



A phenomenological study of Filipino Medical Technologists' forces for perceived job satisfaction amidst COVID-19 pandemic in the Philippines

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Background: Healthcare workers (HCWs) are daily subjected to various conditions that influence their job satisfaction and affect their performance. The COVID-19 pandemic caused a lot of burden amongst HCWs, and as a result, many local HCWs in the Philippines experienced the brain drain phenomenon. In this study, a phenomenological approach to immerse in the lived experiences of Filipino medical technologists in the Philippines was utilized to determine their perceived job satisfaction during the COVID-19 pandemic.

Methods: Purposive sampling was utilized in this study. Thirteen registered Filipino medical technologists in any organizational position with at least three years of experience working in Department of Health, Philippines (DOH)-accredited private hospitals within the Metro Manila, Philippines were individually interviewed to express their definition of job satisfaction and factors affecting the degree of this phenomenon amidst the COVID-19 pandemic. Following their voluntary enrollment in the study, demographics and employment history were obtained using a survey questionnaire. The interview consists of open-ended questions and sub-questions regarding their perceived job satisfaction. Colaizzi's method was applied to obtain the essence of the phenomenon under investigation.

Results: The richness of the information from the in-depth interview has made the researcher come up with three major themes entitled: the Force of Purpose, the Force of Pursuit, and the Force of People. Similar experiences were clustered into various subthemes: passion, service, practice, privilege, professional growth, opportunity, recognition, relationships, and teamwork. Finally, the researchers assimilated the themes and have come up with the simulacrum 'The Fire Triangle of Job Satisfaction' which represents forces for perceived job satisfaction amidst the COVID-19 pandemic in the Philippines.

Conclusions: The emerged job satisfaction of Filipino medical technologists is defined as the Force of Purpose to exemplify their purpose, the Force of Pursuit for their personal and professional pursuits, and the

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Force of People to surround themselves with appreciative and supportive people. The findings of this study may be used to create programs to increase the job satisfaction and retention of healthcare professionals.

Keywords: Healthcare workers (HCWs); phenomenological study; COVID-19 pandemic; job satisfaction; work environment

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Introduction

Background

Job satisfaction is highly associated with the feelings and perception of an employee towards the work environment where unmet expectations can lead to disappointments, causing satisfaction to be unachieved (1). In laboratory settings, the quality of service relies on qualified personnel, emphasizing the importance of the permanency and retention of experienced healthcare professionals. Likewise, they are important in generating shorter turnovers, increased productivity, and marked profit (2). However, it was found that there is an increasing lack of skilled medical technologists, emphasizing on the need to retain said trained individuals rather than recruit (3). Nowadays,

medical technologists face different situations in their respective laboratories that affect their daily performance and occupational satisfaction. These issues vary for each staff, identifying job satisfaction as subjective (4,5). Hence, the detection of factors that reduce satisfaction becomes necessary to improve occupational contentment.

Various work elements affect the overall job satisfaction. An appropriate workplace contains several aspects, namely the physical, psychological, and social workplaces. All of which affect the job satisfaction of employees in their own ways (6). Aside from this, work motivation also plays a vital role on keeping the employees on track to achieve personal and organizational goals (7). From fulfilling the personal needs, to proper work system, reasonable workload, and working environment, everything affects individual's motivation to accomplish a task (8,9). Furthermore, collegial relationships and teamwork were known to positively enhance job engagement and satisfaction (10). Teamwork can mitigate heavy workload, reduce stress, and increase efficiency (11). On another note, increasing psychological safety among team members, which is considered as a relevant element of teamwork, facilitates unity, and gives the members a comfortable environment to engage in interpersonal learning and enhance task performance (12). Higher occurrences of teamwork are crucial in attaining job satisfaction due to effective communication, challenging the professional growth and development of skills of involved personnel, which were wholly rooted to the influences of their colleagues. Job retention and general job satisfaction levels can rise accordingly by addressing and inculcating teamwork among healthcare professionals. The cultivation of teamwork is demonstrated to decrease the level of personnel dissatisfaction which may result in lower productivity and resignation. Moreover, addressing these work elements may aid in improving the job satisfaction amongst healthcare professionals. We present this article in accordance with the SURGE reporting checklist (available

Highlight box

Key findings

- The perceived job satisfaction of the Filipino Medical Technologists is based on three emerged forces: Purpose, Pursuit, and People. The emerged forces are being supported by nine subthemes: passion, service, practice, privilege, professional growth, opportunity, recognition, relationships, and teamwork.

What is known and what is new?

- In the Philippines, Filipino healthcare workers are being underappreciated leading to dissatisfaction and brain drain.
- This study highlights the key areas in improving the quality of the working environment and job satisfaction amongst healthcare workers providing service amidst COVID-19 pandemic.

What is the implication, and what should change now?

- The identified forces also reflect work-related demands that are crucial in the Filipino healthcare worker's continuing service to the country.
- Holistic programs and policies must be considered in order to provide good working conditions amongst healthcare workers not just in the Philippines, but also in other countries.

at <https://jphe.amegroups.com/article/view/10.21037/jphe-22-104/rc>).

Rationale and knowledge gap

The COVID-19 pandemic is a global crisis and countries across the globe were called to respond to the situation (13). The capacity of a country's response towards health crisis and emergency were challenged by this global health phenomenon. Healthcare workers (HCWs) were at the center of the response team, providing diagnosis, treatment, and care among patients.

