HAIGAZIAN UNIVERSITY

Factors that Impact Employee Acceptance of Overtime

By

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DEDICATION

This thesis is dedicated to the memory of my mother **Marie Malkhassian** who believed in my dreams and encouraged me to continue my Master's degree.

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ABSTRACT

Title: Factors that Impact Employee Acceptance of Overtime

Overtime refers to the time worked beyond normally scheduled working hours. It is an important part of people's working experience and daily life, affecting them in various areas such as health, productivity, work-life balance and finances.

The aim of this study has been to understand all the ramifications and challenges that overtime work produces as studied by researchers, and compare it to the Lebanese experience.

The sample under study was collected, through a survey questionnaire, from 207 employees working in different Lebanese industries, i.e., health care, banking, manufacturing, hospitality, security, education, administrative, technology and sales. The survey questionnaire explored the different types of overtime work done, i.e., voluntary, involuntary or a combination of both and whether the employees accepted to work overtime.

It was hypothesized that certain factors, the "independent variables", will have an impact on the employee's acceptance of overtime work, the "dependent variable". The independent variables have been found to be: 1.having a purpose for doing overtime work, i.e., show commitment, strengthen job opportunities, supplement income, avoid social problems (such as pressures from managers and peers), and accommodate the workplace. 2. Being impacted by overtime on personal level, i.e., in mental health, physical health and in work-life balance. 3. Being impacted by overtime on work level, i.e., quality of work and productivity in work. Also, were studied the impact on overtime acceptance by number of overtime work hours in a month and shift of

overtime work; and a few socio-demographic factors, such as gender, age, education, marital status were included together with type of work, and position in work of the employee.

Data collected were analyzed using statistical techniques, such as Regression analysis, ANOVA, T-Test, and Factor Analysis. The results of the analysis showed the following findings: 1.among the purposes to work overtime, strengthening job opportunities and supplementing income related positively with acceptance of overtime, and avoiding social problems, although related to acceptance of overtime, but the relationship is negative here. 2. There is a negative relationship between impact of overtime work on personal level and acceptance of overtime. 3. Quality of work related positively with acceptance of overtime, whereas productivity related negatively. 4. Gender related significantly to overtime work: males were accepting more. 5. Age, education, type of work, job position, number of hours worked in a month, the shift of overtime work had no significant relationship with acceptance of overtime work. 6. Marital status had a significant relationship: the singles were accepting overtime work more than married employees. 7. There was no significant relationship between the voluntary unrewarded and the involuntary rewarded with acceptance of overtime, whereas the relationship between the voluntary rewarded and the involuntary unrewarded with acceptance of overtime was significant.

As a limitation of this study we can mention that in-depth interviews with a significant number of employees as well as managers could have strengthened the explanatory power of the results. However, we can also mention that this study contributed to the understanding of this important topic, particularly in the Lebanese setting where we did not find thoroughly studied research work.

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CHAPTER ONE: JUSTIFICATION AND INTRODUCTION

1.1. JUSTIFICATION

"We need time. We need time to work, to eat, to sleep, and to accomplish all the daily chores of living. We also need time to know and understand our mates, our children, and our friends. Most of our relationships, in fact, require more time than we have, and it is difficult to avoid the feeling that we could never have enough. Nor is our list of demands on our time complete. We have ignored the time we need to be alone, a necessary but invariably short- changed period. . . (Gilman,1996). Imagine this time is taken from the employee in the form of overtime. What is the degree of acceptance this employee would have?

I am studying this subject because it is directly related to my work experience, and I know that it is also related to many other working people's experiences. Overtime work is very important to our career and to our daily life; it affects us in many ways, in our health, our finances, and our work-life balance.

My goal is to understand all the ramifications and challenges that overtime work produces as studied by researchers, and compare it to the Lebanese experience. As I was doing my literature review, I realized that this kind of study about overtime has not been done in Lebanon before. Thus, doing the study in Lebanon and taking the entire sample from Lebanese industries will definitely add value to my study.

The overtime will be evaluated by taking employee perspective, and not the employer's. I wanted to analyze and evaluate the acceptance or lack of it by employee. My questions are clear and ask about how the different kinds of impacts and purposes of overtime influence employee's acceptance. The rationale for this subject is to help organizations that practice overtime better understand and respect the employees by adjusting his/her work hours and pay, before asking him/her to perform unacceptable overtime just for the sake of supplemental income for the organization.

1.2. INTRODUCTION

When an employee works more than a specified number of hours in a week, the additional hours are called overtime. Overtime pay is the additional pay, paid to employees who work more than a specified number of hours in a week.

Overtime enables companies to effectively manage variable workloads without increasing staffing levels. It also provides employees with a source of supplemental income without pushing them to spread their loyalty to other employers. When used properly, overtime can be a very powerful tool for meeting increased workload demands while minimizing costs and maximizing employee compensation and satisfaction. However, overtime that is not well managed, can lead to higher costs, lower quality, low employee morale and increased employee turnover.

The benefits of using overtime include the following:

- Overtime can be increased and decreased to match the labor resources with the workload demands.
- Personnel working on overtime do not require additional training.
- Staffing levels do not need to change to use overtime.
- Overtime coverage is available on short notice.
- Most employees want to work some overtime to supplement their income.

The problems with using overtime include the following:

- High overtime levels can result in lower morale and decreased productivity. If excessive, it can result in greater absenteeism, increased accidents, and higher employee turnover.

- Prolonged, high overtime levels can result in the workforce becoming dependent on the overtime to make ends meet. Reducing overtime in this situation can be financially devastating for the workforce and lead to deteriorating employee relations.

- The cost is another problem area. In a stable work environment, overtime should average between 5% and 15% of the straight-time (non-overtime) hours worked. Less than 5% overtime indicates you are over-staffed. More than 15% overtime indicates you are under-staffed.

In my literature review, shortage of staff is the most prominent reason for overtime. According to Weaver (2015), it would not be possible to provide adequate staffing without extended shifts. Healthcare settings present one context in which overtime is often used so as to meet staffing needs, and that is because of a shortage of employees, influxes of patients, or both. Olds and Clarke show that overtime is an important management tool to make sure that patient needs are covered within a context of a shortage of nurses and healthcare workers, which has been documented for over ten years. In fact, South Korea boasted the highest shortage, wherein three-fourths of nurses worked overtime in their last shift, with 1.8 being the mean number of overtime hours worked (SE 1.0) (Cho & Nam-ju Lee, 2016).

Some companies are now trying to solve the overtime problem through different means. Some are applying for recruitment of unscheduled agency workers who are assumed to be readily available on short notice. So, to fulfill the demand for the shift, which would otherwise not be met by regular-time workers, outside agents can be recruited (Campbell, 2012). Others are

installing the latest technologies to minimize overtime. The outcomes of using the fastest and most recent automation systems include greater efficiency and more use of time, which would previously be consumed in manual operations, to carry out more important tasks. “I don’t need somebody to put a specimen on an instrument,” says Ken Blick, a manager of a Lab. “What I need is my techs to get involved when there’s a problem to solve.” In light of the use of these systems, companies could eliminate overtimes as employees are able to finish on time with the time that is gained (Ken Blick).

Some companies resort to using on-call overtimes to solve the issue of the cost of overtimes, which would be very high for them. On-call overtimes are more desirable than prescheduled fixed overtimes, because it costs much less when the worker is not called in. That being said, an unscheduled overtime presents more of an advantage from a cost perspective, as on-call payment payments are not incurred in the case where workers are not used for a shift (Campbell, 2012).

Some companies are trying to include extra evening or night shifts to grasp work load and minimize the overtime hours, regardless of night shift consequences on health. The results of one research studying a group of participants working night shifts found that more men than women worked after hour shifts. It also found that more health disturbances resulted in the group that worked after hour shifts than in those working regular hours (Rau & Trreiner, 2004).

Overtime exists and is even growing in some communities like Japan, Korea, and other countries where population is declining, and the shrinking future labor leads policymakers, for example, to improve parental leave for workers who are mothers. The recent revisions to the Child Care and Family Care Leave Law (Ministry of health, Labour and Welfare, 2005) now enables workers of either sex to be granted a year’s leave that can be extended to up to 1.5 years. Geraghty (2008)

has found that “workers can be paid up to 40% of previous earnings from employment, and the employee can ask for a limit on overtime work and an exemption from night work” (pp. 521-522).

Overtime exists in some case simply to cover vacation hours, high work demand, or to cover sick leaves or maternity leaves.

We are going to discuss in the following pages the different components of overtime. We have seen in the related literature, that the issue of overtime is closely related to the necessity for the workforce to accept to work more hours. This acceptance has been found to be either on a voluntary basis or on involuntary basis. Thus we are going to develop our discussion by focusing on these main types of overtime and then include a third type, which is a mixed type. During our literature review we will discuss the common effects of overtime on four basic components: employee health, safety, quality of care provided, and productivity. We will also discuss the significant and complex issue of work shifts.

CHAPTER TWO: LITERATURE REVIEW

2.1. TYPES OF OVERTIME

2.1.1. Voluntary

Discussing the voluntary overtime, we must mention all the causes and consequences, which include, for instance, the reward, the job position of the employee and the fatigue, the mood, the health and their effect on the employee's productivity.

Based on many previous studies, we see a very strict relationship between the overtime and the reward. Debby (2008) explains that workers who work voluntary overtime are shown to have higher educational levels, higher income, and a greater job variety and job autonomy. Similarly, unrewarded overtime workers had higher scores of the aforementioned factors than did rewarded overtime workers. Additionally, unrewarded overtime workers reported more overtime hours as well as job demands. All this points that voluntary and unrewarded overtime workers tend to work in favorable jobs with a relatively high income along with a good combination of job and personal characteristics.

Furthermore, higher levels of job autonomy, variety, and demands correlated with voluntary overtime workers. These factors combined suggest that the workers held "active" jobs in terms of the Demand-Control Model (Karasek & Theorell, 1990). As well, the overtime reward groups did not differ in age or gender.

Working voluntary overtime is a self-chosen act. In one motivational and occupational health literature, De Lange et. al. (2008) find that greater satisfaction and well-being correlate with the ability to exercise control over one's activities.

Van der Hulst and Geurts (2001) conducted an interesting study in which employees who reported to have high rewards and low pressure to work overtime were used as reference groups. The assumption holds that these employees work voluntary overtime and as long as the experienced rewards were high, there was no association between the great pressure exerted by working overtime and the risk of negative mental health impacts.

To further explain this relationship between voluntary overtime and reward, one study was done by Bonde (2012) on the Danish association for the senior medical consultants employed in hospitals. Being employed without an upper time period of employment, these consultants are expected to possess a more influential position. A self-administered survey questionnaire on the relationship between the working conditions and associated mood was given to the senior medical consultants, the majority of whom had long working hours and worked voluntarily. The results revealed that voluntary overtime proved surprisingly beneficial. Bonde (2012) showed that the senior medical consultants thrived on the additional work with which they expressed happiness, having the added energy to engage in the work.

Studies involving voluntary overtime were also done in nursing; here we can mention the study of Olds and Clarke (2010), who report that voluntary overtime among medical workers, and especially nurses, had a significant effect on the safety of both nurses and patients. They report that when the critical care nurses spend more than 40 hours a week on duty, the risk of self-reported errors increase among them. In fact, the study has found that working 12.5 hours or

more of consecutive work increased error reports by two times, concluding that increased errors and near-missed are indeed resulted from working more than 40 hours. It also found that with every extra hour of paid work during voluntary overtime, the probability of a reported error such as wrong medication or dose administration increased by 2%. In this study, the voluntary paid overtime amounted to an average of about 3 hours per week. The models suggest that with an increment of 3 hours in voluntary paid overtime, the probability of error reports such as occasional or frequent wrong medication or dose administration would increase by 6.1% (a result of an odds ratio of 1.023) when compared to no overtime worked by nurses. The given results point out that when nurses work voluntary overtime for more than 40 hours a week, the likelihood of identifying or experiencing occasional/frequent errors like wrong medication or dose administration and needle-stick injuries increases. This study assumes that overtime was positively correlated with fatigue experienced by nurses; that is, as they worked more hours of voluntary overtime, nurses felt more fatigued. A complication that appears with trying to limit voluntary overtime has been shown to arise in the face of fact that nurses who are paid hourly are financially motivated to work extra hours, especially if this means being paid at premium rates. Moreover, being overcome with the feeling of guilt or being coerced by managers and colleagues may force nurses not to decline on working voluntary overtime (Olds & Clarke, 2010).

The voluntary overtime was further narrowed down by Watanabe and Yamauchi (2016), who incorporate the motivation theory, which distinguishes intrinsic motivation from extrinsic motivation. Intrinsic motivation, they point out, is "an activity engaged in for its own sake, for some inherent pleasure or satisfaction, while extrinsic motivation is "an activity to seek out anticipated satisfaction obtained from money or reputation" (Watanabe & Yamauchi, 2016, p. 497). The authors found that employee balance is not significantly affected by voluntary

overtime that is intrinsically motivated. However, an extrinsically motivated overtime was shown to affect employees positively, wherein the satisfaction brought about by the wage or reputation was large enough to produce even more positive effects, even within the consideration of the factor of overtime work.

2.1.2. Involuntary

Contrary to voluntary overtime where the employee has the free will to cover the extra hours, in the involuntary overtime, the additional hours covered are mostly mandatory. Moreover, rewards may differ such that the employee is fully rewarded, partly rewarded, or sometimes unrewarded. A study by Beckers (2008) revealed that workers who worked an unrewarded involuntary overtime were noticeably more fatigued and less satisfied compared to rewarded overtime workers. We can classify this particular group of overtime workers as "burnout risk groups" considering that their average fatigue scores rate "high" according to validated burnout norms (Schaufeli & Van Dierendonck, 2000). Also, Beckers (2008) adds that involuntary overtime workers had the lowest educational levels.

For Watanabe and Yamauchi (2016), involuntary overtime work factors decreased work satisfaction. Furthermore, mandatory overwork has its impacts on health such as increased musculoskeletal and work-related injuries and illnesses. The variable "involuntary overtime work," at the level of the workplace, affected the work/non-work balance negatively. Also, Van der Hulst and Geurts (2001) have found that workers will avoid exerting any more effort in the work task with the presence of external pressure to involuntary work extended hours and in the absence of positive affect and intrinsic motivation. To cope with the task demands, then, it would

be required to provide compensatory effort and thus workers would need more time to recover. That is, compared to those who work overtime of their own will, employees who work overtime involuntarily are more likely to suffer poor recovery and fatigue.

As to the involuntary overtime practiced in the medical field, Lamberg's (2004) study finds that the workplace will require some nurses to work up to 18 to 20 hours per day in the case of gaps, well beyond the estimate of safer working hours. Such that it is, the number of staff needed for a given day can thus be reduced through compulsory overtime and extended shifts. And for Rogers (2016), this practice of requiring mandatory overtime for the sake of compensating staffing vacancies is very controversial and potentially dangerous. Roger's (2016) study showed that more than a quarter of nurse participants reported working mandatory overtime at least once during the data-gathering phase.

2.1.3. Mixed

Concerning the mixed group, which includes working both voluntary and involuntary overtime simultaneously, not many studies have been done to demonstrate and narrow down the features. But, it is mostly shown in the cases of medical field workers, who have a fixed overtime put on their schedule. However, during the month as the work increases or a shortage happens, and additional staff might be needed, a mandatory or non-mandatory overtime can be forced on the existing employees, so as to minimize the shortage. In some cases, overtime is offered to the employee, but the rate of pay, not mentioned. At the end and before the payroll is published, on negotiable terms, the pay is given. Sometimes the pay is low and in some cases the pay is highly

rewarding, especially on holidays and when the employee is called to work from his vacation time.

2.2. IMPACT OF OVERTIME ON EMPLOYEES

Overtime in general, whether voluntary or involuntary has its effect on the employee health, safety, work related errors, quality of care, and productivity.

2.2.1. On health and work life balance

In general overtime has its negative effect on employee's health, especially when it is long hours of work or on consecutive days' bases. During my literature review significantly extreme cases of long hours of work were seen, and some cases of these long hours led to death or suicide, Incidents of karoshi and karo-jisatsu (suicide because of overwork) remain common in Japan. The author Nemoto (2012) explains by saying working long hours is "a way of constructing a heroic reputation", since sacrificing one's time for work represents "commitment, endurance, and toughness" and sets out to affirm one's masculine identity. A senior manager often fosters the reputation of a "super-human workaholic, willing and able to accommodate enormous workloads". Such individuals might not take time off even in the case of illness, because they would see it as a sign of "weakness" (Collinson & Collinson, 2004, p. 233). Working long hours is a type of "boundary heightening" behavior (Kanter, 1977, p. 221), in which workers identify overwork as a sign of commitment and power.

If we consider more moderate hours of overtime containing 48 hours of weekly work, Rau and Treimer (2004) demonstrate that even such a moderate increase of working hours may risk one's health. The negative drift in mood as well as the increased risk of sleep disturbances and the inability to relax among those working overtime may lead to an additional reduction in worker efficiency, lower levels of concentration, and feeling less motivated, less energetic, and sleepier.

In the medical field, and especially with nurses who work long hours of shifts and cover much overtime, injury and health issues were also reported. Lamberg (2004) has done a study in which about 1200 working nurses responded to a survey. Nearly half of them reported that they had experienced pain from said injuries which would last at least a week or which would occur at least monthly in the previous year. According to the study, working 12 hours or more per day and more than 40 hours per week (if they included weekends specifically) resulted in nurses experiencing neck, shoulder, and back problems twice as likely as those who worked less rigorous schedules. We also mention Ha and Park's (2011) study in which the authors showed an association between the duration of shift work and the metabolic risk factors of cardiovascular disease in healthy employees, and also the psychological health of the employees. Van der Hulst and Geurts (2001) compared the psychological health indicators of employees who worked overtime and those who didn't. It revealed an association between overtime and negative work-home interference as well as negative home-work interference. According to the authors, working overtime resulted in added pressure on one's private or family life, along with employees' feeling that family life interfered with work. As employees worry or feel irritable about work at home, in addition to being unable to fulfill both work and family roles, conflicts may arise between partners or other members of the family, and this itself could result in negative home-work interference (Van der Huls & Geurts, 2001). The authors also claim that

working extended hours would mean exerting even more effort to make up for the below optimal psycho-physiological state, and this in turn would imply a longer period for recovery. As this process builds up over time, it would cause burnout and health complaints.

