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Market Research for Coaching Business

Thesis

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Thesis abstract

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The objective of this thesis was to find out the frequency of different problems faced by the target market of the commissioner's business. The target market consists of the students living in Finland. These problems had previously been found and categorized by the commissioner of this thesis in his own research, and he had recognized four different problem categories: time-related problems, motivation-related problems, learning-related problems, and emotion-related problems.

The thesis consists of the following chapters: Introduction to Thesis, Introduction to Market Research, Market Research Process, Results, and Conclusion. The Introduction to Thesis chapter presents the background and basic frame for the thesis. It is very practical in nature, which is why the theoretical framework only consists of market research-related theory in the Introduction to Market Research and Market Research Process chapters. The Results and Analysis chapter goes through the results of the study, which are also analysed thoroughly. The Conclusion chapter summarizes the findings and answers research question of this thesis, while giving further advice to the commissioner.

The results of the study showed that, most often, all the respondent groups of the target market faced learning-related problems, and the commissioner should focus his services on this particular area, although other categories were experienced problematic, as well. The commissioner should also focus on younger students and Bachelor-level students in general, while having different emphasis on different genders, since they experienced the problem categories with different frequencies.

Keywords: Market research, Study problems, Learning, Student coaching

SEINÄJOEN AMMATTIKORKEAKOULU

Opinnäytetyön tiivistelmä

Koulutusyksikkö: Liiketoiminta ja Kulttuuri

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Tämän opinnäytetyön tarkoituksena oli selvittää, kuinka usein toimeksiantajayritys kohtasi ongelmia kohdemarkkinalla, joka koostuu Suomessa asuvista opiskelijoista. Toimeksiantaja oli löytänyt ja luokitellut nämä ongelmat aiemmin omassa tutkimuksessaan, ja hän oli tunnistanut neljä erilaista ongelmaluokkaa: aikaan liittyvät ongelmat, motivaatioon liittyvät ongelmat, oppimiseen liittyvät ongelmat ja tunteisiin liittyvät ongelmat.

Opinnäytetyö koostuu seuraavista luvuista: johdanto opinnäytetyöhön, johdanto markkinatutkimukseen, markkinatutkimusprosessi, tulokset ja johtopäätökset. Opinnäytetyön johdanto esittelee työn taustan ja peruskehiksen. Opinnäytetyö on kokonaisuudessaan hyvin käytännönläheinen, minkä vuoksi teoreettinen viitekehys koostuu vain markkinatutkimukseen liittyvästä teoriasta, joka sisältyy lukuihin Johdanto markkinatutkimukseen ja Markkinatutkimusprosessi. Tuloksissa ja analyysissä käydään läpi tutkimuksen tulokset, jotka myös analysoidaan perusteellisesti. Johtopäätöksessä esitetään yhteenveto tämän tutkielman havainnoista ja vastauksista ja annetaan lisäneuvoja toimeksiantajalle.

Tutkimuksen tulokset osoittivat, että kohdemarkkinoilla oli useimmiten oppimiseen liittyviä ongelmia kaikissa vastaajaryhmissä, ja toimeksiantajan tulisi keskittää palvelunsa enimmäkseen tälle ongelma-alueelle, vaikka myös muut kategoriat koettiin ongelmallisiksi. Toimeksiantajan tulisi keskittyä nuorempiin opiskelijoihin ja kandidaattitason opiskelijoihin, samalla keskittyen eri sukupuoliin eri tavoin, koska näiden kokemien ongelmien esiintyvyyksiheydessä oli eroja.