However, in the Philippines, HCWs were underappreciated (14) and underpaid even before the pandemic (15). In the Southeast Asian region, the Philippines was found to have the lowest salary for both nurses and medical technologists which is approximately 50–57% lower than Vietnam—which ranked 6th out of the 7 countries surveyed (16). Amidst the pandemic, many HCWs have demanded a “time-out” since many have experienced physical, emotional, and psychosocial stress due to the burden of COVID-19 cases and the heavy hospitalization rate (17,18). The underpaid COVID-19 benefits like the special risk allowances—an extra allowance for healthcare frontliners serving COVID-19 patients, and unreasonable delays in the salaries made the situation even worse (19). In addition, many institutions have reported a crisis in terms of understaffing, and it has affected the current workload pressure—resulting in delayed COVID-19 response, burnout, and poor quality of health services (20,21). The Philippines needs 106,000 nurses, 67,000 physicians, and 4,500 medical technologists in both public and private health institutions (22). Despite these calls for additional workers, many nurses and even other healthcare professionals chose to resign from their posts due to the overwhelming COVID-19 situation (23), and some even applied for a position abroad and migrate (15). Likewise, a lot of HCWs are experiencing the medical “brain drain” phenomenon (24) which is a phenomenon describing the substantial emigration of educated individuals to seek more favorable job opportunities abroad or a higher standard of living (25).

Understanding the other reasons behind this phenomenon and the true perception of Filipino HCWs specifically medical technologists towards job satisfaction may reveal a lot of key opportunities to address in improving the overall work perception of Filipino medical technologists.

Objective

This study explored the lived experiences of Filipino medical technologists. It purports to answer the central question: “*What is the perceived job satisfaction of Filipino medical technologists?*”. Specifically, this study wants:

- (I) To define job satisfaction as comprehended by Filipino medical technologists;
- (II) To identify the factors/forces associated with the job satisfaction of Filipino medical technologists.

Methods

Research design

This is a phenomenological research that aims to capture the job satisfaction of Filipino medical technologists. It involves the analysis of deliberately selected Filipino medical technologists and the illumination of the similarities and differences in each situation. In particular, a transcendental approach which originated from the philosophies of Husserl and Heidegger and further elaborated by Merleau-Ponty (26), was applied in attempting to unravel and describe the essence of the lived experiences of the respondents (27,28). Following the Husserl's descriptive philosophy, researchers remained objective and kept any personal biases away from describing the emerged patterns in the study. In the same manner, the researchers were also guided by the Heidegger's interpretative philosophy, allowing a comprehensive search for certain meanings and value in the lived experiences of the respondents. The application of both philosophies provides a more thorough and reliable analysis of respondents' lived experiences (29,30). They are particularly useful in the examination of ambiguous and subjectively sentimental topics (30). In addition, the application of Colaizzi's method (31) was made since it follows both philosophies and it allows the researchers to validate data at the end of the analysis (32). Furthermore, inclusion and exclusion criteria were set to sufficiently identify appropriate sample size at one given time that accommodates both the purpose of the study and the phenomenon.

Subject and study site

Purposive sampling was utilized in the study following Creswell and Clark's journal article (33) which recommends narrow and selective criteria to generate specific findings that can be applied to a wider population. Sample size was estimated considering the study of Creswell (34)

which employed more than 10 respondents on conducting interviews for thematic analyses. This sample estimation is enough to demonstrate patterns and allow easier management of data (35). While there are no guidelines stating the correct number of participants to achieve the credibility of the study (36), the researchers primarily considered sample saturation in generating the sample size. The appropriate sample size of 12 or more was generated following Hennink and Kaiser's paper on data saturation and variability (37). Likewise, this prevents any limitations in data encoding where there are no new codes/themes occur in the data (38). Consequently, only 13 registered Filipino medical technologists in any organizational position with at least three years of experience working in Department of Health, Philippines (DOH)-accredited private hospitals within the Metro Manila, Philippines were recruited. Chosen individuals were not required to be active members of any local or international professional organizations, have post-graduate education nor acquired specialized training. Conversely, medical technologists with less than 3 years of working experience in a DOH-accredited private hospital and other healthcare professionals were excluded in the study. Government HCWs and medical technologists were also excluded. There were no established exclusion criteria set to discriminate the age and gender. The locale of this study was set within the Metro Manila, Philippines only.

Instrumentation and data gathering

The research instrument was fractionalized into the Robotfoto and the aide-memoire in gathering and underpinning the collected data. Informed consents were distributed and collected prior to the participant's enrollment in the study (see [Appendix 1](#)). Robotfoto is a personal data sheet seeking the professional endeavors of each participant. Respondents were asked to fill out the Robotfoto, containing their age, gender, educational qualification, work duration, years of experience, and employment classification (see [Appendix 2](#)). The salary was not included in the questionnaire since the researchers have agreed that this information would not make any difference due to the nature of the question. In general, the salary of a medical technologist in the Philippines is the same regardless of the institution and relatively lower as compared to other HCWs (17). All of the provided basic information including contact details were recorded in line with personal and data privacy to keep utmost confidentiality. Subsequently, the aide-memoire consisted

of open-ended questions and sub-questions apropos of their perception of job satisfaction, relating to each criterion under the central question, "*What is the perceived job satisfaction of Filipino medical technologists?*". Throughout the semi-structured one-time interview process using Google Meet[®], Facebook Messenger, and Zoom. All of the interviews were done in less than two hours and the sessions were recorded for transcribing purposes. Any information that may revealed or led to the identities of the participants and their workplace were excluded. Likewise, statements expressed in Filipino were directly translated to English and reviewed by all the researchers to ensure that the original meaning of the context has not been altered.

The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). The study was approved by the Research Ethics Committee of the Faculty of Pharmacy, University of Santo Tomas, Metro Manila, Philippines (approval No. FOP-ERC-2021-02-211). The participants were informed in writing about the nature and purpose of the study. Interviews were audio-recorded with permission from the respondents following the assurance that all of the information shared will remain confidential. Participants were also informed of their right to non-participation at any point during the conduct of the study without any justification.

Data analysis

Data was transcribed and analyzed through Colaizzi's (31) seven-step systematic process of analysis, involving the cool and warm analyses. Among the methods of phenomenological analyses, Colaizzi's method was chosen since it follows the same philosophies as Husserl' and Heidegger's and incorporates data validation (30). The search for common patterns elicited from specific experiences was validated through consultation with the respondents which is part of this seven-step process (32). Cool analysis was utilized in the process of transcribing interviews to form categories from significant statements, then warm analysis was used for thematizing (39).