2.2.2. On quality of work (including safety and work related errors)

Safety procedures are very important in work. The safety of the employee as well as the safety of the customer is related to the hours of work. "As the work period increases, so does the likelihood of injuries," Lamberg (2004) writes.

Folkard and Lombardi (2011) found that in the first hour of work, the risk of injury is low. This risk increases steadily between 2 and 5 hours, and remains relatively fixed until the 8th hour, after which it rises sharply. At 12 hours worked, the risk has been shown to be two times that of the first 8 hours. Folkard and Lombardi (2011) assessed the injuries of workers at a large engineering company, in which they had 8-hour shifts with breaks every 2 hours. The authors found that in the last half-hour of every 2-hour segment, the relative risk of an injury was twice that of the first half-hour. Another research done by Weaver and his team (2015) partitioned and compared the working hours as follows: taking shifts of more than 8 hours but less than or equal to 12 hours, or shifts of more than 12 hours but less than or equal to 16 hours increased the risk of injury by 27%. A shift of more than 16 hours or as long as 24 hours increased the risk of injury or illness by 60%. In the case where shifts spanned less than 8 hours, such a risk decreased by 30%. Shifts of 12 hours in duration or greater increased the risk by 49%. To conclude, it was found that the risk of injury or illness increased by 4% for every hour added to the shift length.

Errors during the work due to overtime are becoming a big concern in companies and especially in critical work domains like the healthcare, where two major studies revealed a direct influence of overtime and work. the first was done by Rogers (2016), where she collected her information on 5,317 work shifts. It showed that hospital staff nurses worked more than 40 hours a week in general, well longer than the daily schedule; an average of 55 minutes longer was worked every day. Also, during the 28 days in which data was gathered, all the participants worked overtime at least once. In this period, Rogers (2016) found 213 errors and near errors. The analysis showed that such errors were caused significantly by factors including work duration, overtime, and the number of hours worked in a week. Working more hours meant a greater chance of committing errors; it was found that when nurses worked shifts lasting 12.5 hours or more, this probability was tripled. Also, regardless of how long the original scheduled shift was, the chances of making at least one error were increased by working overtime. One other thing suggested by the data was that working overtime after longer shifts also increased the risks. The results of the study also indicated that factors like age, size of the hospital, or the type of hospital unit did not affect the relationship between errors/near errors and the work hours and overtime. As well, the risks of committing errors showed no significant increase until the shift duration surpassed 12.5 hours a day, with risks only beginning to increase after 8.5 hours were exceeded. On a similar basis, a study was done by Seaman (2015), wherein her literature review found that as nurses worked more than 12.5 hours in a shift or more than 40 hours a week, the risk increased.

The quality of care is very important in work and the customer is never satisfied with less quality of care. Long hours of work and insufficient time of sleep directly reflects quality of care. In the medical field, the patient is so fragile physically and psychologically and a small pseudo change in care affects negatively on the outcome. A recent study done by Griffiths (2014) based on a

survey of 22,275 registered nurses in 4 US states revealed that, compared with nurses who worked an 8–9 hour shifts, those who worked shifts that lasted 12 hours or more were significantly more likely to report poor quality of care and poor patient safety. That being said, quality of care, patient safety reports, and unfulfilled care related significantly with working overtime and longer shifts. The study found that nurses whose shifts lasts 12 hours or more were more likely to qualify the quality of nursing care in their unit as "poor" or "fair," and patient safety in their units as "failing" or "poor," than those who worked 8 hours or less.

Griffiths (2014) also found that in Europe, the nurses who worked 12 hours or more and those who worked overtime had a greater likelihood of qualifying the quality of nursing care as well as patient safety as "poor" or "fair," and of claiming that care was left undone in their previous shift, compared to those who worked 8 hours or less.

Far from Europe, crossing the pacific from USA, a similar study was done by Cho and Lee (2016) in South Korea based on 2,450 registered nurses. In the study, the nurses described the quality of care in their unit as "fair" or "poor" and claimed that the lack of adequate time resulted in the lack of fulfilling one or more necessary activities. The authors found that on average, 3 out of 12 listed care activities remained undone. The commonest ones that remained incomplete included 'Comfort/talk with patients' (57.1%), 'Teach/counsel patients and family' (44.1%), 'Develop or update care plans' (29.7%), 'Coordinate patient care' (27.8%), and 'Adequately document nursing care' (22.7%).

2.2.3. On productivity

In the modern days all the businesses are focusing on increasing productivity of the employee and refining his/her qualities so that s/he is more competent in his/her work. There are studies which have revealed a positive outcome and several negative ones of working overtime.

We start with the positive outcome. Schank (2005) claims that, theoretically, it is unclear which of either standard hours or overtime hours is more productive. In cases in which demand increases or short-term staff shortages arise, employer associations often highlight that overtime proves helpful and so is highly productive during those periods. Moreover, because standard hours normally involve an unproductive set up time, overtime hours can be more productive. Schank (2005) finds that the efficiency of regime changers lies between that of overtime plants and standard-time plants, such that overtime plants possess higher efficiencies whereas standard time plants, lower ones, which is often not the case for services, but for manufacturing. As per employees, working overtime helps secure a particular income. And according to Awad (2004), overtime hours without functional tools and equipment or enough material are wasted. Moreover, the author points out that working overtime takes away from the time outside work such as being with family. Because such a loss cannot always be made up for by increasing wage rates, contractors may have to resort to supplementary measures, which in turn boost efficiency. As an example, a contractor could offer lunch or dinner to overtime workers as a gesture of compassion, which in turn can enhance the efficiency more than other methods would.

In evaluating the negative impacts of overtime on productivity, three different fields of work were considered in my literature review: the medical field, banking and the industrial.

First, the medical field was considered, where in it was clearly mentioned above that more errors resulted and overall point of care decreased with extensive hours of work, especially for nurses whose productive outcome was poor after long hours of work. Compared to nurses who worked 8 hours, lower levels of job satisfaction were expressed by nurses who worked shifts of 12 hours. That being so, it has been found that long working hours may negatively affect hospital staff nurses' performance, and that the likelihood of errors/near errors to occur increases for nurses who work shifts of 12 hours or more (Rogers, 2016).

Second of all, and far from the medical field, the productivity level was checked in the banking sector, and illustrated in the evaluation by Rica (2014) in India, a culture that emphasizes accounting the quality of work for the client rather than the face time. Several progressive Indian companies have been shown to be challenging the long-held mindset of the importance of being present in office. Rica (2014) contends that it is not by spending many hours at work that productivity is improved, but rather, that productivity relies on three important parts, which include self-discipline, valuing time, and taking pride in work. The author claims "we believe longer hours do not enhance productivity, and in the long run, it results in employees burning out," adding that one can deliver better in the office in the light of a healthy and balanced lifestyle.

Finally, a third study in an industrial field was taken, in which a quantitative study was done to prove the negative results of overtime on productivity. The study by Awad (2004) revealed that over the first three works of overtime, productivity decreases sharply, while decreasing only

steadily over the following few weeks. She concludes that beyond a certain extent, any more overtime bears little negative effect on productivity.

Further in my studies, other features seem to influence the overtime and productivity; one was the characteristic of the employee and his/her qualities. Smyth et al (2011) clearly explain that compared to those who perceive themselves to be adequately skilled or trained, individuals who feel the least skilled or trained have a higher chance to work in excess of 60 hours a week. Smyth (2011) also points out how the high level of labor turnover causes managers to feel that education and training go to waste. Moreover, least skilled or trained workers feel they have to work the additional hours in order to keep up with workmates who are more adept. Another finding is that these less adept workers might be more willing to work long hours (Smyth, 2011).

Another feature was the wage of the employee, where in one company, workers and factory management reached an agreement in which workers still had to work overtime and extra weekends so as to increase the operations and production of the factory, leading to a diminishing of the cost of production. Because workers who earn a lower pay find that they cannot make a substantial living by working regular hours alone, they readily agree to work overtime and the extra weekends. (Son & Kongi, 2008).

2.3. OTHER SIGNIFICANT COMPONENTS

2.3.1. Importance of shifts

While evaluating overtime, we cannot forget the period in which this overtime is taking place, and especially in which part of the day. In general, working hours are separated between two big types: those who work on regular day job hours, working from the early day until afternoon, five days per week without weekend work, and the others who work on shift bases. Shift-based jobs are usually 24-hour jobs in which the shift is divided between day and night shifts or day evening and night shifts.

By discussing the night shift jobs and long hours of work, the researchers in Harvard University found that in physician trainee house, for staff working a conventional 30 hours on duty, attention failure was twice as likely to occur at night and 1.5 times more often in the day than for those who worked a duty schedule of 16 hours (Olds & Clarke, 2010).

The frequency of workplace injuries depends on what shift the women are working in. Folkard and Lombardi (2011) find that workers on the night shift have a 30% higher risk of injuries than on the day shift, while this risk decreases to midway between on afternoon shifts. Additionally, the authors show that the likelihood of injury increases (and specifically on night shifts) as individuals work on more days since the last period of time off. As workers get less sleep and less comfortable sleep between successive night shifts, the situation during the night shifts becomes worse with the resulting sleep disturbances (Rau & Treimer, 2004).

Drawing from the results by Soni et al (2008), we do a comparison between the day workers, shift-based day workers and shift-based night workers. Nightshift workers were shown to sleep less than the other two groups, but to work longer hours. Also, compared to the day workers or dayshift workers, nightshift workers had a greater number of extra working days and working nights. On average, the number of sleeping hours was 6.8 for day workers, 7.1 for dayshift workers, and 5.7 for nightshift workers. All three worked an average daily number of more than 11 hours with no substantial difference among the three: 11.2 hours for day workers, 11.0 hours for dayshift workers, and 11.4 hours for nightshift workers. However, shift-based workers had longer working hours regarding weekly working hours than did day workers.

Soni and Kong (2008) also find that by the end of work, the prevalence of severe sleepiness was 9.5% for the day workers, 23.2% for day shift workers, and 61.2% for night shift workers, the last of which showing how more than half of nightshift workers suffered by the end of the night shift. The risk of severe sleepiness was increased by the night shift itself by over 4.7 times when compared to the day shift. Said risk was also shown to increase by over 7.5 times for nightshift workers because of working for more than 12 hours, compared to dayshift workers who worked less than 11 hours per day including overtime work and bigger issues with fatigue and sleepiness.

Those who worked night shifts had Monday as the worst day because of the great sleepiness they experienced, yet there was no increase in the experience of the strong sleepiness as the end of the weak neared. This may be because those nightshift workers had no days off during the weekends for recovering, and so they might experience the full severity of sleepiness even on the following Monday (Soni et al, 2008).

In the US and Europe, the 12-hour shifts have been described frequently as compressed working hours, which means after four consecutive 12-hour shifts, workers take at least 3 days off. This work system is markedly different than that in Korea, where five to seven consecutive 12-hour shifts exist along with additional and frequent overtime (Soni et al, 2008).

2.3.2. Gender differences

While discussing overtime, in some studies the gender differences were considerable, where overtime differs in some cases for women and in some instances overtime is the same.

Most of the studies were made in the Far East Asia; a big scale research was conducted in Japan, where women represent a big working force. In this study by Nemoto (2012), the availability of overtime is what relates to gender differences, and so the promotion aspirations of women and men are influenced differently by the long working hour norm. The author argues that the gender gap that exists in the promotion aspirations of the different sexes is only made worse with men's working hours being longer. The author finds that men may have more working hours due to the greater rewards that they get from working but also notes that long working hours increase women's pessimistic view towards their lower status. Nemoto (2012) differentiated the women and divided them into two groups: mothers who work but that have been described as not having enough time for it, and women workers who strive to work and may choose to remain single or childless. Some issues that the mothers deal with include additional unpaid family work, stress such as guilt over leaving early, reductions in salary, and concerns over the limited chances of promotion. Salary reductions have also been shown to decrease working mothers' level of satisfaction and aspirations and to obstruct their opportunities as in the case of women who

decided to work as managers, and in doing so, prioritize work over family, conforming to the masculine work norm. Watts (2009) finds that women workers may wish to avoid the pressuring expectations of being good workers as well as good mothers, but also adds that it may be due in part to women's single status, which would impact male colleagues' view of them and the possibility that they will be acknowledged as devoted and competitive workers by men.

The other study was done in China and Thailand, and it showed that there are factories in which ample females worked an excess of 60 hours a week on more than 6 consecutive days. Such results reflect the fact that these factories are not "female-friendly" in terms of the policies designed to promote work-life balance. In fact, in trying to keep up with these norms, the female workers were shown to sustain physical and mental damage.

These factories consider that married females can work longer hours because of the support they get from their extended family at home; consequently, many married migrant women in China work in the city not with their husband, with the main of goal of earning as much as they can to send back to their hometown (Fan & Wang, 2008). As Pun (2007) puts it: "Separated from family, home and rural life, these women workers concentrate in workspaces and submit themselves to a process of homogenization and individuation, these women do not have the need to find time to spend with a partner and hence are able to work longer hours" (p. 246).

According to Pun (2007), women are seen as being compliant laborers, working for low wages; and Edgren (2013) puts it: "Women are preferred as workers for most of the factory jobs because

they are hardworking, easy to control, willing to accept tediousness and monotony and have "nimble fingers".

In some extreme cases of bonded labour, forced labor, or simply modern slavery, men, women, and children work more than 100 hours per week. As Sansom (2015) says, "There are 30 million slaves today, more than at any other time in history. Men, women and children around the world are forced to work for very little money, sometimes without pay at all, and the number of those living at risk is growing".

Statistics from the U.N. International Labor Organization show that 26% of today's slaves are children, 22% are females, and the remaining 52% are adult males, who are often forced into labor due to financial debts. Most of those men work in industries where manual labor is needed, such as farming, ranching, logging, mining, fishing, and brick making, and in service industries working as dish washers, janitors, gardeners, and maids.

2.4. SUMMARY OF LITERATURE REVIEW

A- Types of Overtime

1-Voluntary Overtime.

Causes and consequences of voluntary overtime include the reward, the job position of the employee, the fatigue, the mood, the health and their effect on employee productivity.

Voluntary overtime workers have a relatively more influential position with higher educational levels, higher income, and more job variety and job autonomy. Moreover, voluntary and unrewarded overtime workers tend to work in favorable jobs with a relatively high income along with a good combination of job and personal characteristics (Debby, 2008).Most often, overtime is self-chosen, associated with more satisfaction and well-being (De Lange et. al., 2008).

A study done by Bonde (2012) on senior medical consultants, to evaluate the voluntary overtime and how it relates to mood, showed that overtime was helpful, with the participants expressing content and gladness to work additional hours along with great energy.

Olds and Clarke (2010) conducted a study on nurses working voluntary overtime, showing a significant effect of the overtime on the safety of both nurses and patients. They reported that with overtime, the risk of self-reported errors, near-misses, increased needle-stick injuries and sometimes wrong medication or dose administration increased, tracing them to the resulting fatigue. The nurses tended not to decline overtime, though, on the basis of guilt and coercion from managers.

Voluntary overtime was narrowed down by Watanabe and Yamauchi (2016), to extrinsic and intrinsic motivation; extrinsic motivation would be satisfaction from gaining external rewards

like money or reputation. By contrast, intrinsic motivation is act done for its own sake, with employees deriving pleasure from overtime leading to overall satisfaction.

2-Involuntary Overtime

In involuntary overtime, hours worked are mostly mandatory. Employees are fully, partly or sometimes unrewarded. Based on a study by Beckers (2008), involuntary overtime workers had the lowest educational levels. The unrewarded involuntary overtime workers were significantly more fatigued and less satisfied than the rewarded overtime workers. This group was considered a ‘‘burnout risk group’’.

For Watanabe and Yamauchi (2016) involuntary overtime decreased work satisfaction, increased work-related physical injuries and illness also had a strong negative effect on work non-work balance. Van der Hulst and Geurts (2001) added that an as employers are pressured to work overtime involuntarily, lacking both the intrinsic motivation and positive affect, they will tend to avoid to exert effort required for the tasks. And, as a consequence, both the time needed for recovery and the resulting suffering from fatigue will increase.

3-Mixed

Includes working simultaneously, both voluntary and involuntary overtime. Fix overtime is put on the employee’s schedule, but during the month, as the work increases or a shortage happens, additional overtime is put, and can be a mandatory or non-mandatory overtime.

B- Impact of Overtime on Employee Performance.

1- On Health and Work Life Balance

Effects on employee's health in cases where there are long hours of work or consecutive days are discussed. Extreme cases led to death or suicide, incidents of karoshi and karo-jisatsu (suicide because of overwork) in Japan. Nemoto (2012) explains by saying working long hours is "a way of constructing a heroic reputation. "Even during illness, such individuals might not take time off because to them, it would be assign of "weakness" (Collinson, 2004). Working long hours is a type of "boundary heightening" behavior (Kanter, 1977).

Moderate increase in hours would lead to sleep disturbances, and in turn, the negative drift in mood as well as the inability to relax may lead to an additional reduction in worker efficiency, lower levels of concentration, and feeling less motivated, less energetic, and sleepier (Rau & Treimer, 2004). In the medical field, and especially with nurses who work long hours of shifts and cover much overtime, injury and health issues were also reported. Lamberg (2004) has done a study in which about 1200 nurses working overtime reported pains, leading to the finding that it was twice as likely for nurses to experience shoulder, neck, and back pains during overtime. Ha and Park's (2011) study that the duration of shift work and metabolic risk factors of cardiovascular disease were linked. In the psychological health of the employees, Van Der Hulst & Geurts (2001) revealed that overtime was associated with negative work-home interference, wherein employees saw overtime as an interference in family life, sometimes causing conflicts to break out between family members or partners.

