Post-Graduate Diploma in Health and Hospital Management

Internship and Dissertation report submitted

By

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PART I: INTERNSHIP

Organization profile

- Internship done at Accenture Services Pvt. Ltd.
- Accenture : global management consulting, technology services and outsourcing company

  -more than 246,000 people

  -serving clients in more than 120 countries.

  -collaborates with clients; help them become high-performance businesses and governments.

- <u>Locations</u>: Bengaluru and Chennai
- <u>Schedule</u>:

  17th February 2012- 25th March'12: BA Boot camp Training at Bengaluru

  26th March'12 onwards : Health and Public services CoE, Chennai
  started working on Dissertation project.

Business Analyst Boot Camp Training
(17th Feb. to 25th March'12 Bengaluru)

1. Business Analysis Training (2weeks)

    -two weeks business analysis training was to define the profession of business analysis.

    -Business analysis body of knowledge (BABOK) guide

    -Knowledge areas

2. Application Analysis Training

3. Presentation Dynamics Workshop

4. Online Trainings:
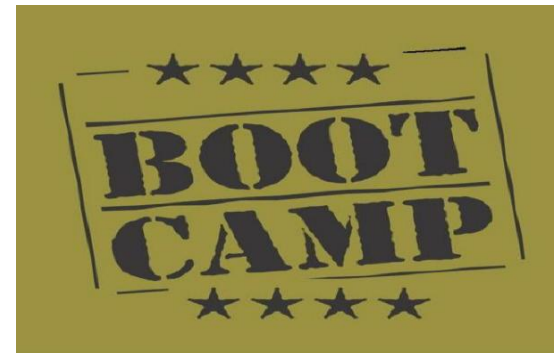
- Managing and Leading Virtual teams: Collaboration in virtual Teams:
- Writing Effective E-Mail Messages:
- The Effective Business Meeting
- Communicate For Results
- Making Your Time Count: Managing Your Time
- Professionalism and Business Etiquette: Communication Business Etiquette
- Visio 2007
- Requirement Analysis Modeling: Event and Process model basis
- Requirements Analysis Modeling: Data and Process Model Basics

PART II: DISSERTATION

"MARKET RESEARCH ON AUSTRALIA'S HIT INDUSTRY TO IDENTIFY BUSINESS OPPORTUNITIES FOR ACCENTURE"

OBJECTIVE FOR THE STUDY :

General objective

 To understand Australia's Healthcare System with a special focus on Health IT industry current scenario, Government's perspective and market economics.

Specific Objective

- To identify and analyze the opportunities and challenges for Accenture to successfully do business in Australia.

- To draw out a list of competitors of Accenture and highlight the extent of their involvement In Australian Health care IT.

Rationale of the study

 To identify and develop the Business Opportunity for Accenture in Australian Health IT   Market

METHODOLOGY:

- WHO, Australian Government websites , Accenture Research portals, Gartner website and websites of various eminent IT companies.

- search terms: Australian Healthcare, Australian Health IT market, Australian EMRs.

- scanned the reference lists for relevant articles (the snowball method)

- contacted individual experts in the field who are working in Accenture, Australia.

- searched for gray literature on the Internet using the search engines Google, Yahoo

INTRODUCTION :

- Australia has 6 states—New South Wales, Queensland, South Australia, Tasmania, Victoria, and Western Australia

- 2 major mainland territories—the Northern Territory and the Australian Capital Territory (ACT).   population of 22.87 million,heavily concentrated in the Eastern states ;highly urbanised

ECONOMY: fifth highest per capita GDP at $66,984 (2011 data)

HEALTH STATUS:

Life expectancy in Australia in 2010 was 79.5 years for males and 84 years for females

DISEASES:

Cancer is Australia's leading broad cause of disease burden (19% of the total), followed by cardiovascular disease (16%) and mental disorders (13%).

AUSTRALIAN HEALTHCARE SYSTEM:

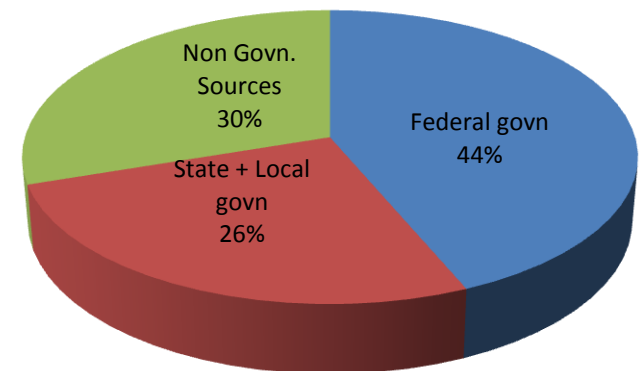Medicare , Medicare levy (1.5 per cent)

Health expenditure Australia Total expenditure on
 health is around 9.4 per cent of GDP.

75% of treatment preferred by patient: Medicare

Rest by private insurance like:

HCF Health Insurance & Medibank

Total Health Spending

Federal govn 44%

State + Local govn 26%

Non Govn. Sources 30%

The number of hospitals in the Australian public and private sector are shown in Table

Public acute hospitals	735
Public psychiatric hospitals	18
Total	753
Private hospitals	
Private free standing day hospital facilities	293
Other private hospitals	280
Total	573
Total hospitals	1326

Top Australian Hospitals by Number of admissions per year

1. Royal Melbourne	Melbourne, Victoria	85,400
2. Royal Brisbane and Women's Hospital	Brisbane, Queensland	74,900
3. Westmead Hospital	Sydney, New South Wales	69,600
4. Royal Adelaide Hospital	Adelaide, South Australia	67,800
5. Sir Charles Gairdner Hospital	Perth, Western Australia	64,800
6. Monash Medical Centre	Melbourne, Victoria	63,900
7. Princess Alexandra Hospital	Brisbane, Queensland	63,600
8. Geelong Hospital	Geelong, Victoria	58,200
9. Gold Coast Hospital	Southport, Queensland	57,800
10. Liverpool Hospital	Sydney, New South Wales	56,900

CHALLENGES FOR THE PRESENT HEALTH SYSTEM

1. The system that is not prepared for future challenges

Projected Changing Trends in Population (%)			
Year	Below 15 years	15-64	65 and Over
2011	18.9	67.1	14
2021	18.3	64.5	17.2
2031	17.5	62.5	20

2. Chronic disease is a large and increasing burden on our health system

3. Too much blame and fragmentation between governments

4. Gaps and poor coordination in urban and rural health services

5. Too much pressure on public hospitals and health professionals

6. Too much inefficiency and waste

7. Not enough local or clinical engagement

GOVERNMENT'S VISION:

- Governance Reforms: Insurance, dental, elective surgery waitlist
- NHHRC : National Health and Hospitals Reform Commission
- Dental care
- Data collection
- Electronic Health record : National e Health strategy.

MAJOR REFORMS IN HEALTH IT

- NEHTA (National E health Transition Authority Limited) : responsible for national e health strategy ; putting in place digital standards and policies necessary

- NASH (National Authentication Service for Health): identification of people and organisations . March 2011,contract to design and build NASH was awarded to IBM.

- PCEHR (PERSONALLY CONTROLLED ELECTRONIC HEALTH RECORD)
  middle of 2012.