The first step involved reading and rereading of the transcribed text for several times to gather the holistic gist for the purpose of attaining the 'global sense' as an aid to the subsequent steps. Then, identifying 'significant statements' through the process of discrimination followed. As this approach became 'discovery-oriented', unexpected significant statements that emerged within this step were noted while keeping an open attitude in treating these

Table 1 Demographic profile of the Filipino medical technology respondents

Demographics	Frequency (%)
Age	
20 to 25 years old	3 (23.08)
26 to 30 years old	3 (23.08)
31 to 35 years old	3 (23.08)
36 to 40 years old	1 (7.69)
41 to 45 years old	1 (7.69)
More than 45 years old	1 (7.69)
Unspecified	1 (7.69)
Gender	
Male	5 (38.46)
Female	8 (61.54)
Marital status	
Single	8 (61.54)
Married	4 (30.77)
Unspecified	1 (7.69)

Unspecified = missing values that correspond to “Do not know” or “Refuse to answer”.

units. Subsequently, the formulation of meanings from the studied ‘significant statements proceeded’. Using the formulated meanings, subthemes were organized by correlating the formulated clusters of themes and central themes based on their commonality and relationship to each other. The establishment of a fundamental structure of the phenomenon followed through the removal of redundant, misused, and irrelevant information and the creation of a representative structure describing the relationship between the phenomenon and the generated themes. Finally, participant validation was done to establish evidence of trustworthiness. This was performed following the production of the extracted significant statements, its respective formulated meanings, thematic clusters, and the overall central themes to institute evidence of trustworthiness (40). Collected data were compiled into files and documents were sent to the participants via email to validate the content and authenticity (see [Appendix 3](#)), allowing the validation of the accuracy of the findings and providing necessary comments to further strengthen the validity of the study (41). Moreover, this ensures the reliability and unbiased nature of the analyzed data.

Results

Respondents’ profile

The demographics of the respondents (*Table 1*) consisted of young adults (69.24%) bracketing from 20 to 35 years of age; the rest of the age brackets were scattered among middle age groups (15.38%) and senior age groups (7.69%). The ratio of male to female participants can be equated to 5:8, while the random assortment of single to married participants can be proportioned into 8:4 (with only one participant who did not disclose his/her marital status), supporting the familial goals and sentiments of some selected participants.

The employment record of the participants validates their credibility in participating (*Table 2*). The minimum work experience required falls under the three to five years bracket with a 38.46% occurrence, followed by six to eight years (30.77%), 12 or more years (23.08%), and 9 to 11 years (7.69%); this set of roster signifies that they met the basic criteria for the study. Along with this, 84.62% are employed and have a minimum undergraduate degree of medical technology. On another note, only 30.77% of participants have worked in only one laboratory or hospital, supporting the various literature stating the unsatisfactory attitude of workers towards their jobs. In addition, only 46.15% of respondents work for the basic number of hours per day; 15.38% work for nine to 12 hours and 23.08% work overtime. Although there is founded literature regarding the relation between promotion and satisfaction, the 5:5 ratio between junior medical technologists and senior medical technologists are unfounded due to the 30.77% workers with shorter duration work experiences.

Findings of the central question

The Fire Triangle of Job Satisfaction

‘The Fire Triangle of Job Satisfaction’ is a simulacrum generated from the syntheses made following the analysis of the lived experiences of Filipino medical technology respondents. It represents the three main concepts that emerged in the study that dictate the degree of satisfaction HCWs express toward their jobs, namely: the Force of Purpose, the Force of Pursuit, and the Force of People. This was used to depict how the aforementioned forces are needed to preserve job satisfaction. Similar to the fire triangle, if one of these forces were to deteriorate, the ‘fire’, that is job satisfaction, would eventually die out as well (*Figure 1*).

Table 2 Employment records of the Filipino medical technology respondents

Employment records	Frequency (%)
Current work status	
Employed	11 (84.62)
Unemployed	1 (7.69)
Unspecified	1 (7.69)
Years of work experience	
3 to 5 years	5 (38.46)
6 to 8 years	4 (30.77)
9 to 11 years	1 (7.69)
12 or more years	3 (23.08)
Number of hospital/laboratories worked for	
Less than 2	4 (30.77)
2 to 3	4 (30.77)
4 to 6	1 (7.69)
7 to 9	1 (7.69)
More than 10	0 (0)
Unspecified	3 (23.08)
Educational attainment	
Undergraduate	11 (84.62)
Graduate	2 (15.38)
Position/rank	
Junior medical technologist	5 (38.46)
Senior medical technologist	5 (38.46)
Unspecified	3 (23.08)
Work hours	
6 to 8 hours	6 (46.15)
9 to 12 hours	2 (15.38)
Overtime (>12 hours)	3 (23.08)
Unspecified	2 (15.38)

Unspecified = missing values that correspond to “Do not know” or “Refuse to answer”.

Force of Purpose: a reason for professional existence

The theme ‘Purpose’ revealed the participants’ reasons for becoming HCWs and exemplifying their core intents. With this, they believe that their undying love for their work, their service towards their patients, their ability to aid in diagnosis and healthcare, and their freedom to exercise their

**Figure 1** Simulacrum: ‘The Fire Triangle of Job Satisfaction’.

professional knowledge and skills are the cornerstones to continue working within the field.

Most respondents shared that the root of their job satisfaction is their inclination towards their career. The faculty of passion includes their unconditional affection for their vocation amidst persistent moments of hardships. Ultimately, the respondents find joy in performing the work they love; thus, they experience dissatisfaction when their work becomes routine as verbalized:

“When you are exhausted, ... That’s when I think of saying, ‘I wish I didn’t pursue Medical Technology’, ... sometimes when I am tired, I don’t want to do it anymore, but at the end of the day, you will still look for it (being a med tech). So, the only thing I can say is: this is really for me. This is half of my life” (R3).