2- On Quality of Work

Safety procedures are very important "As the work period increases, so does the likelihood of injuries," Lamberg (2004) writes. Rogers (2016) reported that work duration, overtime, and number of hours worked per week had significant effects on errors. As shift durations exceeded 8.5 hours, the probability if committing errors increased. Errors were three times higher when nurses worked shifts lasting 12.5 hours. The results of the study also indicated that factors like age, size of the hospital, or the type of hospital unit did not affect the relationship between errors/near errors and the work hours and overtime.

Long hours of work and insufficient time of sleep directly reflect quality of care. In the medical field a study was done Griffiths (2014) based on a survey of 22,275 registered nurses in 4 US states; the researcher found that nurses who worked shifts that lasted 12 hours or more were significantly more likely to report poor quality of care and poor patient safety.

Another study that was done by Cho and Lee (2016) in South Korea on nurses working overtime, revealed that most activities left undone by nurses were 'Comfort/talk with patients' (57.1%), 'Teach/counsel patients and family' (44.1%), 'Develop or update care plans' (29.7%), 'Coordinate patient care' (27.8%), and 'Adequately document nursing care' (22.7%).

3- On Productivity

Positive outcome: Schank (2005) claims that, theoretically, it is unclear which of either standard hours or overtime hours is more productive; but at the level of the employer, overtime plants possess higher efficiencies whereas standard time plants, lower ones. As concerns the employee, working overtime helped secure a particular income.

Negative outcomes: Three fields are detected: first, in the medical field, in which Rogers (2016), who puts that as overall, point of care decreases with extensive hours of work and lower levels of job satisfaction arise, nurses' performance are affected negatively. Secondly in the banking sector, wherein Rica (2014) contends that longer working hours do not improve productivity and instead may lead to worker burnouts on the long run. Finally, in the industrial field, Awad (2004) reports that over the first three works of overtime, productivity decreases sharply, though beyond a certain extent, any more overtime bears little negative effect on productivity.

Employees' characteristics and qualities are also linked to productivity. Smyth et al (2011) found that those who are least sufficiently skilled or trained to do their job are statistically more likely to work overtime. Also, Smyth (2011) points to how least skilled or trained workers feel they have to work additional hours in order to keep up with comparably better workmates.

C - Other Significant Components

1-Importance of shifts

Comparison done by Soni et al (2008) revealed that night shift workers slept less and worked more hours than did dayshift workers. The prevalence of severe sleepiness at the end of the work period was 9.5% for the day workers, 23.2% for day shift workers, and 61.2% for shift workers on a night shift. The risk of severe sleepiness was increased by the night shift itself by over 4.7 times when compared to the day shift. As well, night shift workers have great problems with fatigue and sleepiness.

Harvard University research team found that attention failures occurred twice as often at night (Olds &Clarke, 2010). Folkard and Lombardi (2011) find that workers on the night shift have a

30% higher risk of injuries than on the day shift, while this risk decreases to midway between on afternoon shifts. Sleep disturbances resulting from successive night shifts aggravates the nightshift effect (Rau & Treimer, 2004).

In the US and Europe, the 12-hour shifts have been described frequently as compressed working hours, which means after four consecutive 12-hour shifts, workers take at least 3 days off (Soni et al, 2008).

2-Gender differences

Gender differences were considerable. Nemoto, (2012), states that the promotion aspirations of women and men are influenced differently by the long working hour norm. Men may have more working hours due to the greater rewards that they get from working but also, the author notes that long working hours increase women's pessimistic view towards their lower status. Nemoto (2012) differentiated working women, dividing them into two groups: mothers who work but that have been described as not having enough time for it, and women workers who strive to work and may choose to remain single or childless.

In some extreme cases, overtime is simply called modern slavery. Statistics from the U.N. International Labor Organization show that 26% of today's slaves are children, 22% are females, and the remaining 52% are adult males, who are often forced into labor due to financial debts. Most of those men work in industries where manual labor is needed, such as farming, ranching, mining and fishing in service industries such as janitors and maids.

CHAPTER THREE: RESEARCH FRAMEWORK AND METHODOLOGY

3.1. RESEARCH QUESTIONS

Based on the previous literature review, below are the research questions:

1. Whether having a purpose for overtime work i.e. showing commitment, strengthening job opportunities, supplementing income or avoiding social problems of overtime work, has an influence on the acceptance of overtime?
2. Whether the impact of overtime on mental health has an influence on the acceptance of overtime?
3. Whether the impact of overtime on physical health has an influence on the acceptance of overtime?
4. Whether the impact of overtime on personal work-life balance, has influence on the acceptance of overtime?
5. Whether the impact of overtime on quality of work, has influence on the acceptance of overtime?
6. Whether the impact of overtime on productivity, has influence on the acceptance of overtime?
7. Whether the acceptance of overtime shows difference based on employees' socio demographic characteristics i.e. age gender, marital status, education, type of work and job position?
8. Whether the acceptance of overtime shows difference based on type of overtime work?
9. Whether the acceptance of overtime shows difference based on number of hours of overtime done in a month?
10. Whether the acceptance of overtime shows difference based on type of shift work done?

3.2. HYPOTHESES

Based on the previous literature review, below are the hypotheses:

1. Having a purpose for overtime relates with acceptance of overtime
2. Overtime affecting negatively employee's mental health will relate negatively with acceptance of overtime
3. Overtime affecting negatively employee's physical health will relate negatively with acceptance of overtime
4. Overtime affecting negatively employee's work-life balance will relate negatively with acceptance of overtime
5. Overtime affecting negatively quality of work will relate negatively with acceptance of overtime.
6. Overtime affecting negatively the productivity of employee work will relate negatively with acceptance of overtime
7. The age group of the employee affects the acceptance of overtime
8. The gender of the employee affects the acceptance of overtime
9. The marital status of the employee affects the acceptance of overtime
10. The education level of the employee affects the acceptance of overtime
11. The type of work of the employee affects the acceptance of overtime
12. The job position of the employee affects the acceptance of overtime
13. Type of overtime of the employee (voluntary rewarded, voluntary Unrewarded, involuntary rewarded, involuntary unrewarded) affects the acceptance of overtime
14. The number of overtime hours the employee does relates positively with acceptance of

overtime

15. The type of shift employee does (day, evening, night, rotating) affects the acceptance of overtime

3.3. INDEPENDENT AND DEPENDENT VARIABLES

The independent variables are:

1- Purpose to work overtime

- To show commitment
- To strengthen my job opportunities
- To supplement my income
- To avoid social problems i.e. the pressure of managers or peers
- To accommodate the workplace

2- Impact of overtime on personal level

- On mental health
- On physical health
- On personal work-life balance

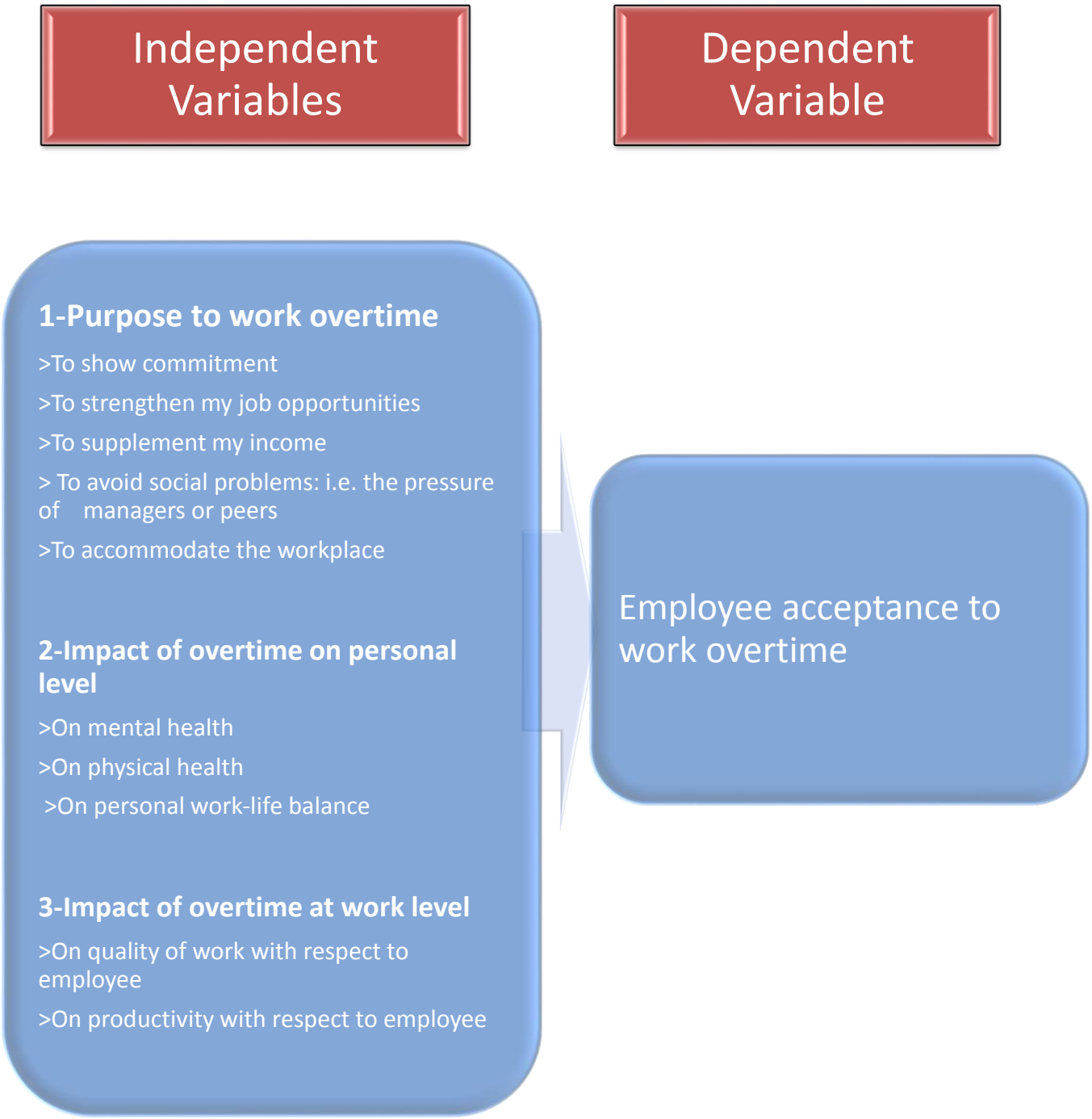
3- Impact of overtime at work level

- On quality of work with respect to employee
- On productivity with respect to employee

The dependent variable:

1. Employee acceptance to work overtime

3.4 MODEL CHARTED



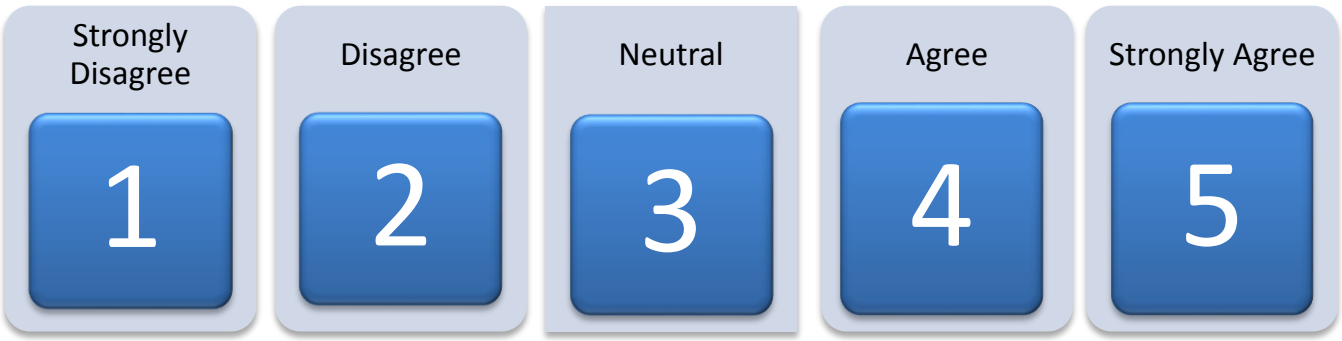
3.5. METHODOLOGY

3.5.1. Questionnaire

The instrument used in this study is a survey questionnaire composed of 22 questions. The questionnaire includes socio-demographic components that have been found in the relevant literature, having a significant relationship with overtime work and statements related to overtime work and its impact on employees.

The questionnaire has been administered through a pilot study to a random sample of 10 participants to check the clarity of the questions. The questionnaire proved to be clear and easily understood by the sample.

Respondents have to first answer the socio demographic questions and then the questions related to their overtime work, which will be measured on a five point Likert type scale ranging from "Strongly Disagree" to "Strongly Agree" as follows.



Respondents will choose the answer that best shows their level of agreement and applicability of the questions to their situation.

Questionnaire

Factors that Impact Employee Acceptance of Overtime

Dear Participants,

As part of the fulfilment of the requirement of the MBA degree from Haigazian University, I am conducting a survey to help me find Factors that Impact Employee Acceptance of Overtime.

I would really be grateful and appreciative if you would take time to fill out the attached questionnaire.

Your frank response will remain confidential and data from this survey will be reported in the thesis anonymously.

Your active participation will be an expression of your valuable sense of social responsibility that I definitely need.

1- Do I perform overtime?

☐ Yes ☐ No

If No please do not continue in the questionnaire

2- I belong to one of the following age groups:

☐ 18 – 29 ☐ 30 – 49 ☐ 50 – 59 ☐ 60 – 69 ☐ 70 +

3- My gender is:

☐ Male ☐ Female

4- My marital status is:

☐ Single ☐ Married no children ☐ Married with children

5- My education is:

☐ No high school ☐ High School ☐ College ☐ Post College(Masters, PhD)

6- What best describes the type of work I do?

☐ Healthcare ☐ Banking

☐ Manufacturing ☐ Hospitality / Food and Beverages

☐ Security company ☐ Other, please specify: _____

7- My job position:

☐ Non Supervisory ☐ Supervisory ☐ Higher Managerial

8- Which type of overtime I mostly work (you can choose more than one answer) :

☐ Voluntary Rewarded (the employee is proposed overtime and agrees with it)

☐ Voluntary Unrewarded (the employee stays more hours in the workplace to complete work or to help peers)

☐ Involuntary Rewarded (overtime hours are added for the employee without negotiating with him/her)

☐ Involuntary Unrewarded (the employee is forced to work overtime for different reasons, for example to prove commitment to the boss, or in exchange of favors, or fear of punishment, exc.)

9- On average how many hours of overtime I make in a month:

Please specify: _____

10- What type of shift work I do (You can choose more than one answer)

☐ Day ☐ Evening ☐ Night

Please read the below statements carefully and specify your degree of agreement or disagreement with them.

Nb.	Please Specify how each of the below statements relate to your own experience	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11	I work overtime to show commitment to my work					
12	I work Overtime to strengthen further my job opportunities.					
13	I work overtime to supplement my income					
14	I work overtime to avoid pressures from my managers					
15	I work overtime to cover the gap at the workplace					
16	My mood worsen when I work overtime					
17	My physical health deteriorates when I work overtime					
18	My social life with my friends suffers from me working overtime					
19	I do not give my family enough time when I work overtime					
20	The quality of my work is the same with and without overtime					

Nb.	Please Specify how each of the below statements relate to your own experience	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
21	My productivity decreases during overtime					
22	My overtime work is acceptable to me					

3.5.2. Distribution method

Electronic Distribution

Through a Survey Monkey (https://www.surveymonkey.com) and using social media like Facebook and WhatsApp to my friends

3.5.3. Sample Population

The sample population selected will be convenient.

- The sample includes full time workers selected from employees all over Lebanon, working in the following industries:

    1. Healthcare
    2. Banking
    3. Manufacturing
    4. Hospitality/Food and Beverages

5. Security companies
6. Other, please specify: _____

- The reasons for the choice of industries I chose are the following:
    1. They all have clear descriptions of their jobs and shifts
    2. Variety of shifts and overtime they perform
    3. Ease of access based on personal relationships

3.3.4. Methods for testing

The hypotheses will be tested using Regression Analysis, one-way ANOVA or t-test, and Factor Analysis; the answers will be analyzed using the Statistical Package for the Social Sciences (SPSS).

- **Regression Analysis** will be used to identify which among the independent variables do affect the dependent variables
- **ANOVA and t-test** will be used to see if differences exist in accepting the overtime based on Socio Demographic factors
- **Factor Analysis** will be used to identify the relationships among the variables and to understand the group of the variables used in the survey

Since Multiple Regression analysis is to be used for testing the hypotheses, the number of observations to each independent variable should not be below five to avoid the risk of over fitting, i.e. making the results specific to the sample, thus lacking generalizability (Bartlett, Kotrlik and Higgins, 2001)

In this study, 10 independent variables were used. Hence the corresponding number of observations on the basis of 5:1 ratio is 10 x 5 = 50.

Moreover, since factor analysis is to be used to identify the relationships among the variables and to understand the group of the variables used in the survey, a researcher cannot factor analyze a sample of fewer than 50 observations and preferably the sample size should be 100 or larger to provide an adequate basis for the calculation of the correlations between variables as Hair, Black, Babin, Anderson, and Tatham (2006) explain.

Therefore 160is defined to be appropriate sample size for carrying out both multiple regression and factor analysis. However, 20% is added to count for non-responses making the sample size 192. For simplicity of calculations, the sample size was rounded to 200workers.

CHAPTER FOUR: SURVEY & STATISTICAL ANALYSES

Survey Results and Statistical Analysis

237 survey questionnaires were filled out by 237 respondents who were full time employees in different Lebanese industries. But 207 of responses were used in SPSS because of data incompleteness and inaccuracy, 30 respondents who answered NO for making overtime were deleted from my study.