Asiasanat: Markkinatutkimus, Opiskeluongelmat, Oppiminen, Opiskeluvalmennus

TABLE OF CONTENTS

Thesis abstract.....	2
Opinnäytetyön tiivistelmä.....	3
TABLE OF CONTENTS	4
Terms and Abbreviations.....	8
Tables, Figures and Pictures	9
Special Symbols.....	12
1 INTRODUCTION.....	13
1.1 Motivation for the topic.....	13
1.2 The aim of the thesis and the research questions	13
1.3 Delimitation	14
1.4 Research approach.....	14
1.4.1 Primary research.....	14
1.4.2 Thesis layout.....	14
2 INTRODUCTION TO MARKET RESEARCH.....	16
2.1 Market research	16
2.2 Market research and mixed terminology	16
3 MARKET RESEARCH PROCESS	18
3.1 Identify and formulate the problem.....	18
3.2 Determine research design.....	20
3.2.1 Exploratory research.....	21
3.2.2 Descriptive research	22
3.2.3 Causal Research	23
3.3 Design the sample	24
3.3.1 Define population of interest	24
3.3.2 Determine whether to sample or to census.....	25
3.3.3 Select sampling frame	25
3.3.4 Choose sampling method	26
3.3.5 Determine sample size.....	29
3.4 Choose data collection method.....	30

3.4.1	Types of data	31
3.4.2	Secondary data collection methods	33
3.4.3	Primary data collection method categorization.....	34
3.4.4	Communicative primary data collection methods.....	37
3.4.5	Observational primary data collection	41
3.4.6	Experimental primary data collection	42
3.5	Analyse the data	43
3.5.1	Quantitative data analysis	43
3.5.2	Qualitative data analysis	45
3.5.3	Data analysis techniques	47
3.6	Presentation and follow-up	48
4	RESEARCH METHODS.....	49
4.1	Research design.....	49
4.2	Sample.....	49
4.3	Data collection method	49
4.4	Technical aspects of questionnaire.....	50
4.5	Questionnaire design	50
4.6	Data analysis	51
4.7	Reliability and validity of the study	51
4.7.1	Reliability.....	51
4.7.2	Validity	52
5	RESULTS AND ANALYSIS.....	53
5.1	Participant information	53
5.1.1	Gender	53
5.1.2	Age	54
5.1.3	Type of study place.....	54
5.1.4	Level of current study.....	55
5.2	Time related statements	56
5.2.1	I think that lack of time to study due to study workload affects my studies negatively	56
5.2.2	I think that lack of time to study due to study complexity affects my studies negatively	57

5.2.3 I think that lack of time to study due to working outside studies affects my studies negatively.....	58
5.2.4 I think that lack of time to study due to free time activities outside my studies affects my studies negatively.....	58
5.3 Motivation related statements	59
5.3.1 My studies get affected negatively because I do not have motivation for studying	59
5.3.2 My studies get affected negatively because I am not interested in subject of my studies	60
5.3.3 My studies get affected negatively because I do not know why I should learn the things I am learning	61
5.3.4 My studies get affected negatively because I do not know why I should study in general.....	62
5.4 Learning related problem statements.....	63
5.4.1 My studies get affected negatively because I do not find it easy to focus while studying, even though I try to	63
5.4.2 My studies get affected negatively because I get easily distracted by external factors (Phone, TV, social media etc.)	64
5.4.3 My studies get affected negatively because I need to study from home.....	65
5.4.4 My studies get affected negatively because I do not find it easy to get started with studying	66
5.4.5 My studies get affected negatively because I do not find learning new things easy.....	67
5.4.6 My studies get affected negatively because I have not found the best studying habits for me.....	68
5.4.7 My studies get affected negatively because I want to be consistent and disciplined in my studies, but I find it hard to do so.....	69
5.4.8 My studies get affected negatively because I don't know how to organize my studying	70
5.4.9 My studies get affected negatively because I do not know which study material I should study	71
5.5 Emotion related statements	72
5.5.1 Study related stress and anxiety affect my studies negatively	72

5.5.2 Emotional problems in my life that are related to factors outside of my studies, affect my studies negatively	73
5.5.3 My studies get affected negatively because of lack of emotional support (Lack of peer group support, lack of family support etc)	74
5.5.4 My studies get affected negatively because I do not know how to deal with stress and anxiety.....	75
6 CONCLUSIONS	76
BIBLIOGRAPHY.....	79
APPENDICES	85