- NEHTA JOINED HAND WITH HL-7 AUSTRALIA
  help progress national e-health standards and accelerate the process of establishing health information network.
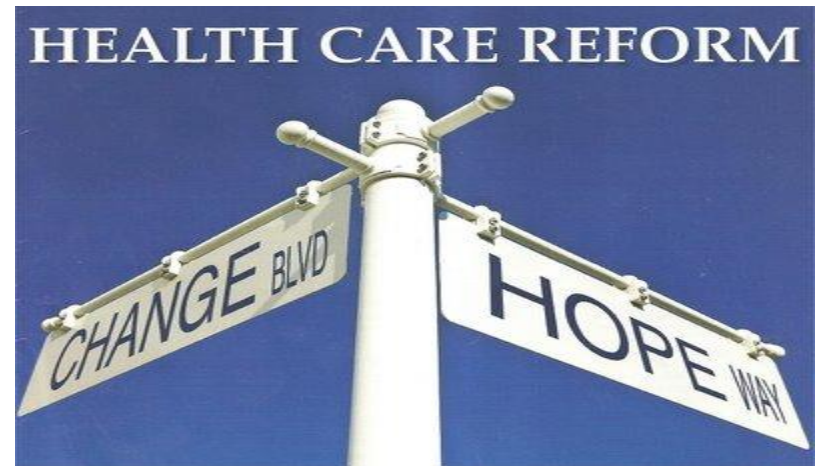
NATIONAL e HEALTH STRATEGY

- put together in 2008, jointly by the DoHA and Deloitte

PCEHR Project

Personally Controlled eHealth Record Partner Projects

Partner Project	Consortium Led by	Consortium Members	Project Cost	Role/Responsibility
National Infrastructure Partner	Accenture	Oracle, Orion Health, Telstra, Cerner, ThinkPlace, Extensia, Ocean Informatics	A$77 million	To design, build, and integrate the system
National Change and Adoption Partner	McKinsey and Company	PricewaterhouseCoopers, Hill & Knowlton, Workstar, Event Planet, Ocean Informatics, Alfred Health, Salmat and the Australian General Practice Network (AGPN)	A$29.9 million	To develop the change strategy, and support change management and communication with all sectors
Benefits Evaluation Partner	PricewaterhouseCoopers	McKinsey and Co., Ocean Informatics, Trilogy Information Solutions and the University of Queensland	A$5.8million	To develop the benefits realisation and evaluation framework, and assess ongoing progress, to inform implementation and future investment
External Delivery Partner	Ernst & Young		A$990,000	To provide independent advice on the progress of the programme

Source: NEHTA and DoHA

Australia IT Market Overview

- The Australian federal government is implementing a six-year plan to transfer **government agencies' computing systems to a public cloud** environment

- Telecoms service providers in the Australian market are investing in infrastructure to provide cloud computing services. **Telecoms company Telstra, in partnership with consulting leader**

- One of SAP's largest Australian partners, Oxygen, launched a new SAP Software-as-a-Service (SaaS) offering that it called 'Oxygen on Demand'. The solution was touted as a total SAP cloud solution, offering flexibility and speed-of-deployment

- Of the four sub segments (hardware, services, software, and telecommunications), **hardware spending was the dominant** segment, with 43.2% (A$937 million) of ICT spending

- **Healthcare ICT Spending in 2011**

Telecom (29.7%)

Hardware (43.2%)

Software (4.8%)
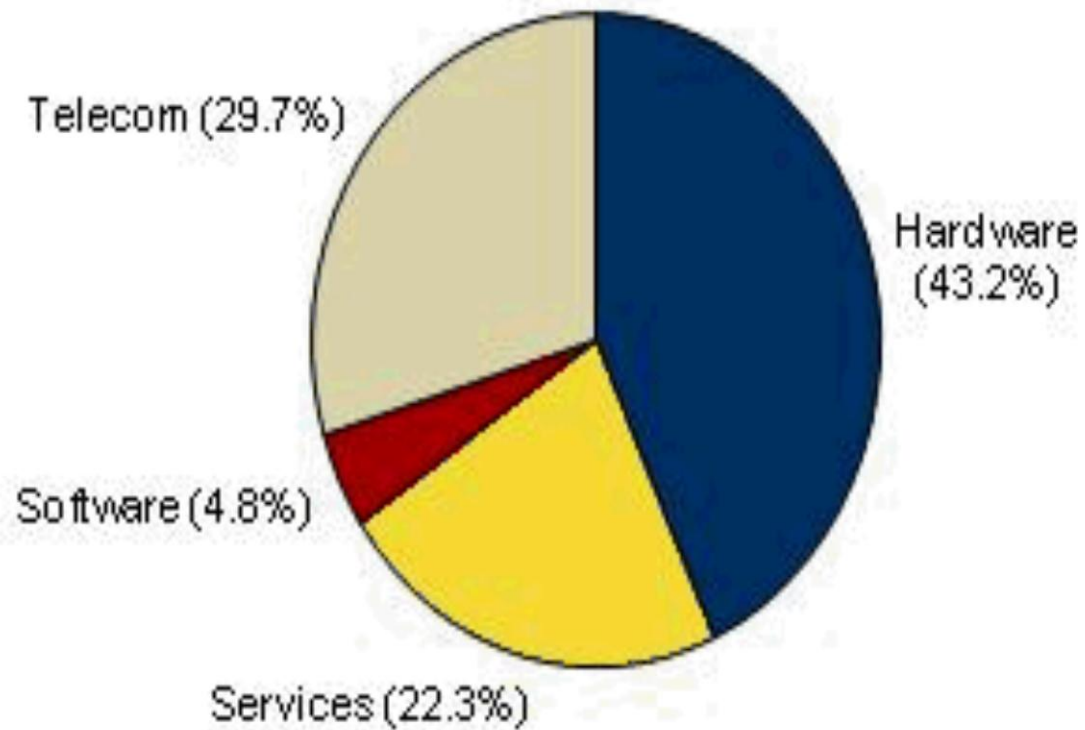
Services (22.3%)

Total market = A$2,303.2

- **South Australia's Public Health System**

  Allscripts as the Vendor of Choice (VOC)

  Sunrise Enterprise(TM)

  Enterprise Patient Administration System (EPAS)

- REGIONAL DISTRIBUTION OF ICT SERVICES AND SPENDING

Australia Health Spending Breakdown by State, 2010−2014

	2011	2012	2013	2014	2015	2011–2015 CAGR (%)
Western Australia	280.7	287.8	298.0	302.3	305.6	2.2
South Australia/Northern Territory	269.7	276.9	286.7	291.2	295.0	2.3
Queensland	478.6	493.4	513.9	523.9	531.4	2.8
New South Wales	577.5	592.1	613.1	622.9	630.4	2.3
Australian Capital Territory	66.5	69.4	71.8	73.4	74.6	3.0
Victoria/Tasmania	630.2	646.0	669.7	679.7	687.4	2.3

Health care IT in Australia-International comparison

- 'Connected Health: The Drive to Integrated Healthcare Delivery':

   analyzed how eight countries' health systems are utilizing healthcare IT and creating 'connected' systems of efficient healthcare delivery.

- Australia, Canada, England, France, Germany, Singapore, Spain and the United States.

- Australia ranked lowest out of the eight countries at approximately 26 per cent use of HIE.

- Health Connect

- Health SMART

- The market is transitioning from the adoption of administrative solutions to clinical solutions.

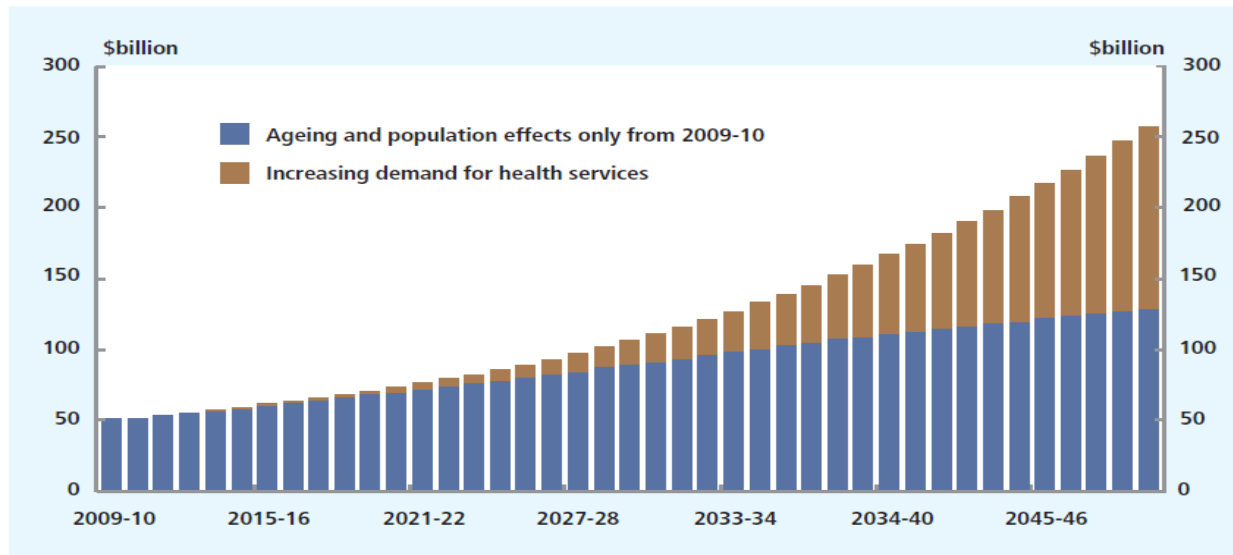- Strategic Shift in Healthcare IT Requirement Expected to Boost Market Growth

FUTURE SPENDING ON HEALTH IT IN AUSTRALIA: FORECAST

cloud computing will pay a large part in the market's continued growth. The government's six-year cloud computing strategy

IT health expenditure is expected to reach $2.1 billion by 2016,

Digital imaging solutions, especially picture archiving system (PACS), will continue to be the key investment area for Australia, closely followed by expenditure on electronic health records (EHRs)

Figure 6: Projected Australian Government health spending

Legend:
- Ageing and population effects only from 2009-10
- Increasing demand for health services

Source: Treasury projections. Based on current arrangements.

