88 $\pm$ 0.73, respectively. When compared with the current status, there was no significant difference before and after the pandemic. This implies that despite the presence of a pandemic, the medical technologists' job morale and satisfaction were not affected and remained at a high level. The strong emotional resilience of the medical technologists protected the respondents from various mental health symptoms such as anxiety, depression, and traumatic stress during this pandemic.<sup>[12]</sup> Resilience is linked positively with optimistic perceptions about work such as satisfaction, commitment, and good citizenship. It was explained that resilience improves together with morale, engagement, productivity, and retention<sup>[2]</sup>. And this enabled employees to cope with the stress and strain of the work and the busy lives of the respondents.

Table 6. Correlation between Variables under Study

	Fear of COVID-19	Job Satisfaction	Job Morale
<b>Fear of COVID-19</b>	1.000		

<b>Job Satisfaction</b>	-0.0244	1.000	
<b>Job Morale</b>	-0.0340	.5993** (p-value=0.01)	1.000

Note. \*\*Correlation is significant at the p-value 0.01 level.

As depicted in Table 6, it was revealed that the Fear of COVID-19 and job satisfaction of the medical technologists did not significantly correlate ( $r = -0.0244$ ,  $p > 0.01$ ). Also, Fear of COVID-19 did not significantly correlate with job morale ( $r = -0.0340$ ,  $p > 0.01$ ). This result was contradicted by a study conducted on nurses in the Philippines that revealed a significant negative correlation between fear of COVID-19 and job satisfaction.<sup>[9]</sup> Cawcutt et al., (2020) emphasized the power of fear and its influence in providing health care<sup>[3]</sup>. Evidence suggests that working in a stressful and uncomfortable environment for a long time can jeopardize the morale, work performance, and psychological well-being of health care workers in general. However, this was not implicated in the present study.

Fear of COVID-19 may not always have a significant correlation with job satisfaction and morale in cases when emotional resilience was taken into consideration. High job satisfaction and work engagement speak of a certain resilience or the ability to succeed personally amid high pressure and a dynamic environment<sup>[8]</sup>. Resilience can boost a person's morale and job satisfaction thus it won't be easily affected by fear. A mental health study emphasized that resilience in the time of pandemics can help people get through the coronavirus distress and adversity<sup>[12]</sup>. For instance, a person has a strong emotional resilience, despite the fear present, he or she may remain unaffected. According to Southwick et al. (2016), there is a great psychological and neurobiological variability in how people respond to different circumstances.

This finding is supported by the inverted U theory or optimal theory of arousal that described the moderate amount of stress (or any manifestation of stress such as fear) would not affect any attitudes, motivation, or even performance of the medical technologists in performing their duties during the COVID-19 pandemic. Moreover, a noteworthy correlation between medical technologist job satisfaction and morale was revealed in the study.<sup>[11]</sup>

## CONCLUSION

The ongoing pandemic has caused fear among the Filipino Medical Technologists, however, based on the findings, the fear of COVID-19 is not significantly correlated with job satisfaction as well as the fear of COVID-19 to the job morale of the medical technologist. Therefore, the results show that there is no impact of fear of COVID-19 on the job satisfaction and morale of medical technologists which means that whenever an increase or decrease happens in between, it will not result in a change in the value of the other factors.

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