To facilitate the display and interpretation of data descriptive statistics were computed from the responses obtained.

4.1. Hypothesis 1

Having a purpose for overtime relates with acceptance of overtime

Purpose consists of:

A-Commitment

B-Strengthen job opportunities

C-Supplement income

D-Avoid social problems

E-Accommodate work place

Survey Results

A-Commitment:

I work overtime to show commitment to my work		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	4.8%	10
Disagree	11.6%	24
Neutral	26.1%	54
Agree	44.9%	93
Strongly Agree	12.6%	26
answered question		**207**
skipped question		**0**

B-Strengthen job opportunities

I work Overtime to strengthen further my job opportunities		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	4.3%	9
Disagree	16.4%	34
Neutral	28.0%	58
Agree	38.2%	79
Strongly Agree	13.0%	27
answered question		**207**
skipped question		**0**

C-Supplement income

I work overtime to supplement my income		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	8.2%	17
Disagree	16.4%	34
Neutral	21.7%	45
Agree	30.4%	63
Strongly Agree	23.2%	48
answered question		**207**
skipped question		**0**

D-Avoid social problems

I work overtime to avoid pressures from my managers		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	8.7%	18
Disagree	27.1%	56
Neutral	33.3%	69
Agree	26.1%	54
Strongly Agree	4.8%	10
answered question		**207**
skipped question		**0**

E-Accommodate work place

I work overtime to cover the gap at the workplace		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	2.9%	6
Disagree	10.1%	21
Neutral	17.9%	37
Agree	51.2%	106
Strongly Agree	17.9%	37
answered question		**207**
skipped question		**0**

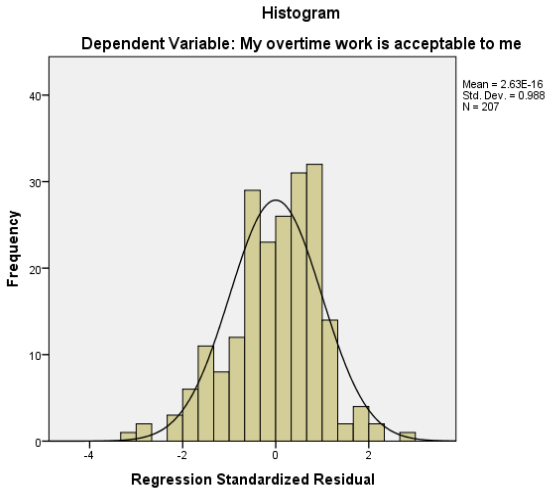
Survey Statistics

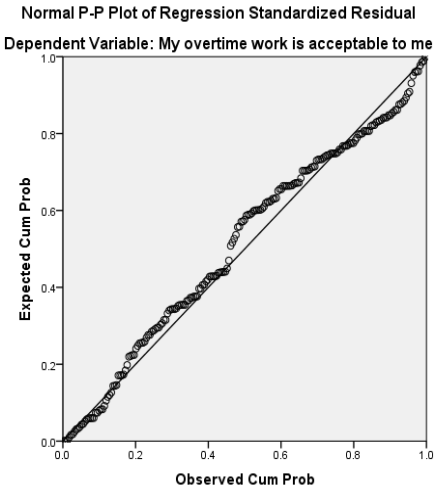
Linear Regression was done to compare the Independent variables, showing commitment, strengthening job opportunities, supplementing income or avoiding social problems of overtime work with the Dependent variable which is Employee Acceptance of Overtime

Results were as follows

Descriptive Statistics

	Mean	Std. Deviation	N
My overtime work is acceptable to me	3.37	.871	207
I work overtime to show commitment to my work	3.49	1.033	207
I work Overtime to strengthen further my job opportunities	3.36	1.056	207
I work overtime to supplement my income	3.44	1.256	207
I work overtime to avoid pressures from my managers	2.85	1.045	207
I work overtime to cover the gap at the workplace	3.71	.973	207





The Histogram shows a bell-shaped curve and the normal plot of the residuals shows the points close to the diagonal line

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	I work overtime to cover the gap at the workplace, I work overtime to supplement my income, I work overtime to show commitment to my work, I work overtime to avoid pressures from my managers, I work Overtime to strengthen further my job opportunities[b]	.	Enter

a. Dependent Variable: My overtime work is acceptable to me

b. All requested variables entered (investigating the dependencies group by group)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	25.163	5	5.033	7.710	.000[b]
	Residual	131.195	201	.653		
	Total	156.357	206			

a. Dependent Variable: My overtime work is acceptable to me

b. Predictors: (Constant), I work overtime to cover the gap at the workplace, I work overtime to supplement my income, I work overtime to show commitment to my work, I work overtime to avoid pressures from my managers, I work Overtime to strengthen further my job opportunities

The Probability of F statistics (7.710) for the regression model is 0.000 which is less than 0.05 hence we accept the alternative hypothesis that there is statistically significant relationship between the independent variables and the dependent variables, that is, regression model is statistically significant in predicting the dependent variable

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.602	.344		7.559	.000
	I work overtime to show commitment to my work	.063	.068	.075	.922	.358
	I work Overtime to strengthen further my job opportunities	.205	.071	.249	2.898	.004
	I work overtime to supplement my income	.109	.049	.157	2.232	.027
	I work overtime to avoid pressures from my managers	-.179	.058	-.215	-3.064	.002
	I work overtime to cover the gap at the workplace	-.001	.059	-.001	-.021	.983

a. Dependent Variable: My overtime work is acceptable to me

We can represent the regression equation:

Purpose for working overtime = 2.602 + 0.205 (I work overtime to strengthen my job opportunities) + 0.109 (I work overtime to supplement my income) - 0.179 (I work overtime to avoid pressure from my managers)

A-Commitment

Since the significance of the t-values for the constant and coefficient Working overtime to strengthen further my job opportunities are 0.358 which is higher than 0.05 there is no statistically significant positive linear relationship between Commitment to work and Employee acceptance of overtime

B-Strengthen job opportunities

Since the significance of the t-values for the constant and coefficient Working overtime to strengthen further my job opportunities are 0.004 which is lower than 0.05 and since they have a positive value, we conclude that there is a statistically significant positive linear relationship between Job opportunities and Employee acceptance of overtime

C-Supplement income

Since the significance of the t-values for the constant and coefficient Working overtime to supplement my income are 0.027 which is lower than 0.05 and since they have a positive value, we conclude that there is a statistically significant positive linear relationship between Supplement income and Employee acceptance of overtime

D-Avoid social problems

Since the significance of the t-values for the constant and coefficient Working overtime to avoid pressure from my managers are 0.002 which is lower than 0.05 but the unstandardized Coefficients B is negative, we conclude that there is a statistically negative relationship between working overtime to avoid pressure from managers and Employee acceptance of overtime

E-Accommodate work place

Since the significance of the t-values for the constant and coefficient working overtime to cover gap at the workplace are 0.983 which is higher than 0.05 there is no statistically significant positive linear relationship between working to cover gaps in workplace and Employee acceptance of overtime

4.2. Hypothesis 2

Overtime affecting negatively employee's mental health will relate negatively with acceptance of overtime

Survey Results

My mood worsen when I work overtime		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	5.8%	12
Disagree	24.2%	50
Neutral	30.0%	62
Agree	30.0%	62
Strongly Agree	10.1%	21
answered question		**207**
skipped question		**0**

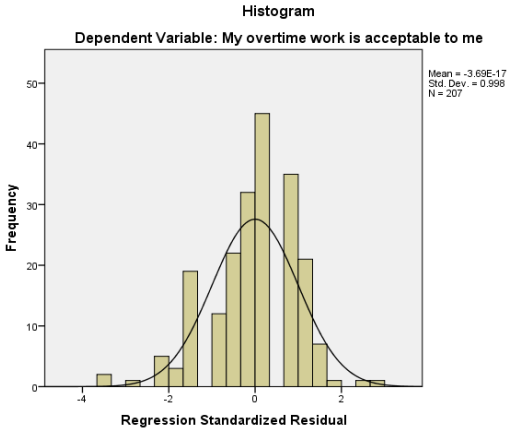
Statistics

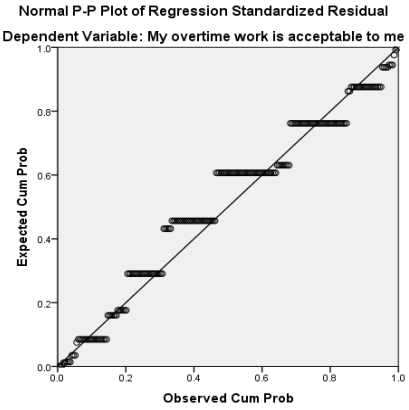
Linear Regression was done to compare the Independent mental health with the Dependent variable which is Employee Acceptance of Overtime

Results were as follows

Descriptive Statistics

	Mean	Std. Deviation	N
My overtime work is acceptable to me	3.37	.871	207
My mood worsen when I work overtime	3.18	1.054	207





The Histogram shows a bell-shaped curve and the normal plot of the residuals shows the points close to the diagonal line

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	My mood worsen when I work overtime[b]	.	Enter

a. Dependent Variable: My overtime work is acceptable to me

c. b. All requested variables entered. (investigating the dependencies group by group)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.039	1	28.039	44.795	.000[b]
	Residual	128.318	205	.626		
	Total	156.357	206			

a. Dependent Variable: My overtime work is acceptable to me

b. Predictors: (Constant), My mood worsen when I work overtime

The Probability of F statistics (28.039) for the regression model is 0.000 which is less than 0.05 hence we accept the alternative hypothesis that there is statistically significant relationship between the independent variables and the dependent variables, that is, regression model is statistically significant in predicting the dependent variable.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.486	.175		25.592	.000
	My mood worsen when I work overtime	-.350	.052	-.423	-6.693	.000

a. Dependent Variable: My overtime work is acceptable to me

We can represent the regression equation:

Mental health = 4.486 - 0.350 (My mood worsen when I work overtime)

Since the significance of the t-values for the constant and coefficient mood worsening are 0.000 which is lower than 0.05 but the unstandardized Coefficients B is negative, we conclude that there is a statistically negative relationship between mood and Employee acceptance of overtime

4.3. Hypothesis 3

Overtime affecting negatively employee's physical health will relate negatively with acceptance of overtime

Survey Results

My physical health deteriorates when I work overtime		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	6.8%	14
Disagree	20.3%	42
Neutral	18.4%	38
Agree	41.5%	86
Strongly Agree	13.0%	27
answered question		**207**
skipped question		**0**

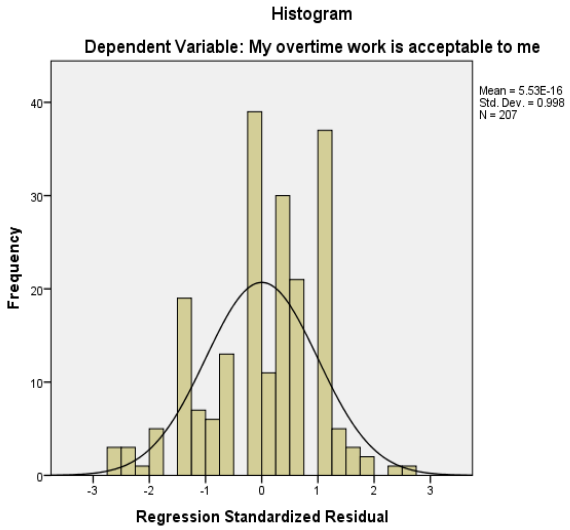
Statistics

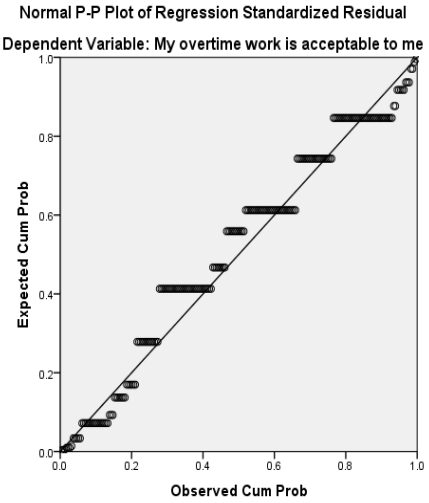
Linear Regression was done to compare the Independent variables, physical health with the Dependent variable which is Employee Acceptance of Overtime

Results were as follows

Descriptive Statistics

	Mean	Std. Deviation	N
My overtime work is acceptable to me	3.37	.871	207
My physical health deteriorates when I work overtime	3.34	1.133	207





The Histogram shows a bell-shaped curve and the normal plot of the residuals shows the points close to the diagonal line

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	My physical health deteriorates when I work overtime[b]	.	Enter

a. Dependent Variable: My overtime work is acceptable to me

d. b. All requested variables entered. (investigating the dependencies group by group)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.232	1	23.232	35.775	.000[b]
	Residual	133.126	205	.649		
	Total	156.357	206			

a. Dependent Variable: My overtime work is acceptable to me

b. Predictors: (Constant), My physical health deteriorates when I work overtime

The Probability of F statistics (23.232) for the regression model is 0.000 which is less than 0.05 hence we accept the alternative hypothesis that there is statistically significant relationship between the independent variables and the dependent variables, that is, regression model is statistically significant in predicting the dependent variable.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.362	.175		24.955	.000
	My physical health deteriorates when I work overtime	-.296	.050	-.385	-5.981	.000

a. Dependent Variable: My overtime work is acceptable to me

We can represent the regression equation:

Physical health = 4.362 – 0.296 (My physical health deteriorates when I work overtime)

Since the significance of the t-values for the constant and coefficient physical health deterioration are 0.000 which is lower than 0.05 but the unstandardized Coefficients B is negative, we conclude that there is a statistically negative relationship between physical health and Employee acceptance of overtime

4.4. Hypothesis 4

Overtime affecting negatively employee's work-life balance will relate negatively with acceptance of overtime

Personal work-life balance consists of:

A-Social life with friends

B-Social life with family

Survey Results

A-Social life with friends

My social life with my friends suffers from me working overtime		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	2.4%	5
Disagree	14.5%	30
Neutral	20.3%	42
Agree	43.5%	90
Strongly Agree	19.3%	40
answered question		**207**
skipped question		**0**

B-Social life with family

I do not give my family enough time when I work overtime		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	1.9%	4
Disagree	11.6%	24
Neutral	15.0%	31
Agree	49.8%	103
Strongly Agree	21.7%	45
answered question		**207**
skipped question		**0**

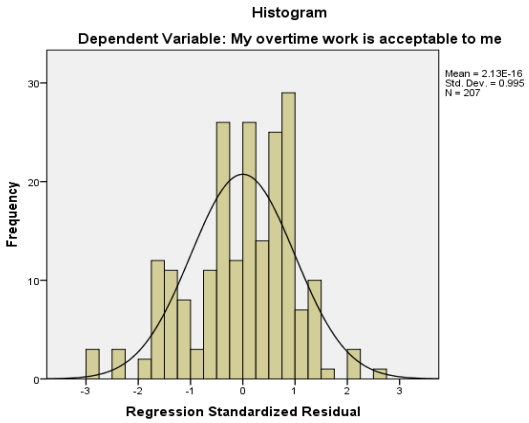
Statistics

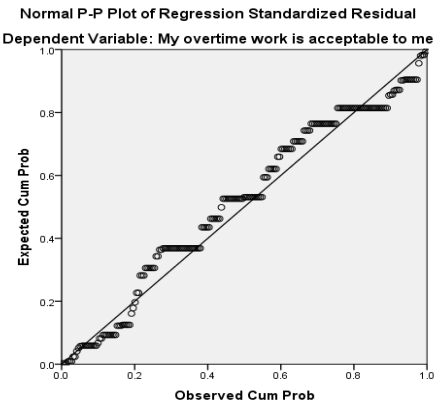
Linear Regression was done to compare the Independent variables, personal work-life balance with the Dependent variable which is Employee Acceptance of Overtime

Results were as follows

Descriptive Statistics

	Mean	Std. Deviation	N
My overtime work is acceptable to me	3.37	.871	207
My social life with my friends suffers from me working overtime	3.63	1.048	207
I do not give my family enough time when I work overtime	3.76	1.018	207





The Histogram shows a bell-shaped curve and the normal plot of the residuals shows the points close to the diagonal line

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	I do not give my family enough time when I work overtime, My social life with my friends suffers from me working overtime[b]	.	Enter

a. Dependent Variable: My overtime work is acceptable to me

e. b. All requested variables entered.(investigating the dependencies group by group)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.276	2	10.638	16.065	.000[b]
	Residual	135.082	204	.662		
	Total	156.357	206			

a. Dependent Variable: My overtime work is acceptable to me

b. Predictors: (Constant), I do not give my family enough time when I work overtime, My social life with my friends suffers from me working overtime

The Probability of F statistics (16.065) for the regression model is 0.000 which is less than 0.05 hence we accept the alternative hypothesis that there is statistically significant relationship between the independent variables and the dependent variables, that is, regression model is statistically significant in predicting the dependent variable.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.620	.227		20.319	.000
	My social life with my friends suffers from me working overtime	-.140	.077	-.169	-1.830	.069
	I do not give my family enough time when I work overtime	-.196	.079	-.229	-2.488	.014

a. Dependent Variable: My overtime work is acceptable to me

We can represent the regression equation:

Personal work life balance = 4.620 - 0.196 (My physical health deteriorates when i work overtime)

A-Social life with friends

Since the significance of the t-values for the constant and coefficient Working overtime to strengthen further my job opportunities are 0.069 which is higher than 0.05 there is no statistically significant positive linear relationship between Social life with friends and Employee acceptance of overtime

B-Social life with family

Since the significance of the t-values for the constant and coefficient Working overtime to avoid pressure from my managers are 0.014 which is lower than 0.05 but the unstandardized Coefficients B is negative, we conclude that there is a statistically significant negative relationship between family time and Employee acceptance of overtime

4.5. Hypothesis 5

Overtime affecting negatively quality of work will relate negatively with acceptance of overtime.