REGULATIONS AND STANDARDS

- **HIPAA (Health Insurance Portability and Accountability Act of 1996)**
  HIPPA regulations come in three parts:
- data transfer,
- privacy
- Security.

National E-Health Transition Authority (NEHTA)

- NEHTA Limited is a not-for-profit company established by the Australian, State and Territory governments to develop better ways of electronically collecting and securely exchanging health information.

STANDARDS

- Health Level 7 Australia (HL7 Australia)
- International Organization for Standardization (ISO)
- Standards Australia (SA)
- Standards Australia is the nexus for Australian industry. It is internationally renowned for its role in the development of standards and is recognized by the Government as the peak, non-government standards body in Australia

ACCENTURE IN AUSTRALIA

- Accenture has 5 offices in Australia. They are at Sydney, Melbourne, Brisbane, Canberra and Perth.

- The ambitious PCEHR project is being handled by a consortium led by Accenture as the National Infrastructure Partner

- Accenture & Telstra combined cloud computing Innovation lab initiative is part of the alliance between Telstra cloud computing company and Accenture.

MARKET COMPETITORS

- **CSC** –

  is doing well in E-Health. In past few years, it has shown increased presence in health System Integration market. It had 7.9 % share in IT services supplier market in 2011.

- **IBM** –

  System Integration and Infrastructure Technology Outsourcing

  work with government, Department of Health and Ageing and

  Medicare.

  top most position in the list of IT services supplier

  IBM is designing and building NASH

- **Ernst and Young , KPMG, PWC, Deloitte**:

  Health Reform

- **Fujitsu – E-Health**

  It is working extensively in e-health track record with various States (Victoria, Queensland).

- **PricewaterhouseCoopers :**

  It is again a player in Health Reform and is a strong competitor in 'audits', strategic reviews, and clinical change management

- **McKinsey and Company**:

  It leads the consortium for National Change and adoption partner in PCEHR project. It is also working with PWC in a consortium as Benefits evaluation partner.

- **HP**: strong presence in the hardware market

- **Allscripts**: implementing the foundation for South Australia's e-health record system as the Vendor of Choice (VOC).

Australia Health Top 5 IT Services Suppliers, 2011

Ranking	Company	Market Share (%)
1	IBM	15.1
2	CSC	7.9
3	Fujitsu	7.6
4	HP	3.2
5	Datacom	2.6

Top Domestic Companies in Product Market

- AusBiotech Ltd
- The Australian e-Health Research Centre
- Clintel is a leading supplier of intelligent software and services to the healthcare industry in Australasia.
- Emerging Health Solutions provides EHS - next generation electronic health records.
- I Soft Group Ltd provides Health IT and communications and Health-related software
- InfoMedix is Australia's leading provider of a scanned medical records solution.
- SEDCO Communications.

Top Companies in Service Market

- TAHPI is the largest specialist health design firm in Australia, with an unmatched depth of experience and specialist technology.
- The Health Team Australia (HTA) consortium has been created in response to the increasing global demand for fully integrated turnkey delivery of healthcare facilities and services.
- Amityone

<u>OPPORTUNITIES FOR ACCENTURE</u>

- At the Federal government level
- Public Hospitals
- GP Clinics, Primary & Aged Care
- Market for Clinical HIS: PACS, RIS, LIS, Pharmacy, etc
- Medical Imaging
- Health Information Exchange

SWOT ANALYSIS FOR ACCENTURE'S AUSTRALIAN HIS MARKET

Internal	
Strengths	**Weaknesses**
- Brand value - NEHR system Implementation, Singapore has given it a proven track record. - PCEHR deal: gives Accenture a widespread access and presence into Australian health care market. - Partnership with eminent local player: Telstra enhances Accenture's potential by multiple folds.	- Majority of Healthcare funds in Australia so far are diverted towards hardware component where companies like HP are making the most while Accenture leaves a total gap there. - Accenture is primarily looked up as a service oriented company hence it is not able to make it big in solution building aspect of business.

Opportunities

Threats

Opportunities	Threats
1. Market for clinical systems hold high growth potential in Australia. Now the market for clinical systems s going to get a high as there are huge funds directed towards hospital IT growth. 2. Adoption of PACS, EMR, LIS, and RIS by Australian HIS market is rampant. 3. Government has invested $16.4 billion in elective surgery waiting list reduction: scope for Business Process Transformation 4. Of all the parameters of Health IT, Australia lags behind in HIE (Connected Health), being a pioneer for them Accenture can leverage the establishment of Health Connect. 5. Health programs with Medicare 6. Accenture should continue and better its terms with Telstra and tap on its 'local' status and expand into other markets apart from cloud computing. 7. Should concentrate on Victoria and New South Wales. 8. Telehealth is expected to have the fastest growth in near future. Australia is funding numerous pilots in next 2 years and has kept $20.6 million for this. Accenture should tap on this opportunity.	1. In the field of cloud computing, Oxygen has partnership with SAP so it has easy access to all SAP partners in Australia. 2. Deloitte being the developer of National e health strategy has an upper hand in those initiatives. Hence, it may win many other projects in future too. 3. PCEHR project is Accenture's greatest accomplishment in Australia but PCEHR's individual existence and adoption has many questions unanswered still, this may affect Accenture's plans adversely.

PORTERS ANALYSIS

Threat of new competition:

- dream destination for many new entrants
- TPP (a leading product from the United Kingdom) is increasing in Australia. TPP's ambition is to grow internationally via local franchises.

Threat of substitute services

- Deloitte:

  founder of the national e health strategy

  close coordination with government bodies like DoHA..

- Ernst and Young is doing a great job in PMO and Implementation plan for National Health and Hospitals Network.

- PricewaterhouseCoopers : strong competitor in 'audits', strategic reviews, and clinical change management.

- TAHPI or Total Alliance Health Projects International :consultancy services for Health

  an unmatched depth of experience and specialist technology.

- Bargaining power of suppliers (Product vendors)
- Bargaining power of customers (Clients)
- Intensity of competitive rivalry For most industries, the intensity of competitive rivalry is the major determinant of the competitiveness of the industry.
- Sustainable competitive advantage through innovation.

RECOMMENDATIONS

- Partnership (like Telstra) should focus on more alliances like

  TAHPI or Total Alliance Health Projects International (based in Sydney) :the largest specialist health design firm ; unmatched **depth of experience** and **specialist technology.**

  Health Team Australia (HTA) consortium for fully **integrated turnkey delivery**.

  provide minimum consultation ;can compliment or reengineer the work processes.

- **Voyager Imaging** is pioneering medical imaging company

- Accenture can build in Domain specialists' teams to provide services to these specific domains including radiologists, pathologists, etc.

- Business Process Transformation

- Telehealth : pilot projects that are coming up in next two years especially because all hospitals, GPs will need specialist assistance to update their technology and processes

RECOMMENDATIONS

- To combat fear of substitution, Accenture should keep our clients up to date with the newest upgrades and also keep a check on client's satisfaction from time to time.

- To match the market needs and get a good hold on suppliers (Human Resource) Accenture should keep a bank of skilled people ready to work on future projects. They should hire the best of the talents and keep them delighted with the job so that they retain with the organization for the long term.

- If regional focus is concerned, Accenture should concentrate on Victoria and New South Wales regions because those are the real goldmines for business.

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- Business Strategy: IDC Health Insights Roundtable, New Zealand 2011

- Closing the Gap Through Shared Care (IDC #NZ8037903T, October 2011)

- ABS, Australia Industry, Experimental Estimates: Industry Performance by ANZSIC Class, Australia,2002-03, cat. no. 8155.0.

- Australian Health Insurance Association (AHIA), Private Health Insurance Industry Statistics, March 2009.

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CASE STUDY

TITLE:
- To study the work-life balance and use of IT for health promotion activities among IT professionals.