Terms and Abbreviations

Tables, Figures and Pictures

Figure 1. The positioning of market research in market analysis (Saxena, 2019).	17
Figure 2. The market research process (Sarstedt & Mooi 2019, 12).....	18
Figure 3. Research problem identification and formulation process (Krishnaswami & Satyaprasad 2010, 22-32).	20
Figure 4. The relationship between the nature of research problem and type of research design (Sarstedt & Mooi 2019, 14).....	21
Figure 5. Research designs and their differences (Shukla 2008, 39).....	21
Figure 6. Descriptive research design usage possibilities (Smith & Albaum 2012, 17).....	23
Figure 7. Sample designing process (Housden 2010, 188).	24
Figure 8. Sampling methods and available techniques (Sarstedt & Mooi 2019, 40).	26
Figure 9. Probability sampling techniques (McCombes, 2019).	27
Figure 10. The effect of sample size on variability (Hague 2006, 120).	29
Figure 11. Basic data type categorization: 1) Primary-Qualitative, 2) Primary-Quantitative, 3) Secondary-Qualitative and 4) Secondary-Quantitative	32
Figure 12. Secondary data collection methods (Sarstedt & Mooi 2019, 50).	34
Figure 13. Example categorization of primary data collection methods through observation, communication and experimentation (Sarstedt & Mooi 2019, 50). ...	35
Figure 14. Example categorization of primary data collection method types through qualitative and quantitative methods (Tutorialspoint, 2021).	35

Figure 15. Differences of qualitative and quantitative research (Zikmund & Babin 2010, 94).....	37
Figure 16. Advantages and disadvantages of survey types (Dalton, 2015).	39
Figure 17. Process of basic quantitative data analysis (Sarstedt & Mooi 2019, 94).	44
Figure 18. Different types of basic qualitative data analyses (Adams, et al. 2014, 152; Hague 2006, 159-161; Nykiel 2007, 99-102).	47
Figure 19. Question 1.	53
Figure 20. Question 2.	54
Figure 21. Question 3.	55
Figure 22. Question 4.	56
Figure 23. Question 5.	57
Figure 24. Question 6.	57
Figure 25. Question 7.	58
Figure 26. Question 8.	59
Figure 27. Question 9.	60
Figure 28. Question 10.	61
Figure 29. Question 11.	62
Figure 30. Question 12.	62
Figure 31. Question 13.	64
Figure 32. Question 14.	65
Figure 33. Question 15.	66
Figure 34. Question 16.	67

Figure 35. Question 17.68

Figure 36. Question 18.69

Figure 37. Question 1970

Figure 38. Question 20.71

Figure 39. Question 21.72

Figure 40. Question 22.73

Figure 41. Question 23.74

Figure 42. Question 24.74

Figure 43. Question 25.75

Special Symbols

1 INTRODUCTION

1.1 Motivation for the topic

The commissioner of the thesis was found from the social vicinity of the researcher, and the thesis subject was found to be something that would have a positive impact on both parties: commissioner acquires data on the demand and viability of the future business idea and the researcher deepens his knowledge of business, specifically of market research. The process of market research clarifies various aspects of the business idea from point of view of target market into more concrete forms of knowledge, thus helping the commissioner to execute on the future business idea and realising weaknesses and strengths of it.

1.2 The aim of the thesis and the research questions

The aim of this thesis is to find out which problem categories found by thesis commissioner are most common in target market. This helps commissioner analyse the feasibility of the business idea in a deeper level through the answers of the study after its completion. Furthermore, it helps commissioner to create a suitable service directly to the needs and problems of the students. Commissioner has done market analysis partly already, including market research on experimental level. He has found preliminary problem categories in the target market, which researcher of this thesis will study more closely to find the most frequent problems faced by target market. Thus, this thesis will provide critical information regarding continuation and specification of the business idea.

The aim of the thesis leads to the research question, which is:

- Which problem categories university level students find most challenging in a context of learning and studying?