Survey Results

The quality of my work is the same with and without overtime		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	4.3%	9
Disagree	25.1%	52
Neutral	19.8%	41
Agree	37.2%	77
Strongly Agree	13.5%	28
answered question		**207**
skipped question		**0**

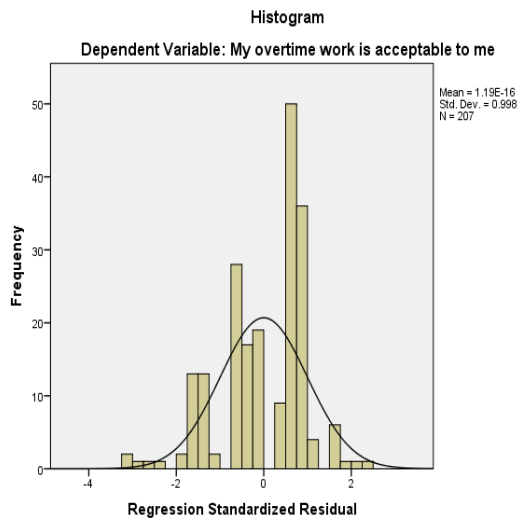
Statistics

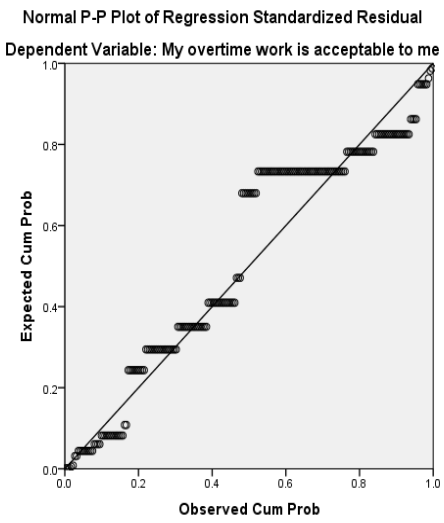
Linear Regression was done to compare the Independent variables, Quality of work with respect to employee with the Dependent variable which is Employee Acceptance of Overtime

Results were as follows

Descriptive Statistics

	Mean	Std. Deviation	N
My overtime work is acceptable to me	3.37	.871	207
The quality of my work is the same with and without overtime	3.31	1.145	207





The Histogram shows a bell-shaped curve and the normal plot of the residuals shows the points close to the diagonal line

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	The quality of my work is the same with and without overtime[b]	.	Enter

a. Dependent Variable: My overtime work is acceptable to me

f. b. All requested variables entered. (investigating the dependencies group by group)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.848	1	4.848	6.559	.011[b]
	Residual	151.510	205	.739		
	Total	156.357	206			

a. Dependent Variable: My overtime work is acceptable to me

b. Predictors: (Constant), The quality of my work is the same with and without overtime

The Probability of F statistics (6.559) for the regression model is 0.011 which is less than 0.05 hence we accept the alternative hypothesis that there is statistically significant relationship between the independent variables and the dependent variables, that is, regression model is statistically significant in predicting the dependent variable.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.929	.183		15.996	.000
	The quality of my work is the same with and without overtime	.134	.052	.176	2.561	.011

a. Dependent Variable: My overtime work is acceptable to me

We can represent the regression equation:

Quality of work = 2.929 + 0.134 (Quality of my work is the same with and without overtime)

Since the significance of the t-values for the constant and coefficient The quality of work is the same with or without overtime are 0.011 which is lower than 0.05 and since they have a positive value, we conclude that there is a statistically significant positive linear relationship between quality of work and Employee acceptance of overtime

4.6. Hypothesis 6

Overtime affecting negatively the productivity of employee work will relate negatively with acceptance of overtime

Survey Results

My productivity decreases during overtime		
Answer Options	**Response Percent**	**Response Count**
Strongly Disagree	9.2%	19
Disagree	32.4%	67
Neutral	22.2%	46
Agree	30.0%	62
Strongly Agree	6.3%	13
answered question		**207**
skipped question		**0**

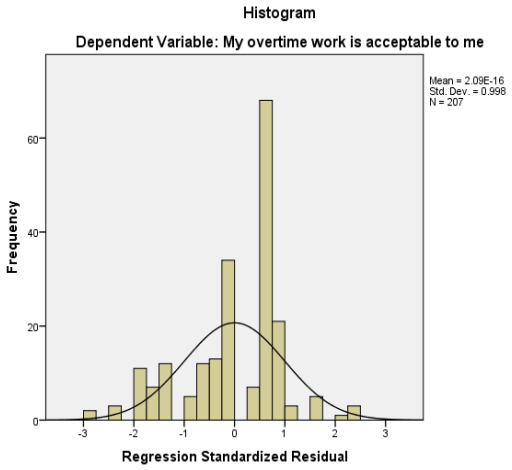
Statistics

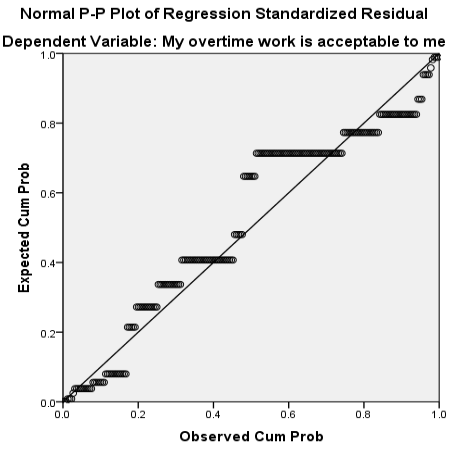
Linear Regression was done to compare the Independent variables, Productivity with respect to employee with the Dependent variable which is Employee Acceptance of Overtime

Results were as follows

Descriptive Statistics

	Mean	Std. Deviation	N
My overtime work is acceptable to me	3.37	.871	207
My productivity decreases during overtime	2.92	1.121	207





The Histogram shows a bell-shaped curve and the normal plot of the residuals shows the points close to the diagonal line

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	My productivity decreases during overtime[b]	.	Enter

a. Dependent Variable: My overtime work is acceptable to me

g. b. All requested variables entered.(investigating the dependencies group by group)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.512	1	6.512	8.908	.003[b]
	Residual	149.846	205	.731		
	Total	156.357	206			

a. Dependent Variable: My overtime work is acceptable to me

b. Predictors: (Constant), My productivity decreases during overtime

The Probability of F statistics (8.908) for the regression model is 0.003 which is less than 0.05 hence we accept the alternative hypothesis that there is statistically significant relationship between the independent variables and the dependent variables, that is, regression model is statistically significant in predicting the dependent variable.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.836	.166		23.062	.000
	My productivity decreases during overtime	-.159	.053	-.204	-2.985	.003

a. Dependent Variable: My overtime work is acceptable to me

We can represent the regression equation:

Productivity during overtime = 3.836 – 0.159 (my productivity decreases during overtime)

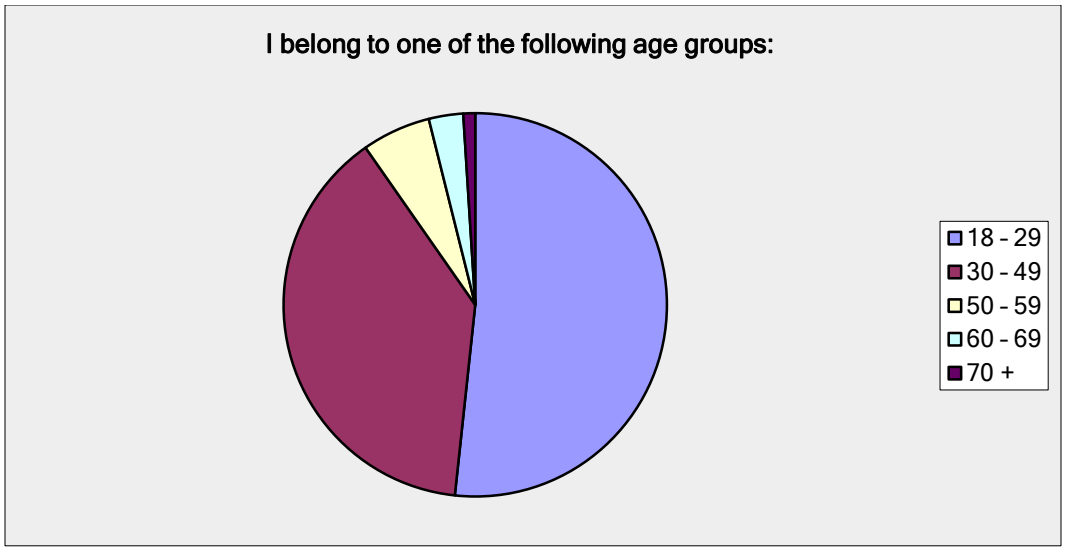
Since the significance of the t-values for the constant and coefficient Productivity during overtime are 0.003 which is lower than 0.05 but the unstandardized Coefficients B is negative, we conclude that there is a statistically significant negative relationship between productivity during overtime and Employee acceptance of overtime

4.7. Hypothesis 7

The age group of the employee affects the acceptance of overtime

Survey results

I belong to one of the following age groups:		
Answer Options	**Response Percent**	**Response Count**
18 – 29	51.7%	107
30 – 49	38.6%	80
50 – 59	5.8%	12
60 – 69	2.9%	6
70 +	1.0%	2
answered question		**207**
skipped question		**0**



Statistics

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of at least five independent groups.

One-way ANOVA test was performed to test whether there are statistically significant differences in the age groups

Descriptives

My overtime work is acceptable to me

Group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	103	3.28	.857	.084	3.11	3.45	1	5
2	88	3.48	.857	.091	3.30	3.66	1	5
3	9	3.33	1.225	.408	2.39	4.27	1	5

4	6	3.33	.816	.333	2.48	4.19	2	4
5	1	4.00	.	.	.	.	4	4
Total	207	3.37	.871	.061	3.25	3.49	1	5

Group index

1=Between 18-29 of age

2= Between 30-49 of age

3=Between 50-59 of age

4=Between 60-69 of age

5=Age group above 70 of age

Test of Homogeneity of Variances

My overtime work is acceptable to me

Levene Statistic	df1	df2	Sig.
.834[a]	3	202	.477

a. Groups with only one case are ignored in computing the test of homogeneity of variance for My overtime work is acceptable to me.

The Levene's statistics is 0.477 which is greater than 0.05 hence there is no violation of the assumption of homogeneity of variances and ANOVA test used

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.235	4	.559	.732	.571
Within Groups	154.123	202	.763		
Total	156.357	206			

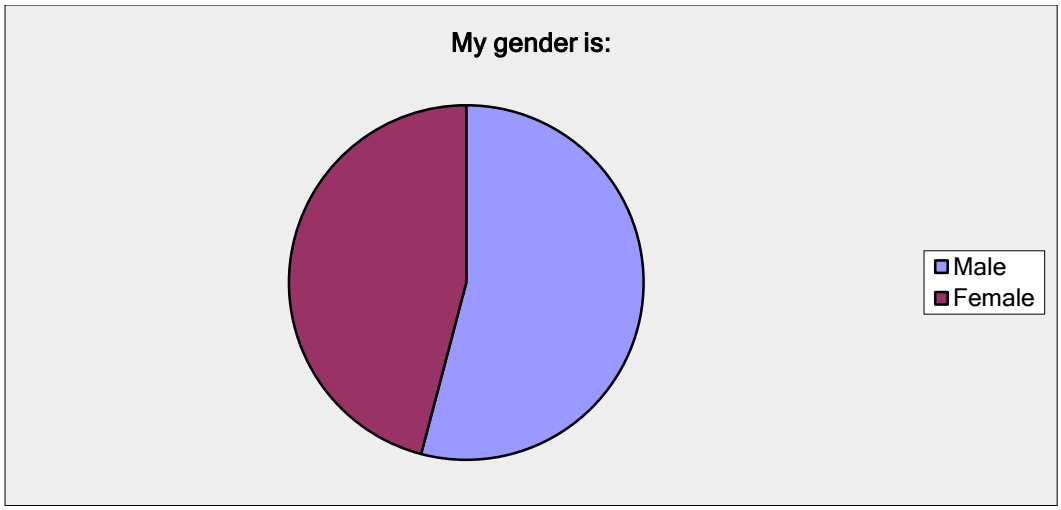
The significance of the ratio of F statistics (0.732) is 0.571 which is greater than 0.05 hence there is insufficient evidence that there are statistically significant differences among the five industries.

4.8. Hypothesis 8

The gender of the employee affects the acceptance of overtime

Survey results

My gender is:		
Answer Options	**Response Percent**	**Response Count**
Male	54.1%	112
Female	45.9%	95
answered question		**207**
skipped question		**0**



Survey Statistics

Independent T-samples T test used

The independent-samples t-test, also called the student's t-test, is an inferential statistical test that determines whether the is a statistically significant difference between the means of two independent groups.

The assumption of equal variances is tested by Levene's Test for Equality of Variances. If the significance for Leven's test is greater than 0.05 then the two group variances can be treated as equal, and the test of equality of means proceeds with the assumption of equal variance between the 2 groups. If the significance for Leven's test is equal or below 0.05, the assumption of homogeneity of the variance is rejected and the "Equality Variances not assumed" is used to test the equality of means. In both cases, the basic criterion for statistical significant difference between the two population means is a "2-taledsiginificane" less than 0.05, where we reject the null hypothesis that two population means are not equal.

First, the independent t-test was performed on the Gender of the independent variables to see whether Accepting the overtime differ between genders.

Group 1= representing the Male

Group 2 = representing the Female

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
My overtime work is acceptable to me	Equal variances assumed	3.578	.060	3.447	205	.001
	Equal variances not assumed			3.401	184.970	.001

If the significance for Leven's test 0.06 is greater than 0.05 then the two group variances are assumed equal

Thus we proceed with the assumption of equal variance between the 2 groups:

The significant for T-test of equality of means is 0.001 which is below 0.05 which is significant, thus the hypothesis of equal means is rejected and therefore there is difference between the two genders concerning accepting the overtime.

Group Statistics

	My gender is:	N	Mean	Std. Deviation	Std. Error Mean
My overtime work is acceptable to me	1(male)	113	3.56	.790	.074
	2(female)	94	3.15	.915	.094

In Group Statistics:

Mean Male 3.56

Mean Female 3.15

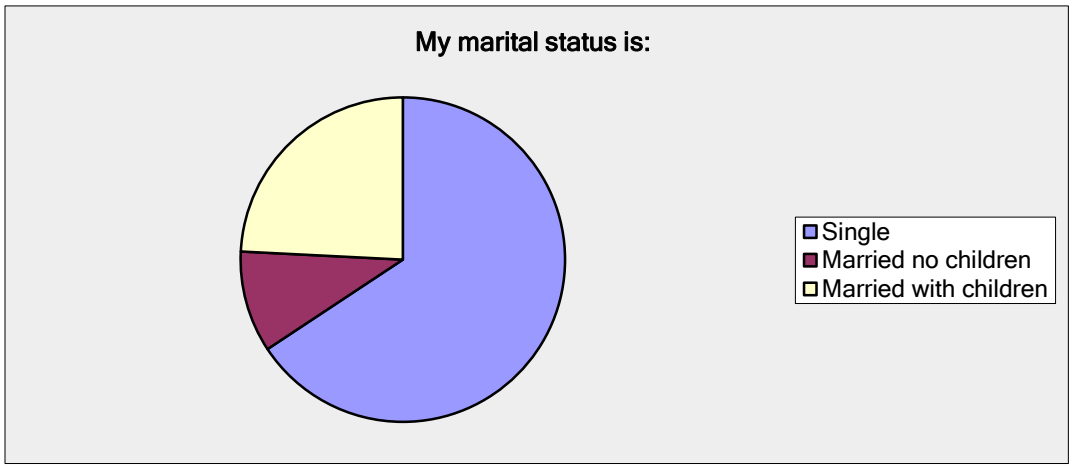
Furthermore, the mean of perceived overtime acceptance by the males is 3.56 while it is 3.15 for females, this means that males are more to accept overtime.

4.9. Hypothesis 9

The marital status of the employee affects the acceptance of overtime

Survey results

My marital status is:		
Answer Options	**Response Percent**	**Response Count**
Group 1 =Single	65.7%	136
Group 2 =Married no children	10.1%	21
Group 3 =Married with children	24.2%	50
answered question		**207**
skipped question		**0**



Statistics

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of at least three independent groups.

One-way ANOVA test was performed to test whether there are statistically significant differences in the marital status groups

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.737	2	2.869	3.885	.022
Within Groups	150.620	204	.738		
Total	156.357	206			

The Probability of F statistics (3.885) for the regression model is 0.022 which is less than 0.05 hence we accept the alternative hypothesis that there is statistically significant relationship

between the Marital status and the dependent variables (acceptance of overtime), that is, regression model is statistically significant in predicting the dependent variable. Thus we can run the Post Hoc Test

Post Hoc Test

We can use Post Hoc Test when we get a significant result in an ANOVA, the samples are not all from the same mean, so the Post Hoc Test tells us which group differ from the rest.

Post Hoc Tests Table

Multiple Comparisons

Dependent Variable: My overtime work is acceptable to me

LSD

(I) My marital status is:	(J) My marital status is:	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.557*	.202	.006	.16	.96
	3	.129	.139	.355	-.14	.40
2	1	-.557*	.202	.006	-.96	-.16
	3	-.429	.221	.054	-.86	.01
3	1	-.129	.139	.355	-.40	.14
	2	.429	.221	.054	-.01	.86

*. The mean difference is significant at the 0.05 level.