OBJECTIVES:
- To understand the general health seeking behavior of respondents.
- To find out if respondents are aware of and willing to use IT in improving their health seeking behavior.
- To find out if there is any relation in the number of working hours and stress amongst IT professionals.
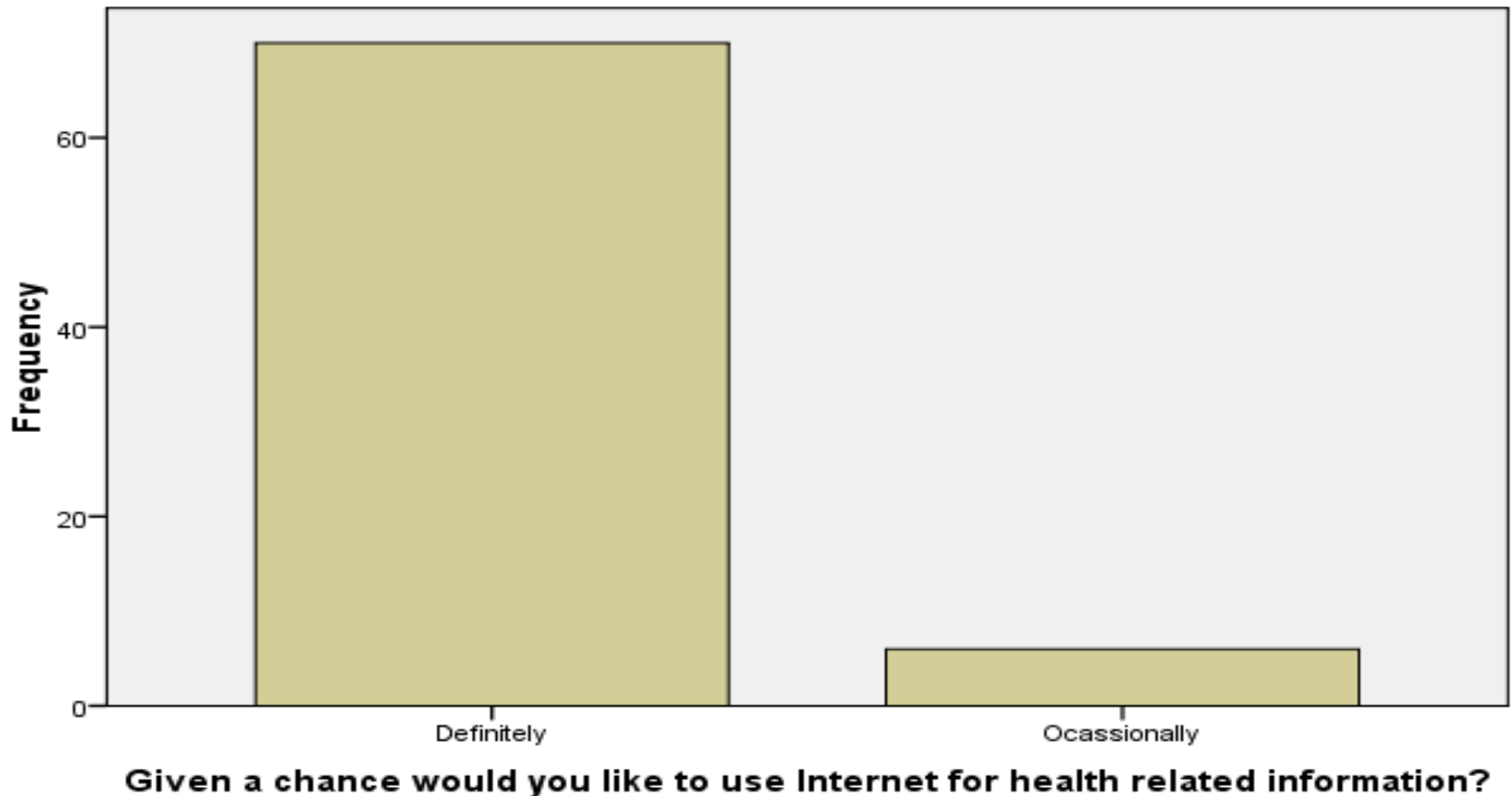
METHODOLOGY:
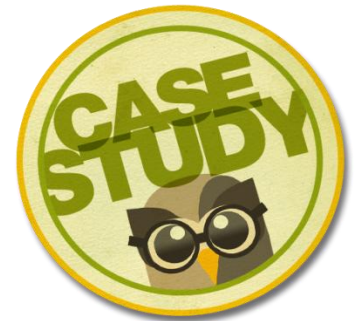
- sample of 76 people working in IT sector
- convenience sampling.
- survey questionnaire that was mailed to around 150 people
- of 150 only 79 people replied back. Out of these 79, 3 responses were incomplete .

Analysis and Results: Section1

- To understand the general health seeking behavior :

What would be the first point of contact if you get a chronic painless rash on your skin?
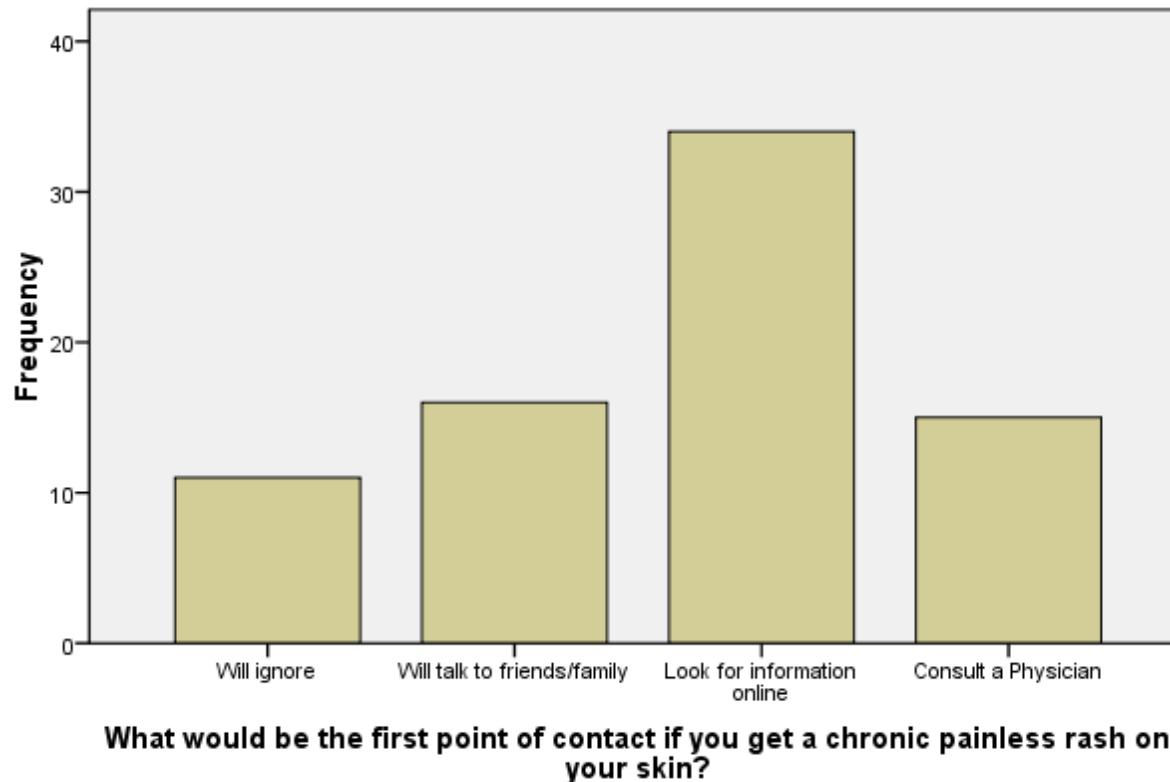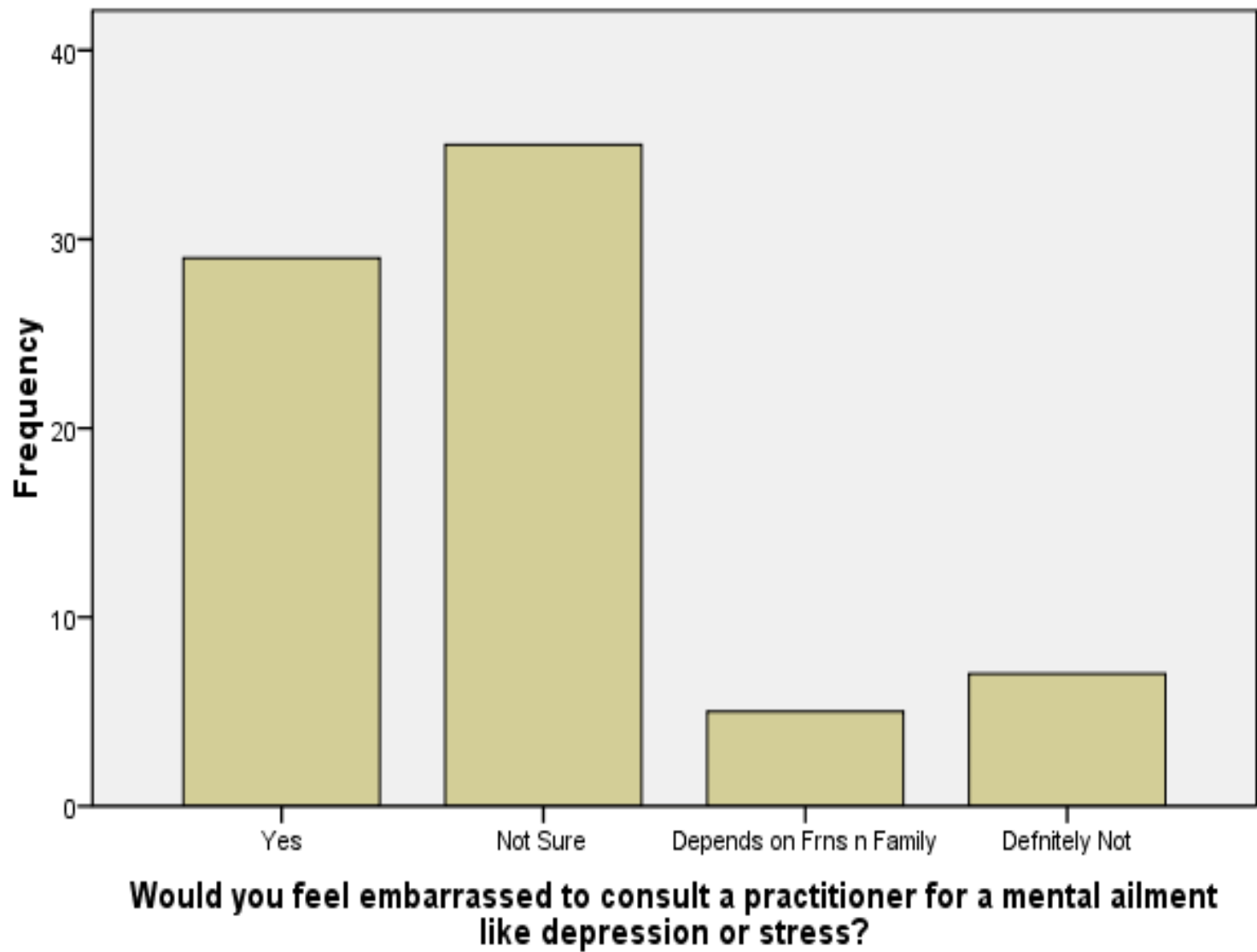
Section 2
To find out if respondents are aware of and willing to use IT