“If you love what you do, you will still be satisfied no matter how difficult it gets... Working as a med tech: it is fun, it is fulfilling, as long as you really love what you are doing. However, it is exhausting” (R6).

“If you do not love your work..., then there is no reason for staying in that particular workplace” (R9).

“If it becomes a routine, that’s when your job satisfaction goes down” (R13).

Almost all the respondents have elaborated experiences that revealed their altruistic character as healthcare professionals through their act of service. They find fulfillment in their involvement in helping their patients recover, sharing their professional knowledge, serving their fellow countrymen, and aiding in patient diagnosis:

“When you are able to help patients... there are times when we interact with patients, and you will see them

improving” (R10).

“The Philippines needs us... It’s like you will forget the compensation and the risk factors because the Philippines is short of healthcare workers... so that urges me to still work even though I am immunocompromised” (R5).

“More Filipinos need us medical technologists, or not only medical technologists but when it comes to the healthcare industry, because especially now in the pandemic, we are in need of more healthcare workers” (R2).

“You know you’re helping your fellow Filipinos... It is satisfying because in your own way, you know that in the way of your work, you are able to help. For example, now, during this pandemic, we perform the tests” (R3).

“It gets fulfilling when you’re able to help society because you’re a public servant... you are part of those who help patients recover” (R6).

“By doing your job, you are able to help doctors diagnose their diseases. Without us, doctors cannot make diagnosis for patients” (R6).

Ultimately, fulfillment is also derived in the execution of their lifelong journey of learning, thus giving life to the context of practice. This gives the respondents the satisfaction of knowing that the hard work they exerted into mastering various principles are bound to be applied in their practice and other fields. These are evident in these statements:

“I can’t grasp lectures very much, so I appreciate it more if I can apply it. There’s really a difference between lectures and application” (R10).

“I can just say that everything I’ve learned in the hospital, I can apply it in the future” (R11).

Force of Pursuit: a reason for betterment

The theme ‘Pursuit’ emerged from desiring needs associated with receiving certain rewards and benefits, procuring a certain amount of remuneration, extending one’s knowledge, and seizing a better future. The findings revealed that respondents seek to attain a certain level of privilege where their salary compensates for their workload. However, fringe benefits may be used as alternatives when salary cannot be equitable as shared by the respondents:

“For retention, employees would like to stay in the job if they are compensated well—when it comes to pay... So I think by doing that, wherein an employee would feel that he or she is important, and what he or she is doing is very helpful to the institution, and they are given good compensations, I think they would still stay” (R2).

“Job satisfaction, working here in the Philippines, isn’t

that satisfactory because money-wise and workload, it’s not enough..., if I can’t satisfy my financial needs, my satisfaction as a working med tech here in the Philippines would be low” (R6).

“We have medicine allowance and hazard pay. If you get sick or if your dependents get sick, they also have benefits, so it’s not a loss on your part despite the low salary as compared to abroad” (R7).

“Free hospitalizations but that is already a big deal... The impact of benefit packages on employees is also big. That’s why they don’t want to leave” (R10).

The respondents also desire to pursue professional growth in their field through attending educational courses organized or funded by their respective institutions. Herewith, job satisfaction was equated to learning more about their field and other related areas. Moreover, the participants considered criticisms and negative feedback as tremendously valuable as they use these sentiments to further enhance themselves. This implies that respondents refuse to stagnate their knowledge, skills, and growth. As verbalized by the respondents:

“If I want to attend seminars and conventions to renew my license, it is supported by the institution. If I ask for anything that will improve the services of the laboratory, they are willing to give it” (R1).

“Job satisfaction is when you get the training, the support, and the professional development in the workplace. As a medical technologist, it’s nice to know more, especially the things that you didn’t know before” (R12).

“I am not confining nor limiting myself, reasoning that: ‘This is all I can and will do’. or ‘I am fine with my daily routine of extracting blood’. So, if I encounter something like ‘Oh, this is challenging’, I would go for it because this is for my future” (R4).

“Sometimes, there are patients who expect a certain level of service from you, yet you fall short, but the one thing you have to do when it comes to that is improve” (R2).

“So if there are criticisms, no matter how painful, you have to accept it and change for the better” (R3).

“Negative feedback builds you... it will be your stepping stone to remind you of your mistakes and to remember to improve on it” (R5).

Some respondents conveyed their ideas on professional growth as promotion and career role change. They coined the term ‘level up’ as the concept of how their quest for knowledge is manifested in their advancement in social standing or in theoretical and practical competency, as expressed:

“If you are the type of worker seen with potential, that is the time you can say you are able to advance into other levels. I was able to bring my career as a medical technologist to a higher level” (R2).

“Professional growth can be seen as: you, as a med tech, having the desire to level up” (R3).

“If I were given an opportunity to work in the field of research, I would grab it so that I may improve on myself. Aside from being a medical technologist, there are other fields we can explore. This is not only limited in the hospital laboratory setting; you can venture into cosmetics, stem cells, genomes, genetics, forensics, so on... I dream of becoming a scientist, so I must further my studies” (R10).

“Of course, your knowledge is enhanced... It’s like a different level in being a medical technologist” (R11).

Due to lack of opportunities, the respondents seek to acquire experiences in the Philippines for pursuing work abroad. Their experiences have been deemed as steppingstones to a better future. They dream of working in countries where they will be better appreciated and compensated in their practice. As shared by the respondents:

“A lot of medical professionals apply in other countries because the biggest factor is the salary here in the Philippines. What happens is the Philippines becomes a training ground for medical professions... But if you know or talk to a lot of people, you will get depressed, especially if you find out how much other medical technologists earn abroad and how they are treated. In other countries, we are treated as scientists” (R6).

“... as a med tech in the Philippines, you are not well-compensated. Everyone whom you will talk to only work here for the experience, then they will apply abroad and work there because you are more appreciated and better compensated in other countries unlike in the Philippines” (R8).