Group index

Group 1= Single

Group 2= Married no children

Group 3=Married with children

Groups 1 and 2 are significant giving 0.006 Significance which is less than 0.05

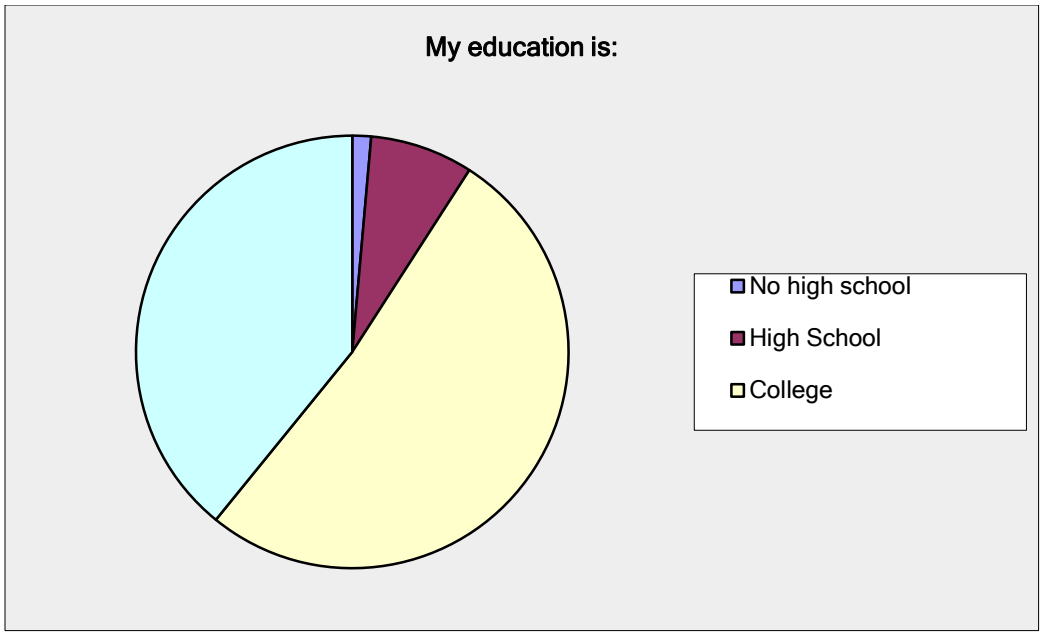
Single and married show significant differences

4.10. Hypothesis 10

The education level of the employee affects the acceptance of overtime

Survey results

My education is:		
Answer Options	**Response Percent**	**Response Count**
Group 1 =No high school	1.4%	3
Group 2 =High School	7.7%	16
Group 3 =College	51.7%	107
Group 4 =Post College(Masters, PhD)	39.1%	81
answered question		**207**
skipped question		**0**



Statistics

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of at least four independent groups.

One-way ANOVA test was performed to test whether there are statistically significant differences in the education groups

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.727	3	.909	1.201	.310
Within Groups	153.630	203	.757		
Total	156.357	206			

The Significance of the ration of F statistics (1.201) is 0.310 which is greater than 0.05 hence there is insufficient evidence that there is statistically significant differences among the four education levels.

4.11. Hypothesis 11

The type of work of the employee affects the acceptance of overtime

Survey results

What best describes the type of work I do?		
Answer Options	**Response Percent**	**Response Count**
1-Healthcare	41.4%	86
2-Banking	15.9%	33
3-Manufacturing	7.24%	15
4-Hospitality/Food and Beverages	11.11%	23
5-Security Company	3.38%	7
Others:		
6-Education	4.83%	10
7-Admninistrative	10.14%	21
8-Technology	2.41%	5
9-Sales	3.38%	7
answered question		**207**
skipped question		**0**

ANOVA test

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of at least four independent groups.

One-way ANOVA test was performed to test whether there are statistically significant differences in the type of work groups

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.766	8	.721	.948	.479
Within Groups	150.592	198	.761		
Total	156.357	206			

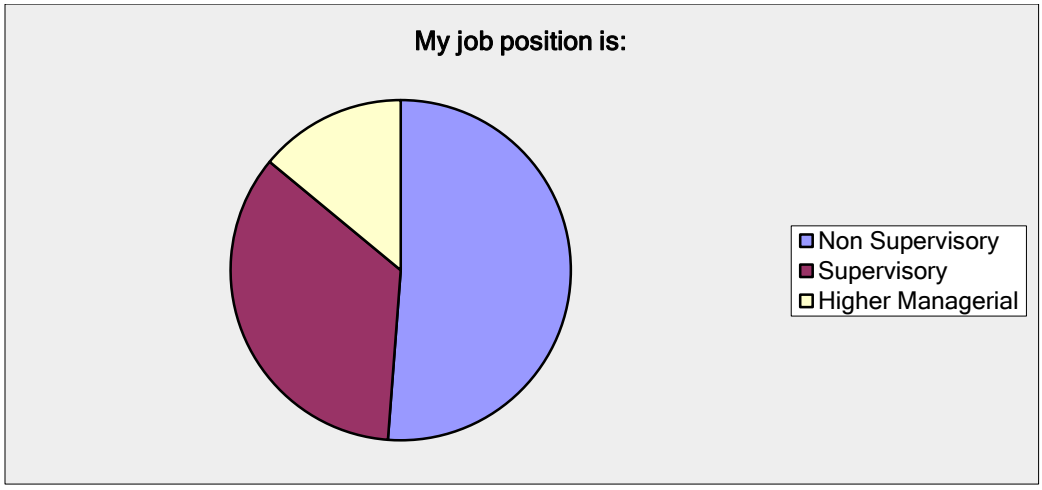
The significance of the ratio of F statistics (0.948) is 0.479 which is greater than 0.05 hence there is insufficient evidence that there is statistically significant difference among the nine types of work

4.12. Hypothesis 12

The job position of the employee affects the acceptance of overtime

Survey results

My job position is:		
Answer Options	**Response Percent**	**Response Count**
Group 1 =Non Supervisory	51.2%	106
Group 2 =Supervisory	34.8%	72
Group 3 =Higher Managerial	14.0%	29
answered question		**207**
skipped question		**0**



Statistics

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of at least four independent groups.

One-way ANOVA test was performed to test whether there are statistically significant differences in the job position

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.149	2	1.075	1.422	.244
Within Groups	154.208	204	.756		
Total	156.357	206			

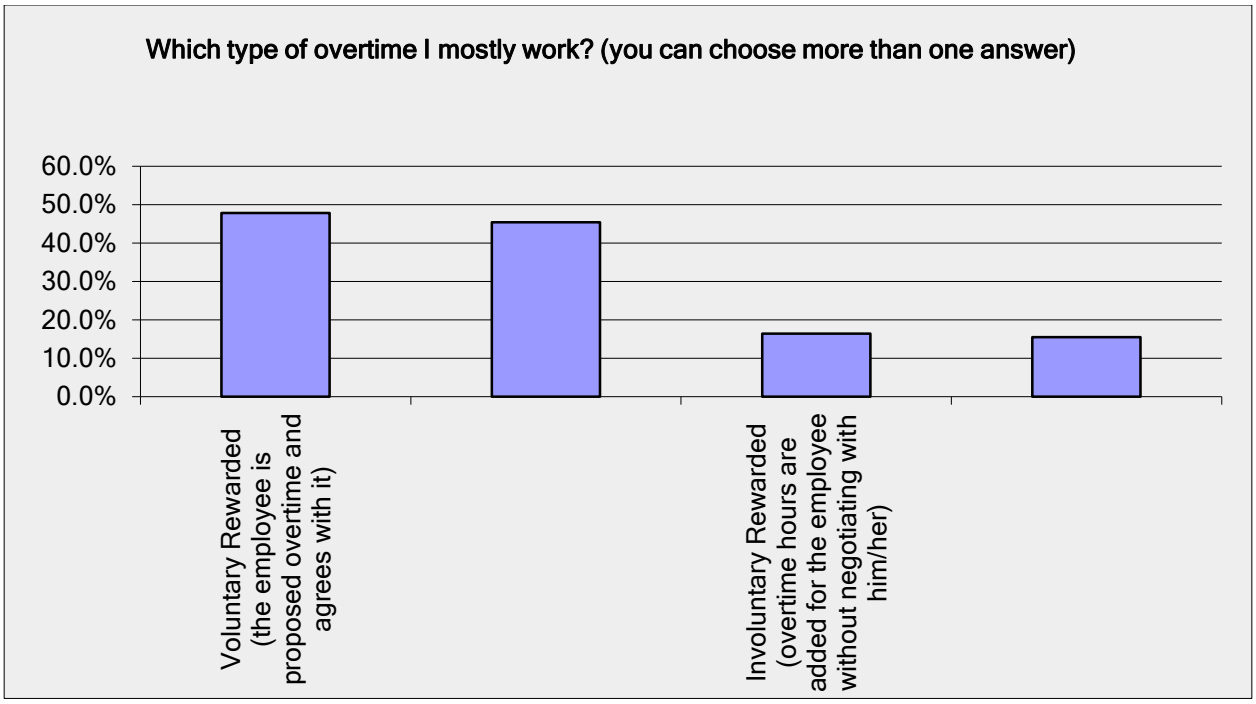
The significance of the ratio of F statistics (1.422) is 0.244 which is greater than 0.05 hence there is insufficient evidence that there is statistically significant difference among four job positions

4.13. Hypothesis 13

Type of overtime of the employee (voluntary rewarded, voluntary Unrewarded, involuntary rewarded, involuntary unrewarded) affects the acceptance of overtime

Survey results

Which type of overtime I mostly work? (you can choose more than one answer)		
Answer Options	**Response Percent**	**Response Count**
Type 1 =Voluntary Rewarded (the employee is proposed overtime and agrees with it)	47.8%	99
Type 2=Voluntary Unrewarded (the employee stays more hours in the workplace to complete work or to help peers)	45.4%	94
Type 3=Involuntary Rewarded (overtime hours are added for the employee without negotiating with him/her)	16.4%	34
Type 4=Involuntary Unrewarded(the employee is forced to work overtime for different reasons, for example to prove commitment to the boss, or in exchange of favors, or fear of punishment, exc.)	15.5%	32
answered question		**207**
skipped question		**0**



Statistics of type 1

Type 1 = Voluntary Rewarded (the employee is proposed overtime and agrees with it)

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of independent groups.

Descriptives

My overtime work is acceptable to me

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0	109	3.25	.914	.088	3.07	3.42
1	98	3.51	.803	.081	3.35	3.67
Total	207	3.37	.871	.061	3.25	3.49

The mean of perceived acceptance to work overtime during shift 1 are 3.25 for the group who don't and 3.51 for the group who does work during shift 1.

Test of Homogeneity of Variances

My overtime work is acceptable to me

Levene Statistic	df1	df2	Sig.
2.234	1	205	.137

The test of variance homogeneity shows that the equality of the two sample variances between the two groups is not significant. Thus, we can proceed with the test using ANOVA.

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.556	1	3.556	4.770	.030
Within Groups	152.802	205	.745		
Total	156.357	206			

The ANOVA test is significant; significance of 0.03 which is less than 0.05, which means that the acceptance to work overtime differs if shift 1 was under consideration. Thus OT shift 1 affects the acceptance to work during this shift. And looking at the means above, the acceptance is higher during this shift (i.e. OT shift 1) than in any other shift.

Statistics of type 2

Type 2 = Voluntary Unrewarded (the employee stays more hours in the workplace to complete work or to help peers)

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of independent groups.

Descriptives

My overtime work is acceptable to me

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0	113	3.35	.865	.081	3.19	3.52
1	94	3.39	.883	.091	3.21	3.57
Total	207	3.37	.871	.061	3.25	3.49

The mean of perceived acceptance to work overtime during shift type 2 are 3.35 for the group who don't and 3.39 for the group who does work during shift 2.

Test of Homogeneity of Variances

My overtime work is acceptable to me

Levene Statistic	df1	df2	Sig.
.076	1	205	.783

The test of variance homogeneity shows that the equality of the two sample variances between the two groups is not significant. Thus we can proceed with the test using ANOVA.

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.081	1	.081	.106	.745
Within Groups	156.277	205	.762		
Total	156.357	206			

In shift type 2 the ANOVA analysis is doable because the test of variance homogeneity is not significant (0.745 more than 0.05) and the result is that there is no significant difference in the acceptance to work overtime during this shift versus any other shift.

Statistics of type 3

Type 3 = Involuntary Rewarded (overtime hours are added for the employee without negotiating with him/her)

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of independent groups.

Descriptives

My overtime work is acceptable to me

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0	176	3.36	.858	.065	3.24	3.49
1	31	3.42	.958	.172	3.07	3.77
Total	207	3.37	.871	.061	3.25	3.49

The mean of perceived acceptance to work overtime during shift type 3 are 3.36 for the group who don't and 3.42 for the group who does work during shift 3.

Test of Homogeneity of Variances

My overtime work is acceptable to me

Levene Statistic	df1	df2	Sig.
.454	1	205	.501

The test of variance homogeneity shows that the equality of the two sample variances between the two groups is not significant. Thus we can proceed with the test using ANOVA.

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.082	1	.082	.107	.744
Within Groups	156.276	205	.762		
Total	156.357	206			

ANOVA analysis in shift 3 is doable because the test of variance homogeneity is not significant and the result is that there is no significant difference in the acceptance to work overtime during this shift versus any other shift.

Statistics of type 4

Type 4 = Involuntary Unrewarded (the employee is forced to work overtime for different reasons, for example to prove commitment to the boss, or

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of independent groups.

Descriptives

My overtime work is acceptable to me

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0	176	3.46	.834	.063	3.34	3.58
1	31	2.87	.922	.166	2.53	3.21
Total	207	3.37	.871	.061	3.25	3.49

The mean of perceived acceptance to work overtime during shift type 4 are 3.46 for the group who don't and 2.87 for the group who does work during shift 4.

Test of Homogeneity of Variances

My overtime work is acceptable to me

Levene Statistic	df1	df2	Sig.
1.119	1	205	.291

The test of variance homogeneity shows that the equality of the two sample variances between the two groups is not significant. Thus we can proceed with the test using ANOVA.

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.152	1	9.152	12.745	.000
Within Groups	147.205	205	.718		
Total	156.357	206			

The ANOVA test is significant; significance of 0.000 which is less than 0.05, where The variance homogeneity test provided no significant difference, which means that the acceptance to work overtime differs if shift 4 was under consideration. Thus OT shift 4 affects the acceptance to work during this shift. And looking at the means above, the acceptance is higher during this shift (i.e. OT shift 4) than in any other shift

4.14. Hypothesis 14

The number of overtime hours the employee does relates positively with acceptance of overtime

Survey results

How many hours of overtime I do per month?		
Answer Options	**Response Percent**	**Response Count**
Type 1 =0-10 hours	46.3%	96
Type 2= 11-20 hours	20.2%	42
Type 3=21-30 hours	14.49%	30
Type 4=31-40 hours	6.76%	14
Type 5= 41-50 hours	2.89%	6
Type 6= more than 50 hours	9.17%	19
answered question		**207**
skipped question		**0**

Statistics

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of independent groups.

Descriptives

My overtime work is acceptable to me

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	97	3.45	.866	.088	3.28	3.63	1	5
2	42	3.21	.842	.130	2.95	3.48	1	4
3	30	3.23	1.040	.190	2.84	3.62	1	5
4	15	3.07	.704	.182	2.68	3.46	2	4
5	4	3.50	1.000	.500	1.91	5.09	2	4
6	19	3.74	.653	.150	3.42	4.05	2	5
Total	207	3.37	.871	.061	3.25	3.49	1	5

Groups index

1= 0-10 hours

2= 11-20 hours

3= 21-30 hours

4= 31-40 hours

5= 41-50 hours

6= more than 50 hours

Test of Homogeneity of Variances

My overtime work is acceptable to me

Levene Statistic	df1	df2	Sig.
1.687	5	201	.139

The test of variance homogeneity shows that the equality of the two sample variances between the two groups is not significant. Thus we can proceed with the test using ANOVA.

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.261	5	1.252	1.677	.142
Within Groups	150.097	201	.747		
Total	156.357	206			

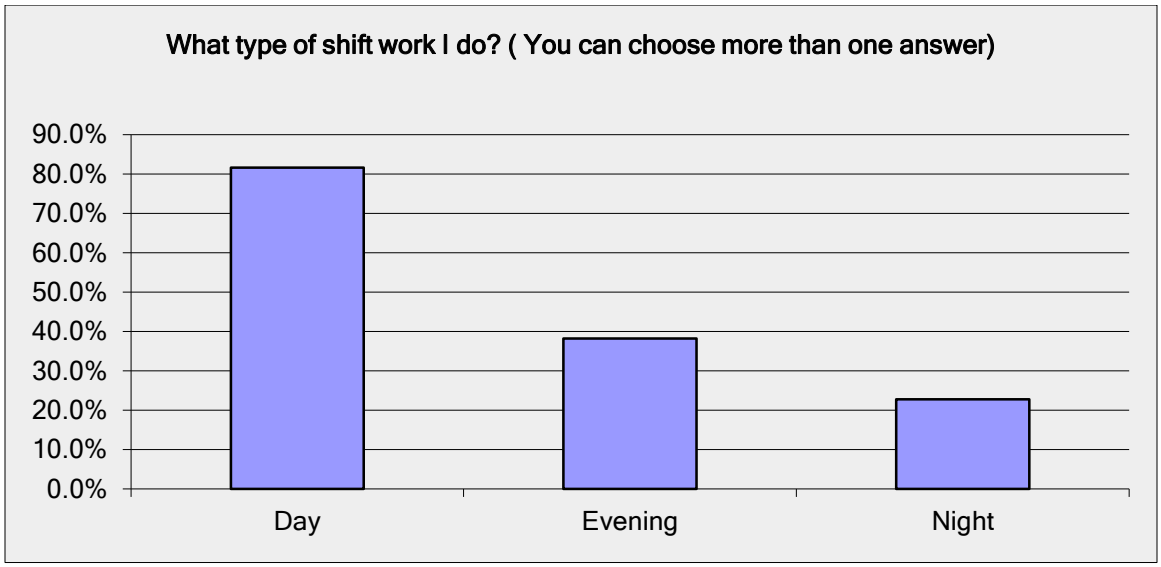
The significance of the ratio of F statistics (1.677) is 0.142 which is greater than 0.05 hence there is insufficient evidence that there is statistically significant difference among the hours of overtime employee makes

4.15. Hypothesis 15

The type of shift employee does (day, evening, night, rotating) affects the acceptance of overtime

Survey results

What type of shift work I do? (You can choose more than one answer)		
Answer Options	**Response Percent**	**Response Count**
Type 1=Day	81.6%	169
Type 2 =Evening	38.2%	79
Type 3 =Night	22.7%	47
answered question		**207**
skipped question		**0**



Statistic of type 1

Type 1 = Day

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of independent groups.