Given a chance would you like to use Internet for health related information?

If you get a facility to avail acute care services information and consultation online, approximately at the same cost as would be spent on a physician, you will prefer to
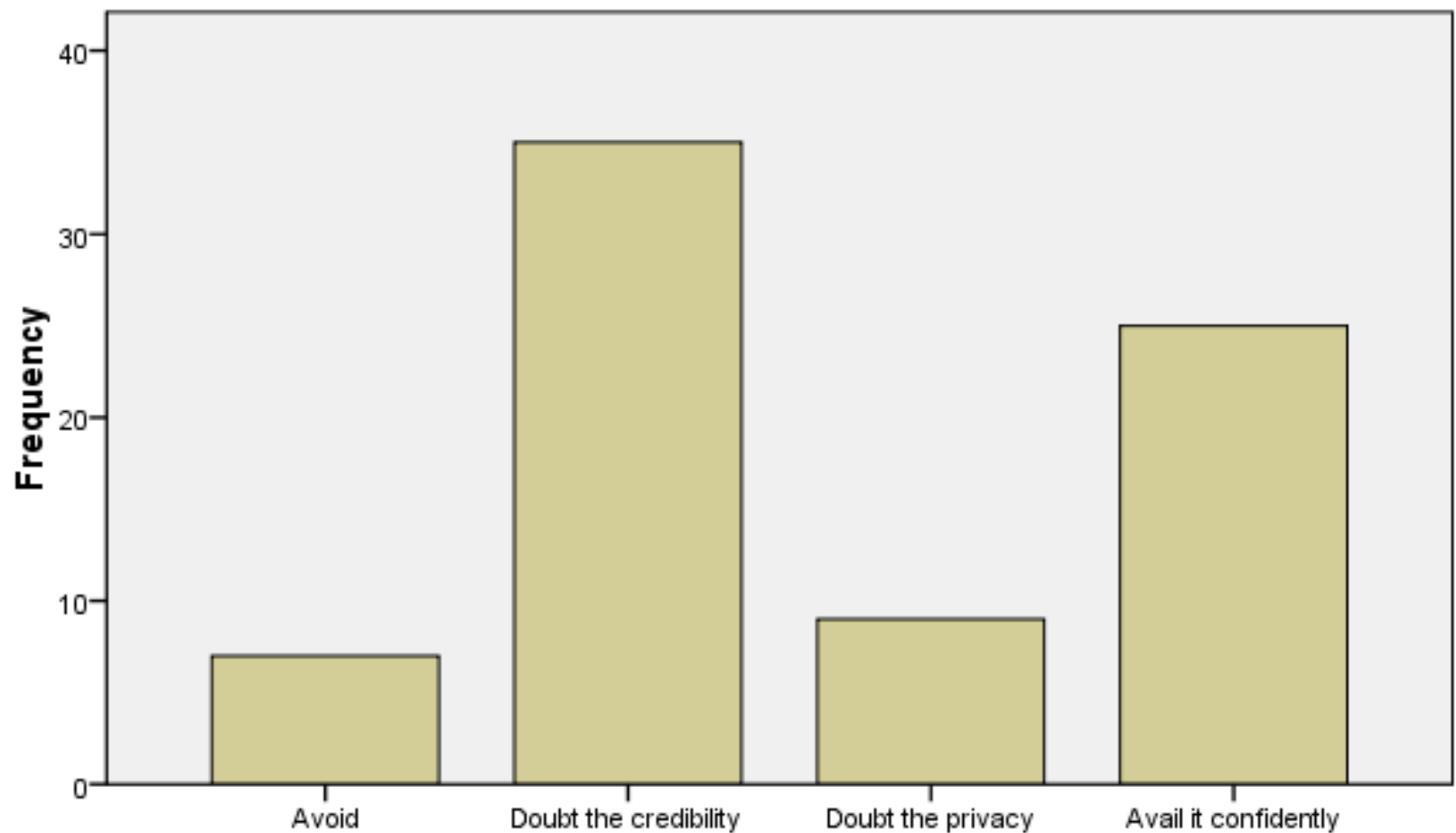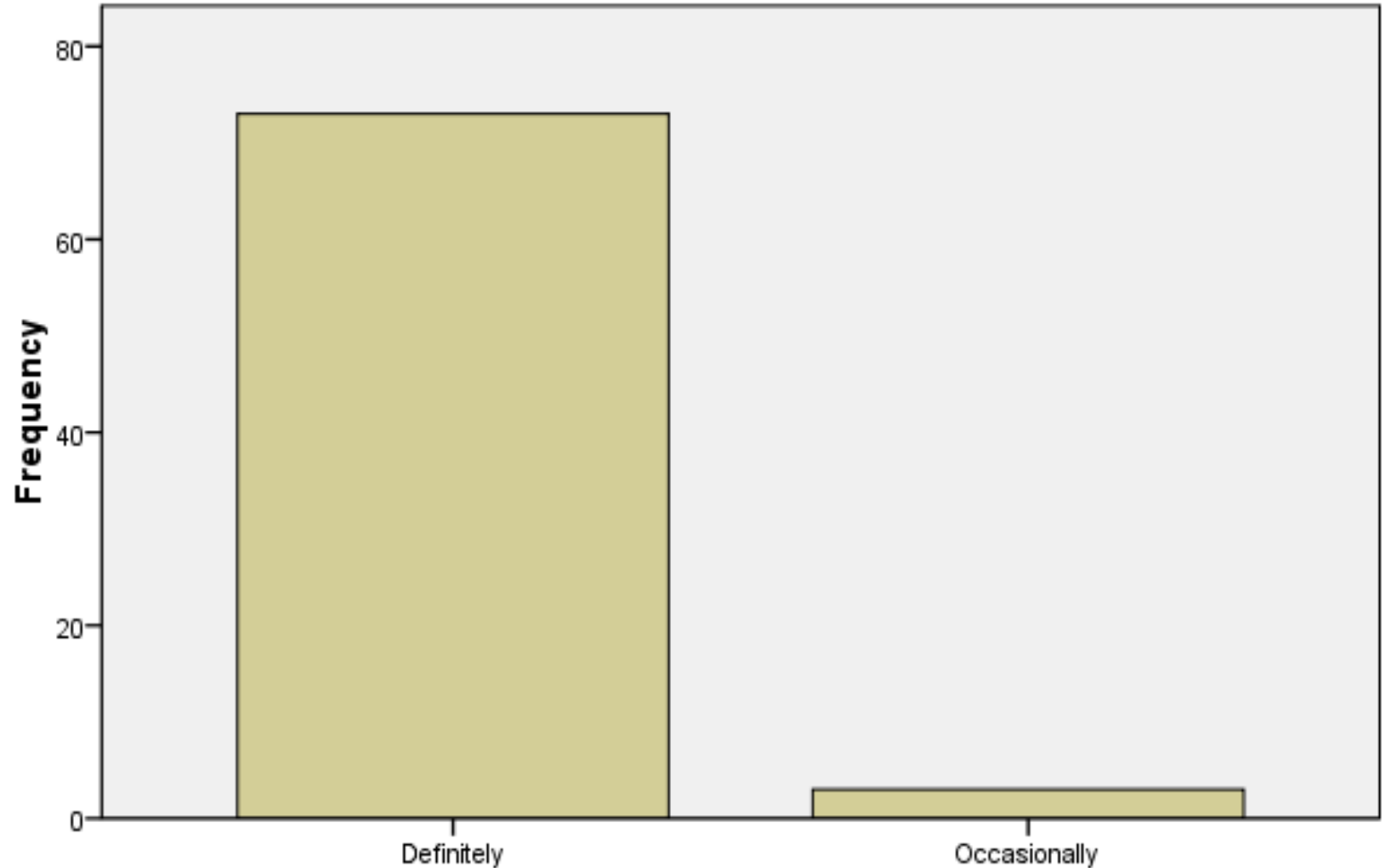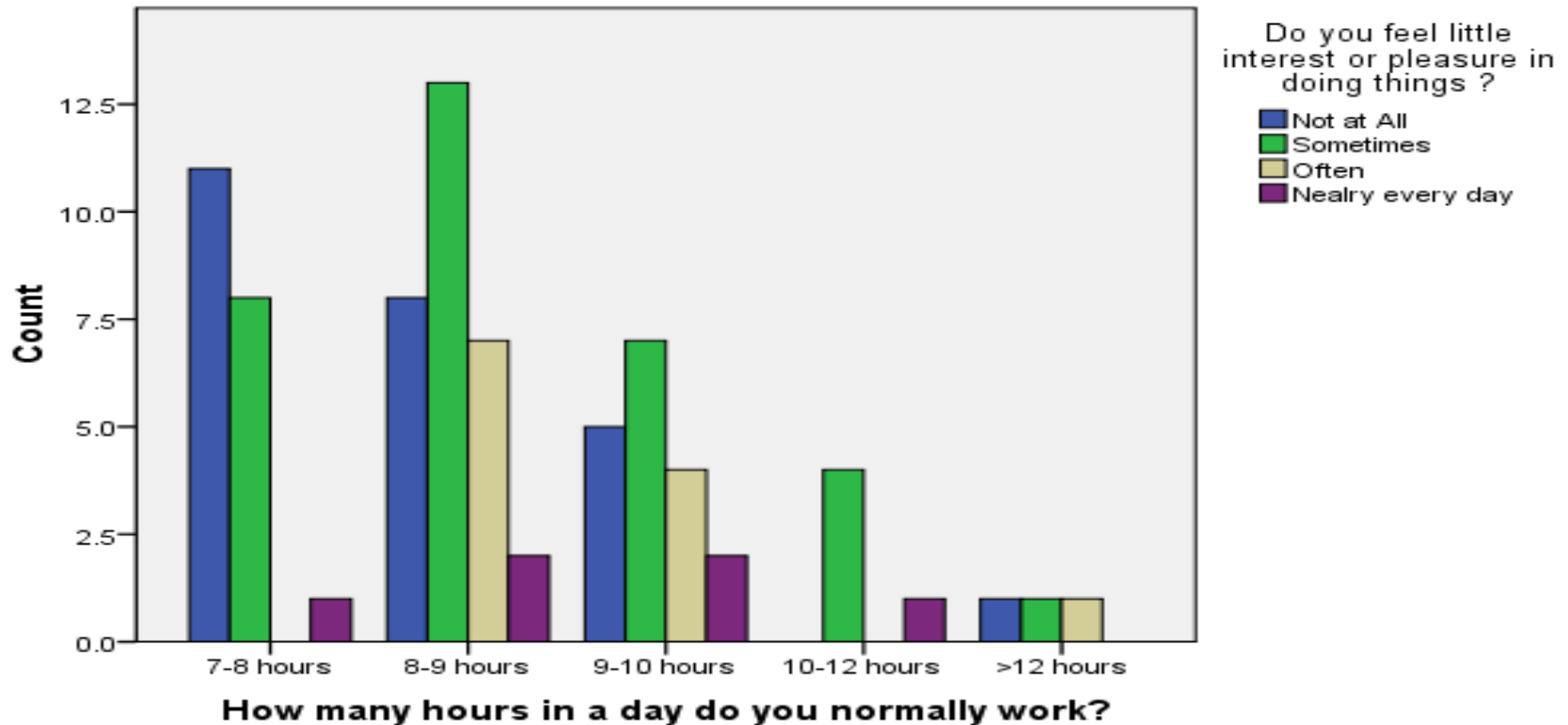