“I’m not optimistic. If you’re planning to be a med tech here in the Philippines for the rest of your life, I wouldn’t recommend that... You either go to another country or go to med school” (R13).

Force of People: a reason to belong

The theme ‘People’ manifests the desire of HCWs for an appreciative and supportive environment. This encompasses the value of societal and patient recognition and authentic relationships, fostering care and enjoyment inside the workplace. A sense of fulfillment arises from subtle recognition received through simple remarks, acknowledgement, and tokens of appreciations from by patients, as stated by the respondents:

“When patients come back to you and say, ‘Thank you po!’, especially this time of pandemic when med techs are working as frontliners” (R3).

“You’re just a nobody to them...but in reality, we’re the unsung heroes... they don’t see the med techs fighting with the viruses” (R5).

“During blood extraction when patients tell you, ‘Ma’am my blood is hard to extract’. then you immediately extracted their blood in one shot” (R11).

Maintaining good relationships inside the workplace supports a good work environment and allows better performance, thereby impacting job satisfaction. Respondents primarily described relationships to be like family, thus increasing their job retention as seen in the following responses:

“I can say I am satisfied with my work when I become friends with them... Since every time I need something, or every time I am in need, ... They are there. They don’t think twice about helping me” (R1).

“The work environment becomes lighter, where everyone is being helpful... Generally, your workplace is nice, you’ll be more productive and more focused...” (R2).

“We act as a family here. Our chief med tech is like our mom, she shares everything she knows... So everything is developed... the skills in the laboratory, and even decision making” (R5).

“I think another reason for job satisfaction is if your colleagues are okay... You won’t think of leaving your job. But if they’re not okay, no matter how high your salary is, you’ll still leave” (R12).

Teamwork is proven to increase job satisfaction by alleviating work burdens by acting as a buffer between work-related stress and burnout that result in work exhaustion and depersonalization. While this is true for most medical professions, the conducted study has shown that teamwork as a factor affecting work satisfaction is not commonly shared among HCWs, as articulated by the respondents:

“We work at our own discretion. No one will mind you” (R4).

“There are moments that I do not want to be in a group or prefer to be surrounded by either one or two people because frequently, the more people that are working in the laboratory, the higher the incidence of having disorderliness in the workplace” (R6).

Discussion

The findings of this study have found the emergence

of three major themes—forces of purpose, pursuit, and people in the perceived job satisfaction of the participants. Each theme reveals the lived experiences of medical technologists working in the Philippines. As reflected in their responses, the findings suggest that these areas may aid in the improvement of the quality of Filipino workplace, fair and relevant compensation, and building a harmonious and collaborative environment among health allied professionals.

Many Filipino HCWs including medical technologists and nurses were exposed to heavy workloads and understaffing amidst the pandemic (15). As a result, it created a stressful environment, and some experienced burnout (42). The findings of this study have revealed that despite these stressful and chaotic working conditions, Filipino medical technology respondents have demonstrated harmonious passion and sense of purpose related to job fulfillment. It roots in personal internalizations which integrate activities into identity and purpose (43). Furthermore, it provides an insight that HCWs denote a lack of passion with lower job retention and satisfaction. The notion of 'routinary work' was mentioned as the loss of passion when boredom conquers the pleasantness of the job (44). Likewise, participants view their passion as their driving force to achieve job satisfaction and success—preventing career burnout (43). Aside from passion, higher levels of job satisfaction among knowledge workers are also attained when HCWs are challenged in their problem-solving, skill variety, and specialization (45). The majority of the responses revealed that the application of their abilities in the medical technology practice, verification of the automated results through manual testing, and consultation with other laboratory personnel, amplify their job satisfaction. Consequently, HCWs may experience higher job satisfaction when work-related learnings can be applied (46).

Participants also mentioned that providing quality patient care also contributes to their sense of fulfillment. Caring for and being involved in the patient's clinical conditions proved to be a major influence on the job satisfaction of HCWs (47). Especially during this pandemic, the greater demand for more HCWs also served as their reason for continuing their service. However, it should be noted that working locally in the Philippines and abroad are two separate concepts. The respondents may have agreed that working here would entail a low salary, heavy workload, underpaid benefits, and even delayed compensation as compared to the benefits attained from working overseas (15). Above all,

the respondents have shared their willingness to serve the country despite these consequences—a demonstration of a true sense of nationalism.

The study participants also highlighted the essence of reasonable compensation, career opportunities, and professional growth. Most respondents were dissatisfied with their financial and non-financial compensations, hindering them from attaining the quality of life that they want to achieve. Ultimately, low salaries and lack of financial compensation led to low satisfaction (9,48). As reflected in the findings, respondents stated that tolerance to these low and delayed compensations can only be achieved only if they will be properly compensated through fringe benefits—medical assistance, meal allowances, transportations subsidy, etc. Likewise, through the provision of these fringe benefits, a greater sense of commitment among employees could be derived (49) and thus, could increase the job satisfaction of the employees (50). An emphasis must be given to these financial compensations as they were deemed relevant to intrinsic rewards as salary represents respect and value for one's service, a higher salary equates to being highly valued (51). In terms of professional growth, participants view this as a productive endeavor in career promotions or to 'level up' their professional standing as termed by some participants. Continuing professional development (CPD) courses, educational grants, feedback and criticism, job rotations, and promotional opportunities are some of the ways in achieving professional growth. These training opportunities are important factors that contribute to job satisfaction (52). However, in the Philippine setting, this training is not offered for free which also adds to their financial burden and hinders opportunity among the HCWs (53). As a result, this kind of working condition hinders individuals from fulfilling their needs and cultivates a working environment that leads to low job satisfaction. Likewise, many HCWs are now considering migration not only to have better compensation and working conditions but also to achieve professional growth without sacrificing their own funds (54). The same standpoint was also given by the respondents as they seek to pursue their profession in higher-earning countries that provide better working conditions. While some might consider this as a professional migration, it is inevitable that this will affect the supply of HCWs serving the country. With this, the Philippines is experiencing a brain drain (55) which is a major public health issue where skilled professionals emigrate to attain a better quality of life (56).