1.3 Delimitation

Commissioner has stated that he wants to create a business around coaching students with problems they face. Thus, the aim of this thesis is focused around finding the frequency of already found problem categories that are most common in university level students. Commissioner has already done other aspects of market analysis, leaving descriptive market research as a last crucial information needed for the completion of analysis. In the opinion of the researcher this thesis is very practical in its nature, and thus concepts outside of this practicality such as concept of entrepreneurship, deeper context regarding market analysis, pricing research etc. are not included in it. The focus is limited solely on things that are relevant to context of this thesis, research question of it and subject of market research.

1.4 Research approach

1.4.1 Primary research

In business context, the general meaning of research is to prepare organisation for future requirements (Adams et al. 2014, 3). In this thesis, primary research is implemented to answer research question: "Which problem categories university level students find most challenging in a context of learning and studying?", so that commissioner can start to design a service around customer needs.

1.4.2 Thesis layout

This thesis consists of three main parts: theoretical background, empirical study, data analysis and conclusion.

According to USC (2021), theoretical framework explains theories and concepts that are related to the topic of the study or thesis; it functions as the foundation for the thesis and it's directly connected to the research problem. In this thesis, theoretical framework is visited thoroughly with profound insight into the theory of market research, and proper literature review is conducted in the process. Empirical study-section of this thesis contains information on the methods of the empirical study of this thesis, and the results of it. Conclusions-section summarizes and reflects the whole thesis. It includes an analysis regarding how the findings are reflected to research question.

2 INTRODUCTION TO MARKET RESEARCH

2.1 Market research

According to ESOMAR (2007, 37-38) market research is correlated directly to human behaviour and the study of it, and it is a tool used for decision making when it comes to using it in organizations, although it can also be undertaken to gain insight. Small Business Development Corporation (2021) adds that through market research consumer data is collected and identified for the purpose of business planning. From these statements it can be noted that market research is something that studies people and their behaviour under certain market conditions to assist in decision making process or to create clarity around certain business-related subject.

According to Livingstone (1977, 123-128) market research is applied mainly for four reasons: determining market size with present pricing, finding company's and its competitors' image and brand related information, determining marketing mix related information or researching possible improvements for present products or new product ideas. Thus it can be said that market research is a tool that can be used for establishing information regarding subjects above, mainly in gathering knowledge about the market and how organization is positioned in the eyes of it.

2.2 Market research and mixed terminology

Market research is often mixed with market analysis and marketing research. Since the purpose of this section is introducing briefly what market research is, it is crucial to go through the definitions of each of these concepts to differentiate them to bring clarity to this subject through precise terminology.

Market analysis is seen as something larger and comprehensive in its nature when compared to market research. In addition, market research is part of market

analysis. Market analysis is generally used more to find out the nature of the market as whole with all its functions in micro- and macro-environment, while market research is specialized in answering research questions in target market micro-environment (Saxena, 2019).

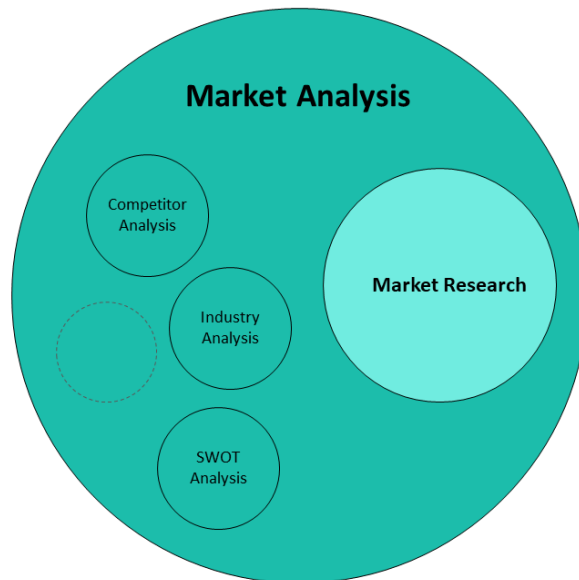


Figure 1. The positioning of market research in market analysis (Saxena, 2019).