Do you think Information Communication tools like mobile, PDA, ipad, internet should be used for health promotion activities.

Have you come across information technology assisted programs or assistance to smoking and drinking problems
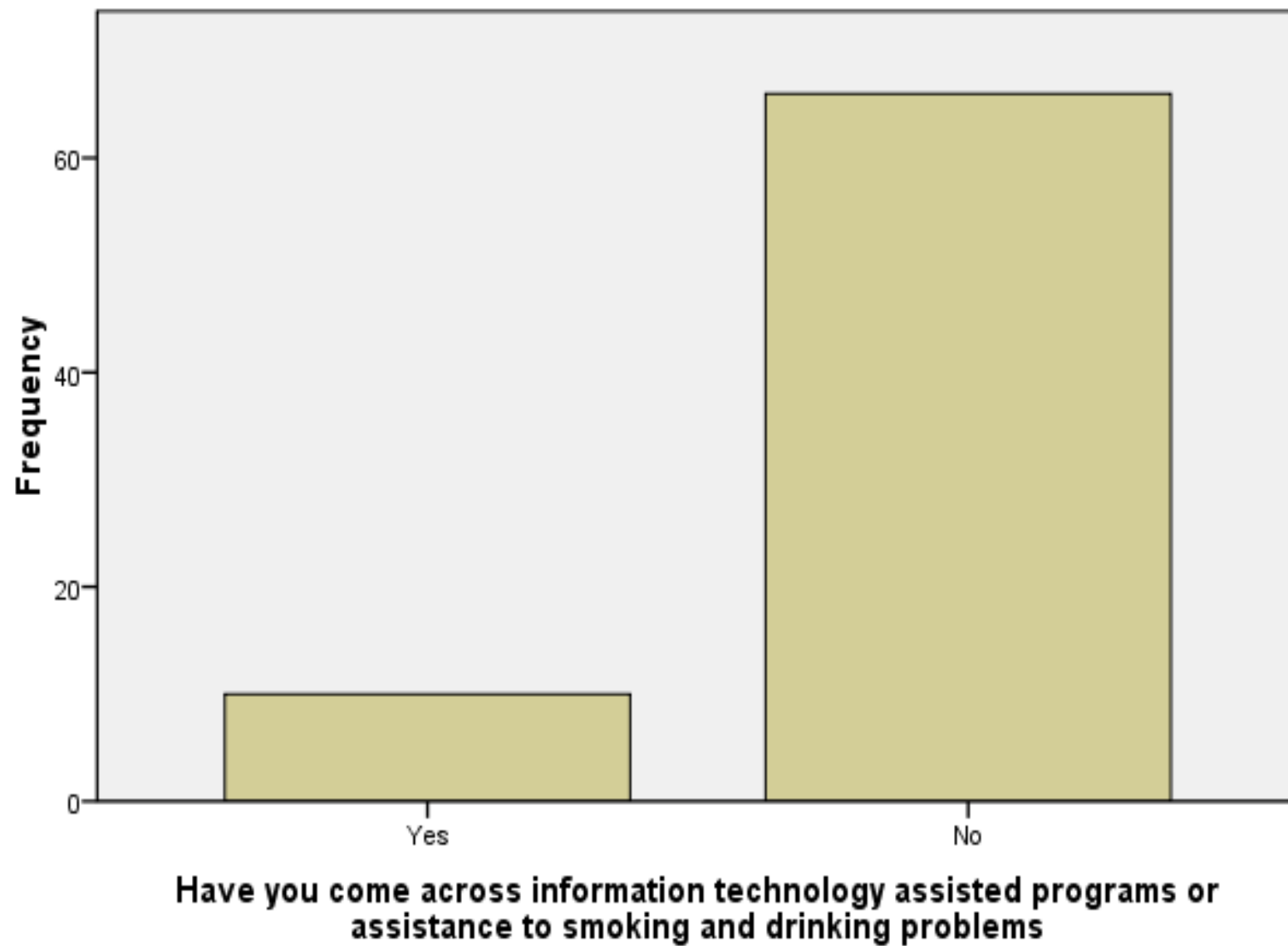
SECTION 3:
IF THERE IS ANY RELATION IN THE NUMBER OF WORKING HOURS AND STRESS AMONGST IT PROFESSIONALS