Interventions in providing the best compensation,

educational efforts, research opportunities, prioritizing and achieving Sustainable Development Goals (SDGs) for Filipino HCWs, and policies protecting their safety and security are some of the actions needed to be taken in order to combat the brain drain phenomenon (53,57). Some literature would also argue that higher salaries no longer suffice in retaining workers and therefore, government sectors must prioritize policies and/or people (56). The findings of this study suggest that recognition, good working relationships, and camaraderie may aid in improving the quality of the Filipino working environment.

HCWs revealed that they receive recognition from two sources: their patients and society. Patient recognition plays a huge factor in job satisfaction as it reinforces good service and work performance. A patient's expression of appreciation is common after experiencing good treatment, sequentially boosting the staff's self-esteem, and reducing burnout (58). "Thank you" letters indicate achievement, resulting in a sense of honor, appreciation, and satisfaction (59). Meanwhile, Filipino HCWs shared their sentiments of feeling underappreciated as compared to other HCWs from other countries, and it negatively affects their job satisfaction. It was proven that 'unfair treatment' is one of the greatest demotivating factors affecting job fulfillment (60). Similarly, the need for government support on motivational considerations, such as recognition and growth, are recommended for the development of healthcare outcomes (61). Based on the findings of this study, the respondents expressed demotivation from the lack of Philippine government support represented by the absence of a budget for primary healthcare and the updated legislature for HCW benefits and CPD policies. In terms of relationships, respondents mentioned that they are willing to make necessary adjustments to cultivate an environment that could bring out the best in them. Likewise, existing research has shown that relationships may reduce stress leading to underperformance (62). Having strong, harmonious, and familial relationships with colleagues also provided an additional reason for HCWs to stay in their jobs. Otherwise, any unhealthy relationships in the workplace will cause employees to leave (63). Lastly, the findings of this study suggest that teamwork affecting job satisfaction is unestablished among HCWs due to the nature of the profession. To support this, collaboration must be restricted in certain professions as this promotes de-synchronicity, resulting in impaired decision-making and co-responsibility (64). To wit, the shortcomings brought about by flawed collaboration are compensated by electronic

transformation. This is attributed to the advancement of technology, leading to increased use of automated machines and a decreased need for manual labor, thereby reducing the need for teamwork (65).

Conclusions

As this study sought to answer the central research question: 'What is the perceived job satisfaction of HCWs?' the common participant experiences were categorized into the three P's, namely Purpose, Pursuit, and People to identify how the respondents defined job satisfaction. Factors from common experiences, expectations, and circumstances were categorized under each theme, identifying the factors associated with their job satisfaction.

The categories under the theme, *Purpose*, namely: passion, service, and practice, are acknowledged as intrinsic factors affecting job satisfaction. Experiences relative to passion showcased the respondents' powerful inclination to work, promoting happiness, contentment, fulfillment, and well-being. Service provides them with the opportunity to provide the best patient care that they can offer. Also, practice equips them with the freedom to practice the knowledge they have acquired throughout the years. Moreover, the findings prove that HCWs are satisfied with their work by experiencing consistent spurs of innate motivation in their daily activities.

The theme *Pursuit* includes the discipline privileges, professional growth, and opportunity and focuses on the personal goals of the respondents. Privilege manifested poorly and HCWs were under compensated in services they rendered, thus failing to satisfy their needs and their job satisfaction. As the respondents were willing to compromise their desires for higher salary, findings suggest that fringe benefits can serve as an alternative to elevate job satisfaction and retention. Professional growth is expressed through deliberate investment to broaden their intellectual and practical capacities and their desire to learn more and progress in their career status. Opportunity is exhibited as most seek to practice the profession in other countries that offer higher salaries, better benefits, and greater professional opportunities, thereby emphasizing on the Philippine brain drain.

The theme *People* recognizes the role of HCWs to build healthy interactions within their work environment. This relates to the feeling of fulfillment rooted on patient and collegial exchanges. Recognition from patient and societal appreciation remains indispensable in promoting satisfaction

as it signifies good service and work performance. Relationships demonstrated through the strong bonds with their colleagues allow them to experience job satisfaction and retention, some even more so than their salaries.

Ultimately, this study highlights the unsung heroes of this pandemic who are currently engaged in the medical frontline, depicting job demands and satiety as crucial to their continuing service to the country. It is evident that the medical technology practice in the Philippines is both a personal and professional challenge especially during the pandemic. It is important to mitigate these problems in order to improve the quality of life and professional practice of the Filipino HCWs in the Philippines. Holistic programs that consider the said factors may be implemented accordingly to advocate better working conditions—increased salary, better benefits, and professional support. Future endeavors following this study may start conducting on-site interviews in an extended duration to accommodate non-verbal communications and enable a more comprehensive method of data validation.

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Footnote

Reporting Checklist: The authors have completed the SURGE reporting checklist. Available at <https://jphe.amegroups.com/article/view/10.21037/jphe-22-104/rc>

Data Sharing Statement: Available at <https://jphe.amegroups.com/article/view/10.21037/jphe-22-104/dss>

Peer Review File: Available at <https://jphe.amegroups.com/article/view/10.21037/jphe-22-104/prf>

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at <https://jphe.amegroups.com/article/view/10.21037/jphe-22-104/coif>). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). The study was approved by the

Research Ethics Committee of the Faculty of Pharmacy, University of Santo Tomas, Metro Manila, Philippines (approval No. FOP-ERC-2021-02-211). The participants were informed in writing about the nature and purpose of the study. Interviews were audio-recorded with permission from the respondents following the assurance that all of the information shared will remain confidential. Participants were also informed of their right to non-participation at any point during the conduct of the study without any justification.