Descriptives

My overtime work is acceptable to me

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0	39	3.49	.721	.115	3.25	3.72
1	168	3.35	.902	.070	3.21	3.48
Total	207	3.37	.871	.061	3.25	3.49

The mean of perceived acceptance to work overtime during day shift are 3.49 for the group who don't and 3.35 for the group who does work during day shift.

Test of Homogeneity of Variances

My overtime work is acceptable to me

Levene Statistic	df1	df2	Sig.
2.862	1	205	.092

The test of variance homogeneity shows that the equality of the two sample variances between the two groups is not significant. Thus we can proceed with the test using ANOVA

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.638	1	.638	.840	.361
Within Groups	155.720	205	.760		
Total	156.357	206			

The ANOVA analysis in day shift is doable because the test of variance homogeneity is not significant and the result is that there is no significant difference in the acceptance to work overtime during day shift versus any other shift.

Statistic of type 2

Type 2 = Evening

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of independent groups.

Descriptives

My overtime work is acceptable to me

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0	129	3.34	.870	.077	3.19	3.49
1	78	3.42	.876	.099	3.23	3.62
Total	207	3.37	.871	.061	3.25	3.49

The mean of perceived acceptance to work overtime during day shift are 3.34 for the group who don't and 3.42 for the group who does work during day shift.

Test of Homogeneity of Variances

My overtime work is acceptable to me

Levene Statistic	df1	df2	Sig.
.041	1	205	.839

The test of variance homogeneity shows that the equality of the two sample variances between the two groups is not significant. Thus we can proceed with the test using ANOVA.

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.327	1	.327	.429	.513
Within Groups	156.031	205	.761		
Total	156.357	206			

The ANOVA analysis in evening shift is doable because the test of variance homogeneity is not significant and the result is that there is no significant difference in the acceptance to work overtime during day shift versus any other shift.

Statistic of type 3

Type 3 = Night

The One-way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between means of independent groups.

Descriptives

My overtime work is acceptable to me

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
0	162	3.38	.886	.070	3.25	3.52
1	45	3.33	.826	.123	3.09	3.58
Total	207	3.37	.871	.061	3.25	3.49

The mean of perceived acceptance to work overtime during night shift are 3.38 for the group who don't and 3.33 for the group who does work during night shift.

Test of Homogeneity of Variances

My overtime work is acceptable to me

Levene Statistic	df1	df2	Sig.
.969	1	205	.326

The test of variance homogeneity shows that the equality of the two sample variances between the two groups is not significant. Thus we can proceed with the test using ANOVA.

ANOVA

My overtime work is acceptable to me

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.086	1	.086	.113	.737
Within Groups	156.272	205	.762		
Total	156.357	206			

The ANOVA analysis in night shift is doable because the test of variance homogeneity is not significant and the result is that there is no significant difference in the acceptance to work overtime during night shift versus any other shift.

CHAPTER FIVE: SUMMARY OF FINDINGS

5.1. Findings from regression analysis

The set of hypotheses tested to know whether the Purpose to work overtime(hypothesis 1), Impact of overtime on personal level (Hypotheses 2, 3, 4) and Impact of overtime at work level (Hypotheses 5, 6) are related to the dependent variable, which is the Employee Acceptance of overtime.

5.1.1. Finding 1: Related to purpose to work overtime (hypothesis 1)

Purpose which consists of five subdivisions showing commitment, strengthening job opportunities, supplementing the income, avoiding social problems, and to accommodate the work place, has different relations with the fact of accepting the overtime like shown in the table below

The Purpose to work overtime			
Independent Variable	**Dependent Variable**	**Significance**	**Relationship**
1-To show commitment	Employee acceptance to work overtime	NO	
2- To strengthen my job opportunities	Employee acceptance to work overtime	YES	Positive
3- To supplement my income	Employee acceptance to work overtime	YES	Positive
4- To avoid social problems i.e. the pressure from managers or peers	Employee acceptance to work overtime	YES	Negative
5- To accommodate the workplace	Employee acceptance to work overtime	NO	

Based on the results to show commitment and to accommodate the workplace have no statistically significant relationship with employee acceptance of overtime, whereas to strengthen job opportunities and to supplement income have significant positive relation with employee acceptance of overtime, and to avoid social problems has a significant negative relationship with the employee acceptance of overtime

To strengthen my job opportunities

Strengthening the job opportunities has a high positive significance with accepting the overtime as working long hours is a type of 'boundary heightening' behavior as to Kanter (1977); and also as K. Nemoto (2012) states, the long working hour norm influences promotion aspirations. My study clearly shows that as the employee sees in overtime an opportunity to climb up in the career ladder, the chances of accepting overtime grows.

To supplement my income

Supplementing the income has a positively significant relationship with acceptance of overtime. In my literature review many examples were given for this positive relationship. M. Watanabe and K. Yamauchi (2016) study shows that the extrinsic factor as incentive has motivational effect on the employee whose acceptance of overtime increases; another study by Van Der Hust & S. Geurts (2001), reports that high rewards and low pressure to work overtime even if they are associated with risk for adverse psychological health, have a significant and positive relationship with overtime; hence as the reward increases the acceptance of overtime increases.

To avoid social problems i.e. the pressure from managers or peers

To avoid social problems i.e. the pressure from managers or peers has the highest significance with the employee acceptance of overtime but negative relationship with working overtime to avoid pressure from managers and Employee acceptance of overtime. This means that as the manager's pressure increases on the employee, the acceptance of overtime decreases and vice versa, one study done by D.M. Olds and S.P. Clarke (2010)clearly states the same concept where nurses unwillingly accept the overtime because of coercion from managers and peers.

5.1.2. Finding 2: Related to impact of overtime on personal level (Hypotheses 2, 3, 4)

Impact on the personal level that consists of three subdivisions on mental health (Hypothesis 2), on physical health (hypothesis 3) and personal work-life balance (Hypothesis 4) has different relations with the fact of accepting the overtime as shown in the table below

Impact of overtime on personal level			
Independent Variable	**Dependent Variable**	**Significance**	**Relationship**
1-On mental health	Employee acceptance to work overtime	YES	Negative
2-On physical health	Employee acceptance to work overtime	YES	Negative
3-On work-life balance			
A-Social life with friends	Employee acceptance to work overtime	NO	
B-Social life with family	Employee acceptance to work overtime	YES	Negative

From the regression analysis findings the impact of overtime on personal level has a direct effect on employee performance, also the relationship is negative, meaning that as the impact decreases the acceptance increases and vice versa

Mental health

From my literature review we understood, as R. Rau & A. Treimer (2004) explain, that even moderate increase in working hours could be a risk for health. The negative drift in mood and its impact on lower levels of concentration, shown in my study that there is a negative relation between mental health and employee acceptance of overtime; hence as the employee feels that his mental health is in risk the acceptance of overtime decreases.

Physical health

For the physical health, many studies have shown the effect of long hours of work on employee physical wellness. L. Lamberg (2004) study shows overtime working nurses were twice as likely to have neck, shoulder, and back problems as those who worked less rigorous schedules. Similarly Ha and Park's (2011) study the authors show an association between the duration of shift work and the metabolic risk factors of cardiovascular disease in healthy employees. In my study significant and negative relationship is proven between physical health and employee acceptance of overtime, meaning that physical health is a concern for an employee when deciding to accept overtime; as the concern for his deteriorating physical health increases, his acceptance of overtime decreases

Work-life balance

In my literature review Monique V.D. Hulst& S. Geurts (2001) make a comparison between employees who did overtime and employees who did not work overtime, and reveal that overtime is associated with negative work-home interference. Thus, working overtime not only put pressure on private or family life, but employees who work overtime also feel that their family life interferes with their work. In my study there was a significant but negative relation between family and acceptance of overtime and no significance between friends and acceptance of overtime, which reveals that family, has a stronger impact on employee.

5.1.3. Finding 3: Related to impact of overtime on work level (Hypotheses 5,6)

Impact on the work level consists of two subdivisions on quality of work (Hypothesis 5) and on productivity (Hypothesis 6). This impact has different relations with the fact of accepting the overtime like shown in the table below

Impact of overtime on work level			
Independent Variable	**Dependent Variable**	**Significance**	**Relationship**
1-On quality of work with respect to employee	Employee acceptance to work overtime	YES	Positive
2-On productivity with respect to employee	Employee acceptance to work overtime	YES	Negative

From the regression analysis findings the impact of overtime on work level has a Significant effect on employee performance, where the relationship is positive for quality of work meaning that as the perception of employees work quality increases the acceptance of overtime increases, and the relationship is negative for productivity, meaning that as the

fear of productivity effected by overtime on employee decreases, the acceptance increases and vice versa

Quality of work with respect to employee

From my literature review we understood that the likelihood of making an error increase with longer work hours (A.E. Rogers 2016). A study done by P. Griffiths (2014)in USA and another study done by E. Cho & N.J. Lee (2016)in South Korea both say that overtime lead to poor quality of care and poor patient safety, in my study the quality of care was significantly related to the employee acceptance of overtime. The employee is feeling responsible for his job and is not willing to sacrifice quality of his work to working extra hours of overtime.

Productivity with respect to employee

As to productivity, in my literature review there are studies that reveal a positive and others a negative outcome of working overtime. For positive H. Awad (2004), says small acts of opportunity to the employee in the form of overtime work often improve efficiency more than any other measure. For negative A. E. Rogers (2016) says nurses' long hours may have adverse effects on performance of nurses. Another stud by H. Awad (2004) includes that the productivity falls rapidly over the first three weeks of overtime. In my study productivity has a significant but negative relation with employee acceptance of overtime, hence when the employee feels that his/her productivity is decreasing with extra hours of work, he/she is not willing to sacrifice more of that productivity level to more hours of overtime.

5.1.4. Findings summary table from Regression Analysis

Regression Analysis Tests				
Independent Variable	**Dependent Variable**	**Hypothesis**	**Significance**	**Relationship**
The purpose to work overtime				
1-To show commitment	Employee acceptance to work overtime	1	NO	
2- To strengthen my job opportunities	Employee acceptance to work overtime	1	YES	Positive
3- To supplement my income	Employee acceptance to work overtime	1	YES	Positive
4- To avoid social problems i.e. the pressure from managers or peers	Employee acceptance to work overtime	1	YES	Negative
5- To accommodate the workplace	Employee acceptance to work overtime	1	NO	
Impact of overtime on personal level				
1-On mental health	Employee acceptance to work overtime	2	YES	Negative
2-On physical health	Employee acceptance to work overtime	3	YES	Negative
3-On work-life balance				
A-Social life with friends	Employee acceptance to work overtime	4	NO	
B-Social life with family	Employee acceptance to work overtime	4	YES	Negative
Impact of overtime on work level				
1-On quality of work with respect to employee	Employee acceptance to work overtime	5	YES	Positive
2-On productivity with respect to employee	Employee acceptance to work overtime	6	YES	Negative

5.1.5. Findings from Correlation Matrix

Because the Enter method used did not show significance with all variables and there could be a chance of multi-co linearity, we performed the correlation test.

Correlation test on purpose which consists of five subdivisions.

Purpose consists of:

A-Commitment

B-Strengthen job opportunities

C-Supplement income

D-Avoid social problems

E-Accommodate work place

Correlations

		I work overtime to show commitment to my work	I work Overtime to strengthen further my job opportunities	I work overtime to supplement my income	I work overtime to avoid pressures from my managers	I work overtime to cover the gap at the workplace
I work overtime to show commitment to my work	Pearson Correlation	1	.580**	-.028	.160*	.086

	Sig. (2-tailed)		.000	.692	.021	.219
	N	207	207	207	207	207
I work Overtime to strengthen further my job opportunities	Pearson Correlation	.580**	1	.234**	.227**	.081
	Sig. (2-tailed)	.000		.001	.001	.247
	N	207	207	207	207	207
I work overtime to supplement my income	Pearson Correlation	-.028	.234**	1	-.188**	-.013
	Sig. (2-tailed)	.692	.001		.007	.856
	N	207	207	207	207	207
I work overtime to avoid pressures from my managers	Pearson Correlation	.160*	.227**	-.188**	1	.222**
	Sig. (2-tailed)	.021	.001	.007		.001
	N	207	207	207	207	207
I work overtime to cover the gap at the workplace	Pearson Correlation	.086	.081	-.013	.222**	1
	Sig. (2-tailed)	.219	.247	.856	.001	
	N	207	207	207	207	207

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table evaluation

In the table above, it shows high correlation between some of the pairs among the five variables, which means that multi-co linearity exists.

Correlation test on work-life balance consists of two subdivisions.

Personal work-life balance consists of:

A-Social life with friends

B-Social life with family

Correlations

		My social life with my friends suffers from me working overtime	I do not give my family enough time when I work overtime
My social life with my friends suffers from me working overtime	Pearson Correlation	1	.709**
	Sig. (2-tailed)		.000
	N	207	207
I do not give my family enough time when I work overtime	Pearson Correlation	.709**	1
	Sig. (2-tailed)	.000	
	N	207	207

**. Correlation is significant at the 0.01 level (2-tailed).

Table evaluation

In the table above, it shows a high correlation between both variables, which means multi-co linearity exists

5.1.6. Findings from Factor Analysis

Hair et al. (2006) stated, "Factor analysis is an interdependence technique whose primary purpose is to define the underlying structure among the variables in the analysis". Factor analysis provides the tools for analyzing the structure of interrelationships among a large number of variables by defining sets of variables that are highly correlated, known as factors.

In this study, exploratory factor analysis was used to test construct validity, that is, the extent to which a measure or set of measures correctly represents the concept of the study.

To determine the appropriateness if factor analysis the entire correlation matrix was examined using Bartlett Test of Sphericity and Kaiser-Myer-Olkin Measure of Sampling Adequacy (KMO MSA).

The Bartlett Test of Sphericity test the overall significance of all correlations within a correlation matrix. It examines the hypothesis that the variables are uncorrelated in the population, that is, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself (r=1) but has no correlation with the other variables (r=0).

If the Bartlett's Test of sphericity is significant, that is, less than alpha (0.05) the null hypothesis (the correlation matrix is an identify matrix) will be rejected and factor analysis can be conducted on the study.

Kaiser-Myer-Olk in Measure of Sampling Adequacy (KMO MSA) is used to quantify the degree of inter-correlations among the variables. The KMO MSA ranges from 0 to 1 reaching 1 when each variable s perfectly predicted without error by the other variables. The researcher should

always have a measure of sampling adequacy above 0.50 before proceeding with the factor analysis.

Communality is the total amount of variance an original variable shares with all other variables included in the analysis. It is the estimate of the variable's shared variance among the variables as represented by the derived factors. The size of the communality is a useful index for assessing how much variance in a particular variable is accounted for by the factor solution. Higher communality values indicate that a large amount of the variance in a variable have been extracted by the factors analysis. Small communalities show that a substantial portion of the variable's variance s not accounted for by the factors. The factor should explain at least half of each original variable's variance, so the communality for each variable should be 0.50 or higher.

Factor Analysis on Independent Variables

KMO criteria and the test of sphericity are as follows:

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.690
Bartlett's Test of Sphericity	Approx. Chi-Square	643.397
	df	55
	Sig.	.000

The KMO is greater than 0.50 and the Bartlett's Test of Sphericity is 0.000 which is less than 0.05 so it is significant. Based on the test's results it is satisfactory to proceed with the factor analysis acceptance

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.168	28.803	28.803	3.168	28.803	28.803	3.061	27.827	27.827
2	1.787	16.246	45.049	1.787	16.246	45.049	1.746	15.874	43.701
3	1.307	11.881	56.930	1.307	11.881	56.930	1.269	11.534	55.234
4	1.051	9.554	66.484	1.051	9.554	66.484	1.237	11.250	66.484
5	.900	8.177	74.662						
6	.769	6.992	81.653						
7	.619	5.625	87.278						
8	.543	4.933	92.211						
9	.329	2.987	95.199						
10	.288	2.620	97.819						
11	.240	2.181	100.000						

Extraction Method: Principal Component Analysis.

Table evaluation

It shows that the factor analysis is justified and that the data can be factored with 66.484% cumulative variance extracted from the original data by the factors derived.

Rotated Component Matrix

The following table shows the rotated component matrix that result from Factor analysis applied on the independent variables only and using the default criteria to select the number of the new principal components, (i.e. eigenvalue >=1

Rotated Component Matrix[a]

	Component			
	1	2	3	4
I work overtime to show commitment to my work	-.145	.824	-.064	.029
I work Overtime to strengthen further my job opportunities	-.071	.868	.207	.090
I work overtime to supplement my income	.016	.103	.890	.086
I work overtime to avoid pressures from my managers	.286	.347	-.439	.504
I work overtime to cover the gap at the workplace	.061	.105	.025	.756
My mood worsen when I work overtime	.699	-.093	-.275	.289
My physical health deteriorates when I work overtime	.844	-.058	-.032	.150
My social life with my friends suffers from me working overtime	.858	.045	.050	-.152
I do not give my family enough time when I work overtime	.802	-.091	.160	-.173
The quality of my work is the same with and without overtime	-.275	-.385	.182	.477
My productivity decreases during overtime	.541	-.030	-.313	.093

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

The rotated component matrix makes the interpretation of the factor analysis easier showing the factor loadings of the variables on the extracted components. The factor loadings represent the correlation of each variable and the factor. Loadings indicate the degree of correspondence between the variable and the factor, with higher loadings making the variable representative of the factor. Factor loadings interpret the role each variable plays in defining each factor. Factor loadings of 0.50 and above are necessary for practical significance.