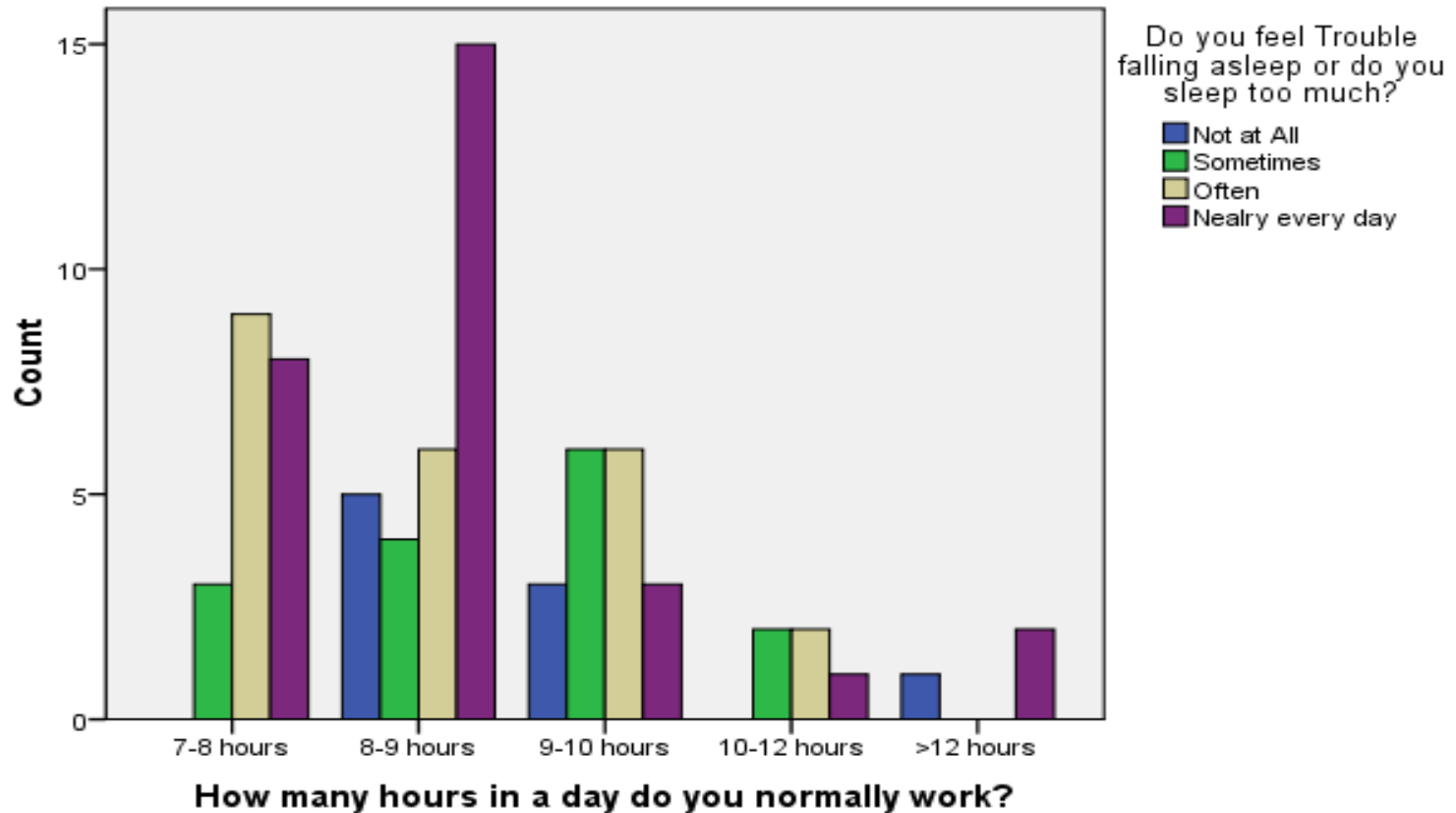People working in shifts of 10-12 hours (4/5= 80%) and 8-9 hours (13/30=43%) sometimes feel little interest or pleasure in doing things.