Marketing research is even larger pool of study, which includes in it not only market research and market analysis, but other marketing related functions as well. The point of marketing research is to assist in decision making process, just like market research or market analysis, although on a larger strategical viewpoint (Stevens et al. 2005, 1-3). Nykiel (2007, 5-6) adds that marketing research can be seen also as something that unites purchasers and public to marketer with use of marketing information, while market research then again studies product- or service-related information alone while contributing to the whole decision-making process. Sarstedt and Mooi (2019, 3-4) go on to add that market research is more of a process while marketing research can be seen more as a function in itself, thus strengthening the the interrelational and sub-categorical meaning of market research in comparison to marketing research. It can be concluded that market research can be seen as tool used to assist in the decision-making process on a “grass level”, while market analysis is part of a larger entity and marketing research takes in all the marketing related subjects to assist in making important strategical decisions on a higher level.

3 MARKET RESEARCH PROCESS

Since market research is systematic in its nature as stated before, it must follow certain guidelines. Conducting market research includes certain steps that need to be followed to produce reliable and credible results. Since market research is part of marketing research, it follows the same process as in marketing research. Theories behind market research process are very similar between different authors and models. They follow similar kind of steps without significant differences that would create theoretical discord in market research process or that would require comparison of these processes. Researcher follows market research process seen in picture below.

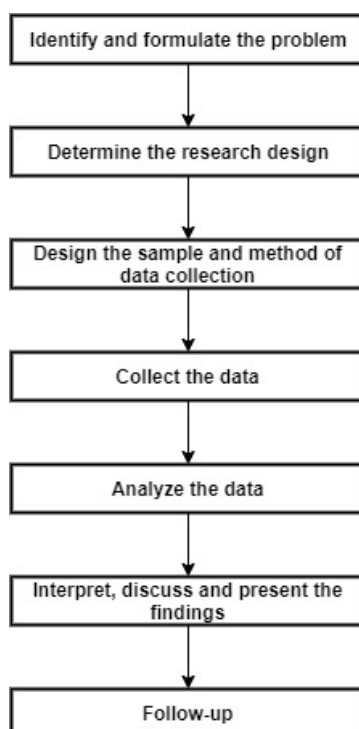


Figure 2. The market research process (Sarstedt & Mooi 2019, 12).

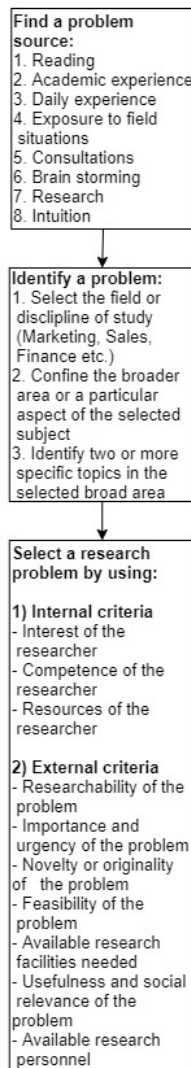
3.1 Identify and formulate the problem

Since market research is always purpose driven process, it starts with identifying the research problem first. Problem formulation starts with first identifying marketing symptoms and marketing opportunities, then defining the problem more specifically.

Marketing symptoms are issues that business is facing, while marketing opportunities are opportunities for business, as the name suggests. When the primary objective has been defined, it is easier to specify the initial research problem and the size of it, which is extremely important for the overall success of the research. For the research questions to be answered thoroughly, research problem needs to be clearly defined; issues, variables, and their mutual connection to each other need to be very clear, since research questions derive from research problem (Sarstedt & Mooi 2019, 13). Hague (2006, 24-26) adds that it is a sensible procedure to think and write down different hypotheses stemming from research objective, since it gives researcher multiple hypotheses which can be then ruled out by looking out for alternative research done on the subject already. This helps with defining research problem and in assessing which type of information is needed in answering research questions, which ultimately leads to meeting research objectives.