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Appendix 1 Informed consent

**University of Santo Tomas
Faculty of Pharmacy
Department of Medical Technology**

**APPENDIX I
INFORMED CONSENT**

Dear Participant,

Good day! We are a group of researchers from the University of Santo Tomas administering a study entitled, **“A phenomenological study of Filipino Medical Technologists’ forces for perceived job satisfaction amidst COVID-19 pandemic in the Philippines”** under the supervision of Mary Rose Pingol.

This form serves to provide the important details of our study necessary for your decision in participating in the study. Should you agree to participate, kindly refer to this document to know your rights and responsibilities as a respondent. Attached to this form is the consent form that must be filled out in compliance with the study.

PURPOSE AND OBJECTIVES OF THE STUDY

The primary objective of this study is to determine how medical technologists perceive job satisfaction and how it is affected by their experiences concerning different factors specified in the study.

PROCEDURE

Participants are selected based on the provided criteria of the study. According to an agreed schedule, an interview will be conducted. A total of 13 participants are required for this study. The interview is expected to last for approximately an hour. During the interview, turning your camera on is highly encouraged to keep the interview interactive, but it is not required. The questions are open-ended and designed to gather information necessary in determining your job satisfaction as a medical technologist, and may therefore include sensitive topics. Your name and workplace location, however, will not be included in the discussion to maintain confidentiality. You may answer questions in English or in Filipino, whichever language you are most comfortable with, and if you have experiences from different hospitals, it would be much appreciated to discuss your experiences collectively instead of focusing on only one hospital. The interview will be recorded throughout, and this will be transcribed for analyzing and determining the patterns and similarities. Information may be omitted accordingly upon request and rest assured that the information gathered will be solely used for the purpose of the research. From the data gathered, themes will be formed, and participants will be consulted to ensure that the interpretations are in line with the answers of the participants. The results and findings of the study will also be made available for the participants.

VOLUNTARINESS

University of Santo Tomas
Faculty of Pharmacy
Department of Medical Technology

Participating in this study is not mandatory and is completely voluntary. You may choose not to participate, and you may also withdraw your participation from the study. When any information that may influence your participation in any way becomes available, rest assured that the researchers will inform you.

COMPENSATION

No financial expense will be incurred by participating in the study, nor will there be any form of compensation.

BENEFITS AND RISKS

The study serves as the first to understand and analyze the job satisfaction of medical technologists in the Philippines. Your participation will give light to the field of medical technology and will raise awareness on the current working conditions of medical technologists. This would allow institutions to re-assess and modify the work environment for further improvements.

CONFIDENTIALITY

All of the information that will be used in this study will be consented upon by the participant. No information will be used without being consented upon in strong adherence to the Republic Act No. 10173 - Data Privacy Act of 2012, “an act protecting individual personal information in information and communications systems in the government and the private sector, creating for this purpose a national privacy commission, and for other purposes.” Following the act, “The personal information controller shall implement reasonable and appropriate measures to protect personal information against natural dangers such as accidental loss or destruction, and human dangers such as unlawful access, fraudulent misuse, unlawful destruction, alteration and contamination. “To ensure the protection and job security of the participants, individual names as well as location of the workplace will be excluded from the discussion. To ensure the protection and job security of the participants, individual names as well as location of the workplace will be excluded from the discussion. Any information that may reveal or lead to the identities of the participants and their workplace will also be excluded. Furthermore, participants may request to view their records upon request. The information shared will be primarily recorded, transcribed, and thoroughly analyzed. This study may be used for further research and may be published

If you have any concern, feel free to contact Francesca Mae O. Ruanto at 09176888781 or francesca.mae.ruanto.pharma@ust.edu.ph. Thank you for taking interest and we are sincerely looking forward to conducting this research with you.

**University of Santo Tomas
Faculty of Pharmacy
Department of Medical Technology**

Sincerely,

CANO, Earl Adriane A.

OLANO, Maria Louisa R.

RUANTO, Francesca Mae O.

ONG, Xanthe Vienne G.

MEDEL, Maria Angelica T.

NERY, Justine Jayne D.M.

PEL, Marice Angeli B.

SANTIAGO, Benjamin Jeremiah S.

RELACION, Patrick R.

PINGOL, Mary Rose V.

University of Santo Tomas
Faculty of Pharmacy
Department of Medical Technology

CONSENT FORM PROPER

“A phenomenological study of Filipino Medical Technologists’ forces for perceived job satisfaction amidst COVID-19 pandemic in the Philippines”

I, _____, am volunteering to take part in this study and to give my consent to the researchers: **CANO, E.A., OLANO, M. L. R., RUANTO, F. M. O., ONG, X. V. G., MEDEL, M. A. T., NERY, J. J. D., PEL, M. A. B., SANTIAGO, B. J. S., RELACION, P. R., and PINGOL, M. R. V.** to gather information that is necessary and relevant to the study. I am fully aware of the purpose, objectives, and significance of the study, and I am informed that I may withdraw my cooperation whenever I wish to. As a participant, I am aware that it is my responsibility to cooperate with the researchers with the best of my abilities.