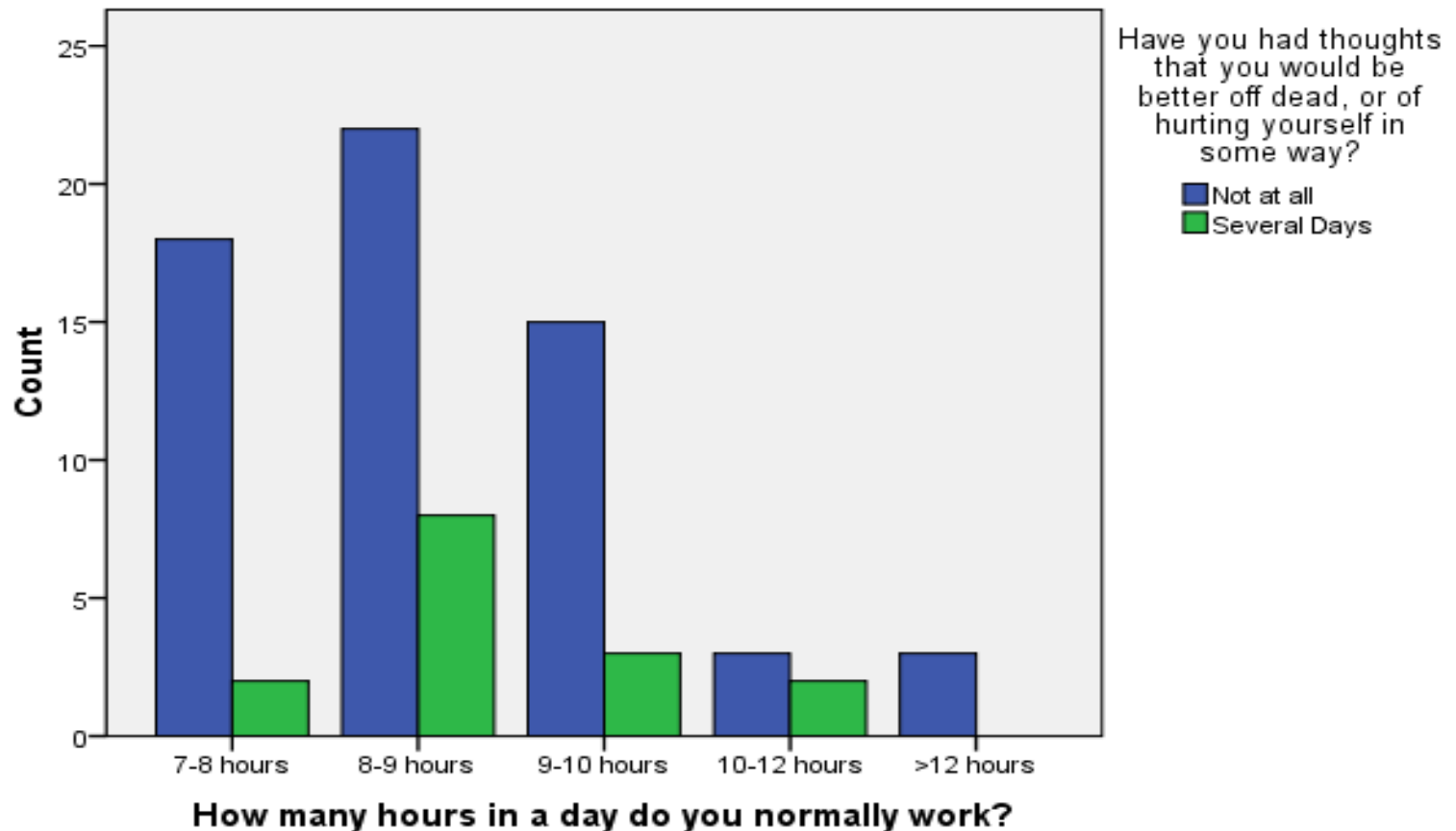How many hours in a day do you normally work?
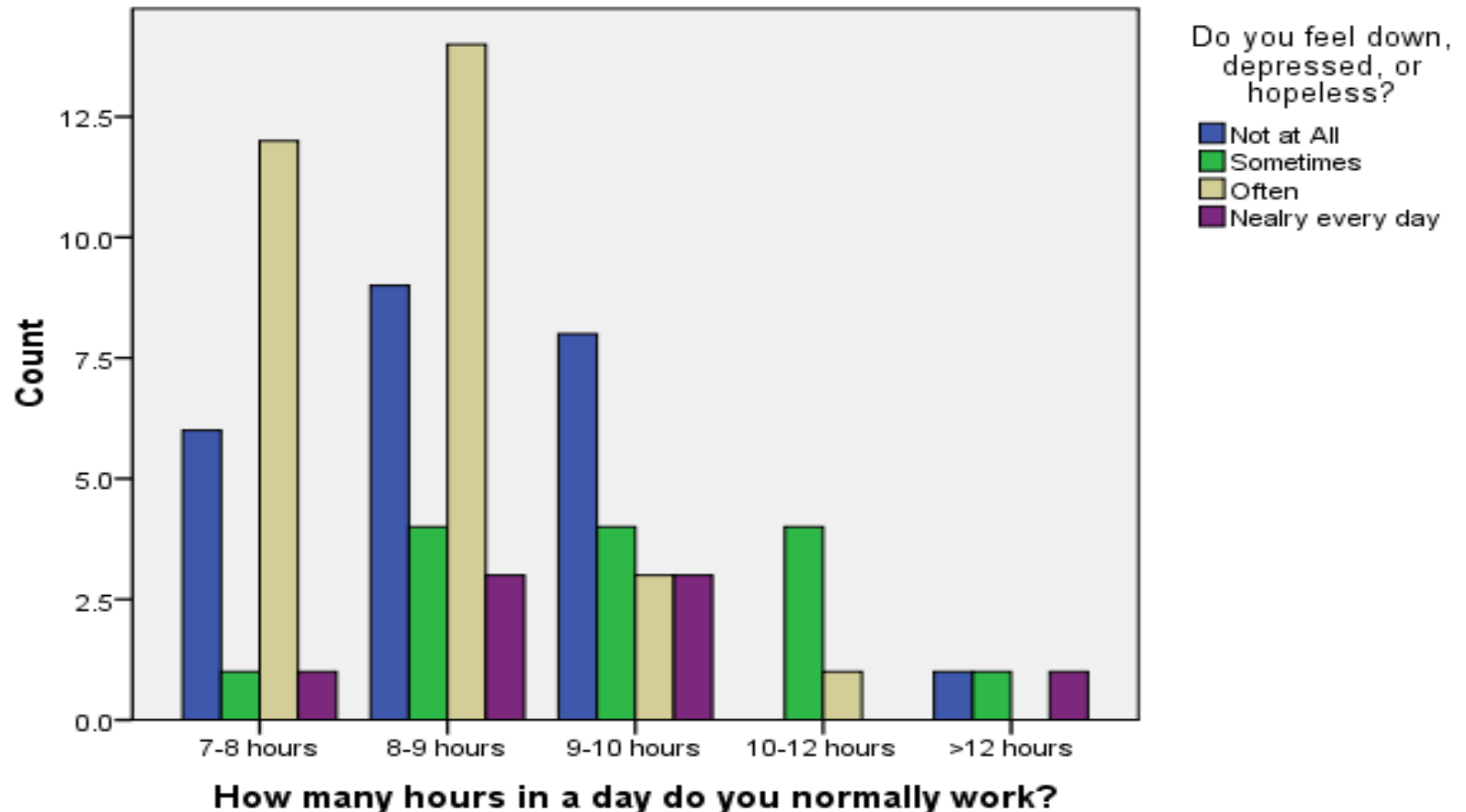
RESPONDENTS FROM 10-12 HOURS SHIFT SOMETIMES FELT DEPRESSED AS COMPARED TO OTHERS (4/5=80%). HOWEVER, 8-9 HOURS WORKING RESPONDENTS FELT DEPRESSED OFTEN. (14/30=47%).

66% OF RESPONDENTS WORKING FOR >12 HOURS AND 50% OF RESPONDENTS WORKING FROM (8-9 HOURS) SUFFER DISTURBED SLEEP EVERY DAY.

Bar Chart

How many hours in a day do you normally work?

Have you had thoughts that you would be better off dead, or of hurting yourself in some way?
- Not at all
- Several Days

40% OF RESPONDENTS IN 10-12 HOURS GROUP FOR SEVERAL DAYS FEEL THAT THEY WOULD HAVE BEEN BETTER OFF DEAD OR HURTING THEMSELVES IN SOME WAY

RECOMMENDATIONS:

- common working hours: 8-9 hours per day ,showed the maximum behavioral issues

  serious challenge to the health and hence working potential of their workforce.

- The individuals on their own should aim to strike a balance.

- information should be taken only from best authentic sources only.

- The health organizations : IT as a new means to disseminate Health related information; and especially anti alcohol, anti tobacco information

- Online portals, discussion forums to spread awareness and promote measures to combat stress.
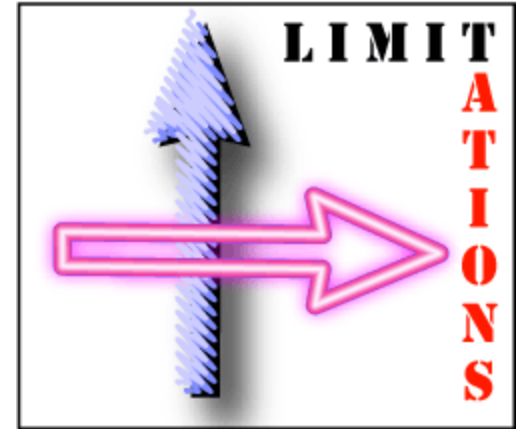
LIMITATIONS OF THE CASE STUDY:

- The case study was based on a modest sample size of 76 people.

- Most of the respondents were working for 8-9 hours so the results were based on a smaller sample size for other groups.

- The sampling used was convenience sampling as only the respondents who s email Id's were available were sent and who ever responded back was included in the study.

References:
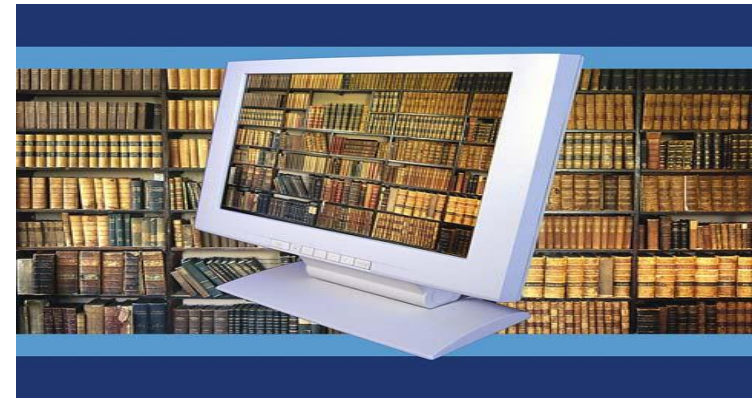
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Thank you very much for your attention