Research problem identification and formulation process is paramount in its importance since it sets direction for rest of the research; thus it might be helpful to follow definite process in doing so if identifying problem becomes a problem in itself or is not obvious for researcher. Krishnaswami and Satyaprasad (2010, 22-32) discuss of this kind of precise process to identifying and formulating a problem. Process of identifying research problem uses various techniques that categorize, specify and characterize problems, while formulation of the selected problem then again includes adapting and molding it into scientific terms.

RESEARCH PROBLEM IDENTIFICATION AND SELECTION PROCESS



RESEARCH PROBLEM FORMULATION PROCESS

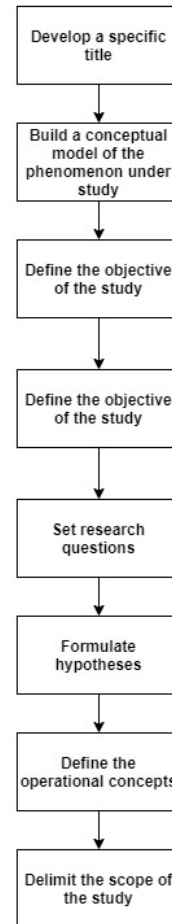


Figure 3. Research problem identification and formulation process (Krishnaswami & Satyaprasad 2010, 22-32).

3.2 Determine research design

According to Akhtar (2016, 68-69) research design is the frame for research that keeps it together and the structure for collecting, measuring and analysing data. It is not connected to any type of information nor information collecting technique, although it can be categorized. Smith and Albaum (2012, 15-18) state that there is three types of research designs relating to business research: exploratory studies, descriptive studies and causal studies. Sarstedt and Mooi (2019, 14) add that since research design stems from research problem and they are vastly correlated to each

other, the selected type of design depends largely on the nature of the research problem.

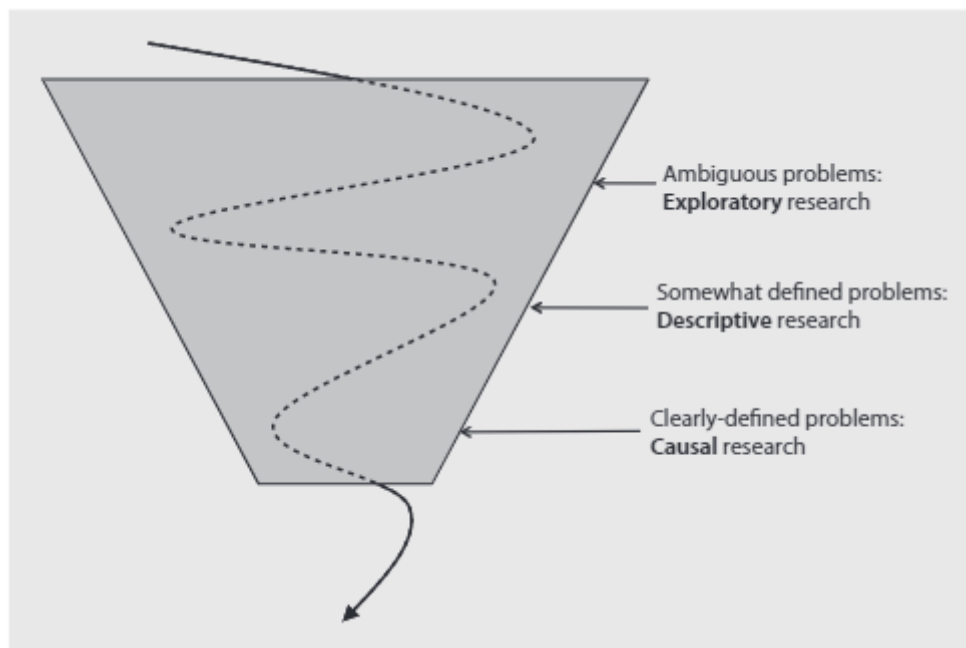


Figure 4. The relationship between the nature of research problem and type of research design (Sarstedt & Mooi 2019, 14).

