# GUIMARAS STATE COLLEGE EMPLOYEES' BODY MASS INDEX STATUS: BASIS FOR THE DEVELOPMENT OF EMPLOYEES WELLNESS PROGRAM

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## ABSTRACT

The body mass (weight) and the height of an individual are the attributes used to derive Body Mass Index (BMI) or Quetelet Index. The body mass divided by square of the body height gives BMI and expressed in unites kg/m2, mass is in kilograms and height is in meters. BMI categorizes the person as underweight, normal, overweight or obese. Thus, this descriptive study was conducted to determine the body mass index status of employees of Guimaras State College. The respondents were the 114 faculty and staff. The height and weight of the respondents were taken using a tape measure and weighing sale to determine the body mass index status. Personal Data Sheet was used as another option to get the data due to the unavailability of respondents during the actual measurement of their height and weight. Statistical tools used were frequency, percentage distribution and weighted mean. Results revealed that in Academic Year 2017-2018, there were more female faculties and staffs that were tenured compared to male. Majority of the faculty were old, have permanent job specialize in teaching Filipino and English language with teaching load below 24 units. As to the profile of staff, majority of them were young and employed as job order. Furthermore, its good to note that the young permanent female faculties were healthy.

**Keywords**: Body Mass Index, faculty, staff, GSC

## INTRODUCTION

### Background of the Study

Body size does really matter in this modern time. It is now the basis of beauty and personal and professional satisfaction. A notable amount of fats present in the body makes most of us go wild. This causes us to rush to the gym, trim our dietary allowance, ingesting bitter-tasted slimming drugs, and even undergoing costly and excruciating surgical operations. Excessive fats in the arms, abdomen, and thighs are indicators of overweight and obesity.

Body mass index (BMI) has been considered to be an acceptable proxy for body fatness. It is defined as a person's weight in kilograms over the square of his height in meters. This has been directly related to health risks and death rates in many populations. BMI can be used to screen for weight categories that may lead to health problems but it is not diagnostic of the body fatness or health of an individual. As BMI increased, health status decreased significantly (and to a clinically relevant degree) for respondents categorized as obese compared with normal weight (Di Bonaventura, 2015).

On the other hand, body fatness affects the job performance of an individual. Excess fat in terms of additional weight increases the energy cost of the activity. A direct negative relationship was found between added weight and decreased performance (Willford, 1998). Gates, et. al. (2008) believed that obesity has been found to reduce the quality of life for both men and women. With this, employers are struggling with increasing costs related to health care and absenteeism. Moreover, excess weight has a great impact on the health and quality of life of individuals (Bener, 2006).

BMI profile and prevalence of overweight and obesity differs between occupations and sectors. Despite the differences are explained partly by socio-demographic factors, based on a given distribution of age, sex, and education within each occupational group and sector, the occupational group- and sectorspecific strategies to prevent and reduce overweight are recommended (Proper, 2010).

Among men, the relationship between obesity and work limitations was not statistically significant. Obesity appears to result in future productivity losses through reduced workforce participation and increased work limitations. These findings have important implications in the U.S., which is currently experiencing a rise in the prevalence of obesity (Tunceli, 2006).

The aforementioned realities can be resolved through a faculty wellness program. In higher education, employee wellness programming is not always prevalent. However, tertiary academic institutions are often better positioned to offer wellness programming to faculty and staff (Hill & Korolkova, 2014).With these, the study intended to identify the body mass index status of the Guimaras State College faculty and staff.

**Statement of the Problem**

This study aimed at identifying the body mass index status of the Guimaras State College faculty and staff. Specifically, this study sought answers to the following queries: (1) what is the profile of the faculty in terms of sex, age, employment status, specialization, and number of teaching load, (2) what is the profile of the staff in terms of sex, age, and employment status, and (3) what is the body mass index status of the faculty and staff when grouped according to profile and taken as a whole.

## METHODOLOGY

This descriptive study aimed to identify the body mass index status of the Guimaras State College faculty and staff. The respondents of the study were the 114 faculty and staff of Guimaras State College and they were chosen using the convenient sampling. Out of this total number of respondents, 77were faculty and 37 were staffs. To determine the body mass index status, the height and weight of the respondents were taken using a tape measure weighing scale. The study started when permission to conduct the study was granted to the researchers. Then, a complete list of faculty and staff was taken from the Human Resource Management Office. The researchers then took personally their height and weight. Personal Data Sheet was used as another option to get the data due to the unavailability of respondents during the actual measurement of their height and weight.

To determine the profile of the faculty in terms of sex, age, employment status, specialization, and number of teaching load; frequency and percentage distribution were used. On the other hand, to determine the profile of the staff in terms of sex, age, and employment status; frequency and percentage distribution were also used. To determine the body mass index status of the faculty and staff when grouped according to profile and taken as a whole; weighted mean was utilized.