The interpretation of the components can be as follows:

Factor 1: The negative impact of working over time

Factor 2: The purpose of career development in working over time

Factor 3: The purpose of more income by working overtime

Factor 3: The purpose of enhancing job requirements

5.1.7. Findings from Stepwise method on Factor Analysis

Stepwise analysis was performed on the four factors extracted from Factor analysis

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	REGR factor score 1 for analysis 1	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	REGR factor score 3 for analysis 1	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

3	REGR factor score 2 for analysis 1	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: My overtime work is acceptable to me

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.973	1	28.973	46.627	.000[b]
	Residual	127.384	205	.621		
	Total	156.357	206			
2	Regression	39.960	2	19.980	35.017	.000[c]
	Residual	116.398	204	.571		
	Total	156.357	206			
3	Regression	44.710	3	14.903	27.097	.000[d]
	Residual	111.648	203	.550		
	Total	156.357	206			

a. Dependent Variable: My overtime work is acceptable to me

b. Predictors: (Constant), REGR factor score 1 for analysis 1

c. Predictors: (Constant), REGR factor score 1 for analysis 1, REGR factor score 3 for analysis 1

d. Predictors: (Constant), REGR factor score 1 for analysis 1, REGR factor score 3 for analysis 1, REGR factor score 2 for analysis 1

The Probability of F statistics for the regression model is 0.000 which is less than 0.05 hence we accept the alternative hypothesis that there is statistically significant relationship between the three factors

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.372	.055		61.545	.000
	REGR factor score 1 for analysis 1	-.375	.055	-.430	-6.828	.000
2	(Constant)	3.372	.053		64.226	.000
	REGR factor score 1 for analysis 1	-.375	.053	-.430	-7.126	.000
	REGR factor score 3 for analysis 1	.231	.053	.265	4.388	.000
3	(Constant)	3.372	.052		65.417	.000
	REGR factor score 1 for analysis 1	-.375	.052	-.430	-7.258	.000
	REGR factor score 3 for analysis 1	.231	.052	.265	4.469	.000
	REGR factor score 2 for analysis 1	.152	.052	.174	2.939	.004

a. Dependent Variable: My overtime work is acceptable to me

Table evaluation

Since the significance of the t-values are lower than 0.05, we conclude that there is a statistically significant relationship among the first 3 factors (factor 1: The negative impact of working over time, factor 2: The purpose of career development in working over time, factor 3: The purpose of

more income by working overtime) and acceptance of overtime, with the exception of factor 4 which is The purpose of enhancing job requirements.

5.2. Finding from Independent Samples T-Test

Independent Sample T-Test was performed only on the gender of the employee and checked if there is significant relationship between the gender and the Gender of the employee and his/her acceptance of overtime

5.2.1. Finding 4: Gender (hypothesis 8)

Whether the Gender of the employee is related to the acceptance of overtime (Hypothesis 8)

Socio demographic variable	Dependent Variable	Significance
Gender of the employee	Employee acceptance to work overtime	YES

The Gender has significance with the employee acceptance to work overtime

From my literature review we understand that males have more acceptances for overtime than women; K. Nemoto (2012) states that men are taking more job promotions because of longer working hours

My findings also show significance between gender and employee acceptance of overtime, males score higher than females (Mean Male 3.56 /Mean Female 3.15)

5.3. Findings from One-Way ANOVA Test

One-Way ANOVA test done on socio demographic values, Age (Hypothesis 7), Marital Status (Hypothesis 9), Education (Hypothesis 10), Type of work (Hypothesis 11) and Job position (Hypothesis 12), also on a few other factors such as Type of overtime (Hypothesis 13), Number of hours of overtime (Hypothesis 14), and Type of shift (Hypothesis 15)

5.3.1. Finding 5: Socio demographics (hypotheses 7,9,10,11,12)

In my fifth finding I will discuss the Socio demographic values of Age (Hypothesis 7), Marital Status (Hypothesis 9), Education (Hypothesis 10), Type of work (Hypothesis 11) and Job position (Hypothesis 12) and the different relations with the fact of accepting the overtime, as shown in the table below

Socio Demographic Values		
Socio Demographics	**Dependent Variable**	**Significance**
1-Age	Employee acceptance to work overtime	NO
2-Marital status	Employee acceptance to work overtime	YES
3-Education level	Employee acceptance to work overtime	NO
4-Type of work	Employee acceptance to work overtime	NO
5-Job position	Employee acceptance to work overtime	NO

In my study the socio demographic factor of age, education, type of work and job position have no significant relationship between them and with the employee acceptance to work overtime, which means all the age groups accept working overtime the same way, the

education level of employees does not effect on decision of employees to make overtime, any type of work has no significance between type and accepting overtime, and job position. has no effect on employee acceptance of overtime.

However for the marital status, there was a significant result while performing the One-Way ANOVA test.We also went further to test which group differs from the rest by performing the Post Hoc test. And the results came as follows

Post Hoc test

Groups 1 and 2 are significant, giving 0.006 Significance which is less than 0.05

Group index

Group 1= Single

Group 2= Married no children

Group 3=Married with children

Giving that Marital Status as single, and married with no children have significant relationship with acceptance of overtime, suggests that marriage is the difference between them.

5.3.2. Finding 6: Type of overtime (hypothesis 13)

In my sixth finding I will discuss the type of overtime (Hypothesis 13) and its significance with the employee acceptance to work overtime as shown in the table below

Types of overtime		
Value	**Dependent Variable**	**Significance**
1-**Voluntary Rewarded** (the employee is proposed overtime and agrees with it)	Employee acceptance to work overtime	YES
2-**Voluntary Unrewarded** (the employee stays more hours in the workplace to complete work or to help peers)	Employee acceptance to work overtime	NO
3-**Involuntary Rewarded** (overtime hours are added for the employee without negotiating with him/her)	Employee acceptance to work overtime	NO
4-**Involuntary Unrewarded**(the employee is forced to work overtime for different reasons, for example to prove commitment to the boss, or in exchange of favors, or fear of punishment, exc.)	Employee acceptance to work overtime	YES

From my study The Voluntary Unrewarded and Involuntary Rewarded overtimes have no significant relation with employee acceptance of overtime whereas the Voluntary rewarded and Involuntary Unrewarded have a significant relation with employee acceptance of overtime.

Voluntary Rewarded

From my literature review the excess voluntary rewarded overtime results in likelihood of administration errors and injuries also relates to fatigue, adding that there is a strong financial incentive to work additional hours, particularly if those hours are paid at premium rates, when the employee may not turn down voluntary overtime (Olds and S. P. Clarke 2010). In my findings the reward and the overtime being voluntary have a significant impact on acceptance of overtime and employees regardless of fatigue and high percentage of error and injuries during those hours of overtime are relatively significantly accepting the overtime, hence freedom of choosing to do overtime added to the high incentive affect positively the acceptance of employee to do overtime

Involuntary Unrewarded

The Involuntary unrewarded overtime workers are the ones that are the most fatigued and less satisfied than most overtime workers. This specific group of overtime workers can be considered a ‘‘burnout risk group’’ (Schaufeli & Van Dierendonck, 2000). Also as G.J. Beckers(2008) adds the lowest educational levels were found for the involuntary overtime workers. In my study this group has a significant relation to employee acceptance to work overtime, meaning that the mandatory way of dealing with the employee to perform overtime with no reward given will push the employee to a position where he/she cannot longer fight back and in most of the cases he/she has no means to use for fighting back and finally he/she surrenders to his/her situation, hence unwillingly accepts to work overtime.

5.3.3. Finding summary table from One-Way ANOVA test

One-Way ANOVA Tests			
Socio Demographic Values			
Socio Demographics	Dependent Variable	Hypothesis	Significance
1-Age	Employee acceptance to work overtime	7	NO
2-Marital status	Employee acceptance to work overtime	9	YES
3-Education level	Employee acceptance to work overtime	10	NO
4-Type of work	Employee acceptance to work overtime	11	NO
5-Job position	Employee acceptance to work overtime	12	NO
Types of overtime			
Value	Dependent Variable	Hypothesis	Significance
1-Voluntary Rewarded	Employee acceptance to work overtime	13	YES
2-Voluntary Unrewarded	Employee acceptance to work overtime	13	NO
3-Involuntary Rewarded	Employee acceptance to work overtime	13	NO
4-Involuntary Unrewarded	Employee acceptance to work overtime	13	YES
Number of overtime hours			
Value	Dependent Variable	Hypothesis	Significance
Number of overtime hours	Employee acceptance to work overtime	14	NO
Type of shift			
Value	Dependent Variable	Hypothesis	Significance
Day	Employee acceptance to work overtime	15	NO
Evening	Employee acceptance to work overtime	15	NO
Night	Employee acceptance to work overtime	15	NO

CHAPTER SIX: CONCLUSIONS

6.1. LIMITATIONS

We could have strengthened the explanatory power of the results of our study if we were able to invest more time and add a qualitative aspect. This could be done through in depth interviews with significant number of employees to discuss and understand all the ramifications of this important foundational basic issue.

We could also add value to this study if we had included the managerial perspective by conducting in depth interviews with managers. However we know that this wouldn't be easy consideration with the busy schedule of managers.

6.2. RECOMMENDATIONS

Going through the significant findings of my study, we developed the following nine recommendations.

Recommendation 1

Strengthening the job opportunities

My study clearly shows that as the employees in Lebanon see in overtime an opportunity to climb up in the career ladder, the chances of accepting overtime grow. However a more positive and healthy way for the employee should be instead of thinking working more overtime to obtain greater opportunities, to rely on their personal capabilities to grow and increase their salary.

Recommendation 2

Supplementing income

From my study the financial reward increases the acceptance of overtime, which means that most of the employees in Lebanon have the tendency to work overtime because of their relatively low fix or basic salary. Here again, the employees should improve their skills so that they can apply for better paying positions.

Recommendation 3

Avoid social problems i.e. the pressure from managers or peers

From my study as the manager's pressure increases on the employee, the acceptance of overtime decreases and vice versa. This makes us think that the relation between the Lebanese employees and their managers is not very healthy, and a recommendation to strengthen the good communication between them and to decrease the unprofessional attitudes, which may be harmful to the work

Recommendation 4

Mental health

Shown in my study that there is a negative relation between mental health and employee acceptance of overtime; hence as the employee feels that his/her mental health is at risk, the acceptance of overtime decreases, clearly psychological wellness is important for the Lebanese employee. The recommendation is to have better organized and designed jobs for our Lebanese employees, in a "Feng Shui" environment that is more harmonized softened and warm. The awareness of this concept is worthwhile to consider.

Recommendation 5

Physical health

In my study a significant and negative relationship is proven between physical health and employee acceptance of overtime, meaning that physical health is a concern for the Lebanese employee when deciding to accept overtime; as the concern for his deteriorating physical health increases, his acceptance of overtime decreases. Therefore management must be aware of the nature and characteristics of jobs and loads when putting out job descriptions for every job position, always keeping in mind the physical endurance of the employee, and never forgetting the ergonomics of the workplace. Employees should ask management to provide a better work atmosphere with standardized ergonomics related lectures to remind them for example the right body structure during work or the appropriate furniture in the workplace.

Recommendation 6

Work-life balance

In my study there was a significant but negative relation between family and acceptance of overtime and no significance between friends and acceptance of overtime, which reveals that family has a stronger impact on employees. In Lebanon we still enjoy and keep our family values, we prioritize our family over work sometimes; my recommendation is for Lebanese employees to expect that their employers consider providing family friendly services, such as medical care to the elderly, special incentives to families with children, and near workplace child care centers to working mothers.

Recommendation 7

Quality of work with respect to employee

In my study the quality of work was significantly related to the employee acceptance of overtime. The employee is feeling responsible for his job and is not willing to sacrifice quality of his work to working extra hours of overtime; the main reason to an unstable quality of work is most probably lack of or uneven training for the employees; the employee must have a certain level of standard training to strengthen his/her work skills and agility in work. The recommendation here is for the employees to request training programs. Clearly the Lebanese workers care for the quality of their jobs therefore they deserve good and continuous training opportunities.

Recommendation 8

Productivity with respect to employee

In my study productivity has a significant but negative relation with employee acceptance of overtime, hence when the employee feels that his/her productivity is decreasing with extra hours of work, he/she is not willing to sacrifice more of that productivity level to more hours of overtime. The Lebanese employee in general is responsible but sometimes lacks the technical aids in his/her job, which leads to insufficient productivity, though in other instances a quick burn out produces the same result. Recommending to enhance the workplace technology, by for example modernizing the workplace software or renewing the workplace machines. This may

help the employee to be more productive for longer periods of time and perhaps this will also help him/her to not experience quickly a burn out.

Recommendation 9

Lack of significant relationships among few variables

The findings regarding acceptance of overtime work and the lack of significant relationship between the age, education level, type of work, job position, number of overtime hours worked, and type of shift worked is noteworthy and I believe need to be further explored.

6.3. MY CONTRIBUTION

My contribution consists in focusing on this important but not thoroughly studied topic. In particular I have tried to show the relationship between the types of overtime work performed with the employee's acceptance of overtime. Thus, we have discussed the type of overtime, i.e. voluntary rewarded, voluntary unrewarded, involuntary rewarded, involuntary unrewarded with employee acceptance of overtime. The relationships are summarized again in the table below.

Types of overtime		
Value	**Dependent Variable**	**Significance**
1-**Voluntary Rewarded** (the employee is proposed overtime and agrees with it)	Employee acceptance to work overtime	YES
2-**Voluntary Unrewarded** (the employee stays more hours in the workplace to complete work or to help peers)	Employee acceptance to work overtime	NO
3-**Involuntary Rewarded** (overtime hours are added for the employee without negotiating with him/her)	Employee acceptance to work overtime	NO
4-**Involuntary Unrewarded**(the employee is forced to work overtime for different reasons, for example to prove commitment to the boss, or in exchange of favors, or fear of punishment, exc.)	Employee acceptance to work overtime	YES

Voluntary rewarded and involuntary unrewarded were shown to have a significant relation with employee acceptance of overtime.

It is clear that the reward and the overtime being voluntary have a significant impact on acceptance of overtime; and employees regardless of fatigue and high percentage of error and injuries during those hours of overtime are relatively significantly accepting the overtime. The freedom of choosing to do overtime added to the high incentive affect positively the acceptance of employee to do overtime. Also the low income of families is leading large portion of workers to work extra hours, in some cases up to working second jobs in order to overcome the daily expenses. The trend of working couple of jobs is booming as expenses are growing and salaries are relatively not satisfying.

As to the group of workers who accept to work overtime, despite the fact that they do this involuntarily and also are not reworded for it, this group are in a position where they cannot longer fight back because in most of the cases they do not have different means to fighting back therefore they surrender to their situation, hence unwillingly accept to work overtime. This gives us a feel for those who are truly underprivileged in Lebanon.

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APPENDIX

SUMMARY TABLE FROM REGRESSION ANALYSIS, T-TEST & ONE-WAY ANOVA

Regression Analysis Tests				
Independent Variable	**Dependent Variable**	**Hypothesis**	**Significance**	**Relationship**
The purpose to work overtime				
1-To show commitment	Employee acceptance to work overtime	1	NO	
2- To strengthen my job opportunities	Employee acceptance to work overtime	1	YES	Positive
3- To supplement my income	Employee acceptance to work overtime	1	YES	Positive
4- To avoid social problems i.e. the pressure from managers or peers	Employee acceptance to work overtime	1	YES	Negative
5- To accommodate the workplace	Employee acceptance to work overtime	1	NO	
Impact of overtime on personal level				
1-On mental health	Employee acceptance to work overtime	2	YES	Negative
2-On physical health	Employee acceptance to work overtime	3	YES	Negative
3-On work-life balance				
A-Social life with friends	Employee acceptance to work overtime	4	NO	
B-Social life with family	Employee acceptance to work overtime	4	YES	Negative
Impact of overtime on work level				
1-On quality of work with respect to employee	Employee acceptance to work overtime	5	YES	Positive
2-On productivity with respect to employee	Employee acceptance to work overtime	6	YES	Negative

Independent Samples T-Test			
Socio demographic variable	**Dependent Variable**	**Hypothesis**	**Significance**
Gender of the employee	Employee acceptance to work overtime	8	YES
One-Way ANOVA Tests			
Socio Demographic Values			
Socio Demographics	**Dependent Variable**	**Hypothesis**	**Significance**
1-Age	Employee acceptance to work overtime	7	NO
2-Marital status	Employee acceptance to work overtime	9	YES
3-Education level	Employee acceptance to work overtime	10	NO
4-Type of work	Employee acceptance to work overtime	11	NO
5-Job position	Employee acceptance to work overtime	12	NO
Types of overtime			
Value	**Dependent Variable**	**Hypothesis**	**Significance**
1-Voluntary Rewarded	Employee acceptance to work overtime	13	YES
2-Voluntary Unrewarded	Employee acceptance to work overtime	13	NO
3-Involuntary Rewarded	Employee acceptance to work overtime	13	NO
4-Involuntary Unrewarded	Employee acceptance to work overtime	13	YES
Number of overtime hours			
Value	**Dependent Variable**	**Hypothesis**	**Significance**
Number of overtime hours	Employee acceptance to work overtime	14	NO
Type of shift			
Value	**Dependent Variable**	**Hypothesis**	**Significance**
Day	Employee acceptance to work overtime	15	NO
Evening	Employee acceptance to work overtime	15	NO
Night	Employee acceptance to work overtime	15	NO