Participant’s Signature over Printed Name
Signature

Date and Time of

Discussant’s Signature over Printed Name
Signature

Date and Time of

Appendix 2 Interview material

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APPENDIX II
QUESTIONNAIRE

Robotfoto:

1. Demographics

1.1. Age

- 20 to 25 years old
- 26 to 30 years old
- 31 to 35 years old
- 36 to 40 years old
- 41 to 45 years old
- 46 to 50 years old
- 51 to 55 years old
- 56 to 60 years old
- More than 60 years old

1.2. Gender

- Male
- Female

1.3. Marital status

- Single
- Married

1.4. Educational Attainment

- Graduate
Please specify course: _____
- Postgraduate
Please specify course: _____

2. Contact Details

- 2.1. Email address: _____
- 2.2. Contact number: _____

Employment record

2.3. Current work status

- Employed
- Unemployed: _ years

2.4. Years of work experience

- 3 to 5 years
- 6 to 8 years
- 9 to 11 years
- 12 or more years

2.5. Number of hospital/laboratory worked for

- Less than 2
- 2 to 3
- 4 to 6
- 7 to 9
- More than 10

2.6. Position/Rank

- Junior Medical Technologist
- Senior Medical Technologist

2.2 Works hours

- 6 -8 hours/day
- 9-12 hours/day
- Overtime:

Please specify # of hrs:

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INTERVIEW GUIDE QUESTIONS

Research Questions	Guide Questions
<p>How do Filipino medical technologists define job satisfaction?</p>	<p>1. How would you define job satisfaction?</p> <p>a. As a Medical Technologist, how can you say that you are satisfied with your job?</p> <p style="padding-left: 20px;">i. Please share an example of when this was represented in your job?</p> <p style="padding-left: 20px;">ii. How would you describe this experience as a medical technologist?</p> <p>2. Can you state an instance wherein working as a Filipino medical technologist served personally rewarding?</p> <p>CONCLUDING QUESTIONS</p> <p>2. Considering your experiences in working as a medical technologist, how optimistic do you feel about your future in this career?</p> <p>3. Kindly explain how this is affected by job satisfaction.</p>
<p>What are the factors associated with the job satisfaction of Filipino medical technologists?</p>	<p>1. Work environment</p> <p>1.1. What do you think are the factors that make you stay in your current job?</p> <p>1.2. Discuss some instances wherein your clinical laboratory provided a program for the retention of employees.</p> <p>1.3. What is the role of work related value on job satisfaction: The above mentioned pertains to the work-related values like work ethics, respect for time, discrimination, bullying, and relationship (inter and intra), etc.</p> <p style="padding-left: 20px;">i. Based on the answers in 1.3 (work- related values), which affects your job satisfaction?</p> <p>2. Motivation</p> <p>2.1. How does having determination help you achieve your career goals?</p> <p>2.2. What do you think are the most essential benefits provided by the institution that made you stay in the company?</p>

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	<p>2.3. Share your thoughts and feelings upon receiving feedback and recognition from your colleagues and superiors.</p> <p>2.4. In what ways have you felt appreciated by:</p> <ol style="list-style-type: none">i. your colleagues?ii. the institution? <p>2.5. How is work performance supervised?</p> <ol style="list-style-type: none">i. How are concerns regarding work, colleagues, and supervisors addressed? <p>2.6. How are professional and personal growth assured in your job as a medical technologist?</p> <p>2.7. What is/are your experience/s regarding how the institution ensures your job security?</p> <p>3. Teamwork</p> <p>3.1. How would you describe the conduct of collaboration in your department?</p> <p>3.2. What experiences can you share about your work's flow command?</p> <p>3.3. In your department, do you think that the team's objectives are clearly understood by all members?</p> <p>3.4. Describe the nature of your relationship with your direct supervisor and colleagues and how this affects your work synergy.</p> <p>3.5. How does your experience of working as a group affect your overall feeling towards your job?</p> <p>3.6. Explain how unity amongst your co-workers contributes to turning your encounters into successes.</p> <p>3.7. Have you experienced an instance when failure in collaboration led to a detrimental impact on the entire team?</p> <p>3.8. Kindly share your experiences and thoughts on witnessing how your company manages diverse cultures in your workplace.</p> <p>3.9. In your opinion, how can your company make use of your organizational relationships to become more successful and efficient?</p>
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Appendix 3 Validation document

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APPENDIX III – VALIDATION DOCUMENT

April 19, 2021

To whom it may concern,

Greetings in the name of St. Thomas Aquinas!

We are the group of researchers from UST who have recently interviewed you, along with 12 other medical technologists, for our study. It is with grateful hearts that we are informing you that we have already finished our data analysis.

As part of our research process, we have to validate our analysis with you to ensure that our interpretations of your experiences are in line with what you have shared with us during your interview. By finding the similarities of all of your answers, we present to you our research questions and our findings below:

Research question 1: How do Filipino medical technologists define job satisfaction?

We have found that most, if not all, define job satisfaction as PURPOSE, PURSUIT, and PEOPLE.

1. PURPOSE encompasses passion, service, practice
 - a. Finding fulfillment in one's inherent love for the profession of Medical Technology
2. PURSUIT encompasses opportunity, privilege, and professional growth
 - a. Finding satisfaction in fulfilling personal and professional needs and desires
3. PEOPLE encompasses recognition and relationship
 - a. Finding genuine happiness in being acknowledged and having harmonious relationships with people in work

What are the factors associated with the job satisfaction of Filipino medical technologists? The following are the common factors that affect the participants:

1. PASSION: finding fulfillment in loving one's occupation regardless of how stressful or difficult it is
2. SERVICE: finding satisfaction in being able to help others (e.g. being able to share knowledge with colleagues, to help patients recover, to serve our fellow countrymen)
3. PRACTICE: being able to apply and practice theoretical knowledge in the field of Medical Technology
4. OPPORTUNITY: seeking other opportunities for a better future (e.g. working abroad for stability)
5. PRIVILEGE: importance of benefits, compensation, wages, and medical assistance
6. PROFESSIONAL GROWTH: importance of seminars, trainings, and conventions
7. RECOGNITION: appreciation from patients, colleagues, and the institution
8. RELATIONSHIP: finding joy in working with others without conflict and having a light environment that cultivates a happy workspace

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As we took into account the responses of 13 respondents, all of these may not generally apply to you. **However, most, if not all, must be relatable to you.**

If you have any concerns or contradictions with the findings that we have presented, kindly feel free to message us or call us (0995-9563-011). **Shall you choose to not reply to this message, we are compelled to assume that you have agreed with the findings of this study, so long as we have confirmation of your seeing of this document.**

We sincerely thank you for participating in this study. Mabuhay po kayo!

Regards,

Cano et al.