## RESULTS AND DISCUSSION

### Demographic Profile

Table 1 presented the demographic profile of the faculty. There were 36 males (46.75%) and 41 females (53.25%). In terms of the age, 37 (48.05%) were 43 years old and below and the remaining 40 (51.95%) were above 43 years old. 47 (61.04%) of them were permanent faculty and 30 (38.96%) were contractual teachers.

Data in Table 2 presents the faculty profile according to their specialization. 14 (18.18%) from Language-both English and Filipino; 10 (12.99%) from Social Sciences; 9 (11.69%) from Computer and Information Technology; 7 (9.09%) from Mathematics; 7 (9.09%) from Industrial Technology; 6 (7.79%) from Natural and Physical Sciences; 5 (6.49%) from Hospitality Management, Foods and Home Economics; 5 (6.49%) from other fields; 3 (3.90%) from Business and Management; 4 (5.19%) from Agriculture; 3 (3.90%) from Physical Education; 2 (2.60%) from Criminology; 1 (1.30%) from Educational Management and 1 (1.30%) from Library Sciences.

Table 1. Faculty Demographic Profile (Sex, Age, and Employment Status)( N=77)

| Particular | f | % |
|---|---|---|
| Sex | | |
| Male | 36 | 46.75 |
| Female | 41 | 53.25 |
| Age | | |
| Young (43 yrs old & below) | 37 | 48.05 |
| Old (above 43 years old) | 40 | 51.95 |
| Employment Status | | |
| Permanent | 47 | 61.04 |
| Contractual | 30 | 38.96 |
| Specialization | | |
| Hospitality Management, Foods & Home Economics | 5 | 6.49 |
| Business & Management | 3 | 3.90 |
| Language (English & Filipino) | 14 | 18.18 |
| Natural & Physical Sciences | 6 | 7.79 |
| Social Sciences | 10 | 12.99 |
| Mathematics | 7 | 9.09 |
| Physical Education | 3 | 3.90 |
| Agriculture | 4 | 5.19 |
| Criminology | 2 | 2.60 |
| Industrial Technology | 7 | 9.09 |
| Computer Science & Information Technology | 9 | 11.69 |
| Library Science | 1 | 1.30 |
| Educational Management | 1 | 1.30 |
| Others | 5 | 6.49 |

As revealed in Table 3, most of the faculty were carrying below 24 units of teaching load (47.40%). Some are teaching the 24 units (24.03) and others are with more than 24 units of teaching load. In the first semester of AY 2017-2018, the faculty carried below 24 units (n=38, 49.35%), 24 units (n=18, 23.38%), and some have more than 24 units (n=21, 27%) of teaching load. For the second semester, 35 (45.45%) have below 24 units, 19 (24.68%) have 24 units, and 23 (28.57%) have more than 24 units.

Table 3. Faculty Profile According to Number of Teaching Load

| | 1st Semester, A.Y. 2017-2018 (n=77) | | 2nd Semester, A.Y. 2017-2018 (n=78) | | Mean Percentage |
|---|---|---|---|---|---|
| | f | % | f | % | |
| Below 24 units | 38 | 49.35 | 35 | 45.45 | 47.40 |
| 24 units | 18 | 23.38 | 19 | 24.68 | 24.03 |
| Above 24 units | 21 | 27.27 | 23 | 29.87 | 28.57 |

In Table 4, data represent the demographic profile of the staff in terms of their sex, age, and employment status. It shows that there are 13 (35.14%) male and 24 (64.86%) female staff as the respondents of this study. In terms of age, 21 (56.76%) were young and 16 (43.24%) were old. When grouped according to the employment status, 15 (40.54%) were permanent and 22 (59.46%) were job order staff.

Table 4. Staff Demographic Profile (Sex, Age, and Employment Status) (N=77)

| Particular | f | % |
|---|---|---|
| Sex | | |
| Male | 13 | 35.14 |
| Female | 24 | 64.86 |
| Age | | |
| Young (43 yrs old & below) | 21 | 56.76 |
| Old (above 43 years old) | 16 | 43.24 |
| Employment Status | | |
| Permanent | 15 | 40.54 |
| Job Order | 22 | 59.46 |

**Body Mass Index Status**

The body mass index status is presented in Table 5. The findings show that 27.71% are healthy, 13.85% are overweight, 4.11% are obese, 2.81% are underweight and 1.30% are extremely obese. When grouped into sex, the male have 19 (24.68%) healthy, 10 (12.99%) overweight, 4 (5.19%) obese, 2 (2.60%) underweight, and 1 (1.30%) extremely obese faculty while the female have 23 (29.87%) healthy, 12 (15.58%) overweight, 3 (3.90%) underweight, 2 (2.60%) obese, and 1 (1.30%) extremely obese faculty.

When grouped into age, there were 24 (31.17%) healthy, 8 (10.39%) overweight, 4 (5.19%) underweight, 1 (1.30%) obese and 1 (1.30%) extremely obese young faculty. There are also 19 (24.68%) healthy, 14 (18.18%) overweight, 5 (6.49%) obese, and 1 (1.30%) extremely obese old faculty. Lastly, when grouped according to employment status, there were 27 (35.06%) healthy, 17 (22.08%) overweight, 5 (7.79%) obese, and 2 (2.60%) extremely obese permanent faculty. There are also 15 (19.48%) healthy, 5 (3.90%) overweight, 3 (3.90%) underweight, and 1 (1.30%) obese contractual faculty. This implies that regardless of the sex, age, and employment status of faculty respondents they were living a healthy lifestyle.

Table 5. Body Mass Index Status of the Faculty (N=77)

| Particular | Underweight | | Healthy | | Overweight | | Obese | | Extremely Obese | |
|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | f | % | f | % | f | % | f | % |
| Sex | | | | | | | | | | |
| Male | 2 | 2.60 | 19 | 24.68 | 10 | 12.99 | 4 | 5.19 | 1 | 1.30 |
| Female | 3 | 3.90 | 23 | 29.87 | 12 | 15.58 | 2 | 2.60 | 1 | 1.30 |
| Age | | | | | | | | | | |
| Young (43 yrs old & below) | 5 | 7.79 | 23 | 29.87 | 8 | 10.39 | 1 | 1.30 | 1 | 1.30 |
| Old (above 43 years old) | 0 | 0 | 19 | 24.68 | 14 | 18.18 | 5 | 6.49 | 1 | 1.30 |
| Employment Status | | | | | | | | | | |
| Permanent | 0 | 0 | 27 | 35.06 | 17 | 22.08 | 5 | 7.79 | 2 | 2.60 |
| Contractual | 5 | 7.79 | 15 | 19.48 | 5 | 3.90 | 1 | 1.30 | 0 | 0 |
| Weighted Mean | | 2.81 | | 27.71 | | 13.85 | | 4.11 | | 1.30 |

Data in Table 6 revealed the body mass index status of the staff. The findings show that there were 46.17% healthy, 11.26% overweight, and 1.35% underweight. When grouped into sex, there were 10 (27.03%) healthy, 3 (8.11%) overweight, and 1 (2.70%) underweight male staff. There were also 18 (48.65%) healthy and 5 (13.51%) female staff. When grouped according to age, there were 14 (37.84%) healthy, 7 (18.92%) overweight, and 1 (2.70%) underweight young staff. There were also 14 (37.84%) healthy and 1 (2.70%) old staff. Lastly, when grouped according to employment status, there were 12 (32.43%) healthy and 4 (10.81%) overweight permanent staff. There were also 16 (43.24%) healthy, 5 (13.51%) overweight, and 1 (2.70%) underweight staff who are job orders.

Table 6. Body Mass Index Status of the Staff (N=77)

| Particular | Underweight | | Healthy | | Overweight | | Obese | | Extremely Obese | |
|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | f | % | f | % | f | % | f | % |
| Sex | | | | | | | | | | |
| Male | 1 | 2.70 | 10 | 27.03 | 3 | 8.11 | 0 | 0 | 0 | 0 |
| Female | 0 | 0 | 18 | 48.65 | 5 | 13.51 | 0 | 0 | 0 | 0 |
| Age | | | | | | | | | | |
| Young (43 yrs old & below) | 1 | 2.70 | 14 | 37.84 | 7 | 18.92 | 0 | 0 | 0 | 0 |
| Old (above 43 years old) | 0 | 0 | 14 | 37.84 | 1 | 2.70 | 0 | 0 | 0 | 0 |
| Employment Status | | | | | | | | | | |
| Permanent | 0 | 0 | 12 | 32.43 | 4 | 10.81 | 0 | 0 | 0 | 0 |
| Job Order | 1 | 2.70 | 16 | 43.24 | 5 | 13.51 | 0 | 0 | 0 | 0 |
| Weighted Mean | | 1.35 | | 46.17 | | 11.26 | | | | |

## CONCLUSIONS

The nature of work is a determinant of the body mass index status of a person. There are cases of underweight both in young males and females. This is supported with the isolate cases of the contractual faculty only. This could be inferred that the salary of the contractual faculty is not enough to support their basic needs, specifically food. Moreover, the study presented good BMI status of the staff. This might be because of the nature of work. Their job works good fitness status for them to accomplish their task excellently. Same also with the faculty, there is a case of underweight in a job order staff.

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