	Exploratory	Descriptive	Causal
Emphasis	Discovery of ideas and insights	Frequency of occurrences	Determine cause and effect
Features	Flexible, unstructured	Hypotheses based, structured	Variable control
Techniques used	Focus groups, in-depth interview, mostly qualitative research	Surveys, observation, panel data, mostly quantitative research	Experimentation

Figure 5. Research designs and their differences (Shukla 2008, 39).

3.2.1 Exploratory research

As the name suggests, exploratory research is explorative in its nature. It is done when the problems are poorly defined and vague, or when certain concepts or ideas are being explored for their feasibility. It is useful when the symptom of the problem is clear, but the research problem itself is not clear yet, making it beneficial in the

problem identification and formulation phase. This makes exploratory research often the first step in research cycle, since the function of it is to bring clarity to overall situation, and not definite answers to research problem itself. This makes it good advocate to use in innovative areas of business where pace of change is fast. (Zikmund & Babin 2010, 44). When it comes to research methods used in exploratory research, it is often done as qualitative research since it measures abstract concepts and ideas according to (Shukla 2008, 30), although Stevens et al. (2005, 28) add that it is not constrained to any particular type of method. This makes it the most malleable and easily approachable research design, since other designs are inflexible in regard to used research methods as seen in picture 5. This contributes to it being a good first step in research process of problem identification and formulation-phase, although it is not confined to only this.

3.2.2 Descriptive research

According to Shukla (2008, 40) descriptive research is something that analyzes events and their repetitiveness or how two variables are connected to each other, with the intention of forecasting future events or defining category distinctions. Sarstedt and Mooi (2019, 17) add that it can be executed with one variable as well. Zikmund and Babin (2010, 45) go on to add that not only does descriptive research analyze events, but it also describes aspects and attributes of them from the level of individual all the way to larger macro environment. Thus it can be concluded that descriptive research is something that aims to find situational general view about studied subjects and their relation to each other. This makes it an excellent choice of research design when searching for more specific answers to research questions stemming from somewhat defined research problem, while testing out function of hypotheses as well (Stevens, et al. 2005, 35).

Descriptive research is something that could follow exploratory research, although exploratory research is not necessarily needed to do if the research problem is defined to some extent. The usage of descriptive research is more specified and compartmentalized in comparison to exploratory research due to measuring specific

and quantifiable variables, making it often quantitative in its nature for the same reason as seen in picture 5.

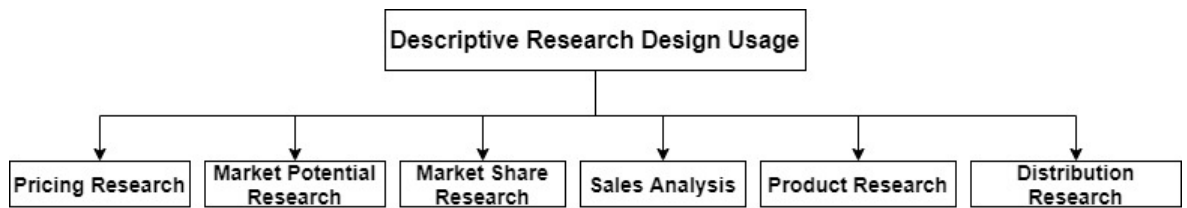


Figure 6. Descriptive research design usage possibilities (Smith & Albaum 2012, 17).

3.2.3 Causal Research

Causal research is suitable for occasions when explanation behind phenomenon is being wanted to comprehend on a deep level. According to Sarstedt & Mooi (2019, 18-22) causal research explores the cause-and-effect connection between minimum of two variables and it seeks to understand the causality between them to create definite conclusions through experimentation. Zikmund & Babin (2010, 48) specifies that on top of this it measures the level and relativeness of causality between the studied variables, and plausibility and effect of external ones. This makes it good research design to use when the research problem is well defined and variables are extremely specified, at the same time making it demanding research design due to clear-cut and susceptible variables being vulnerable to external variables affecting them, making the process of finding causality challenging. According to Shukla (2008, 46) this makes causal research initially having more strict control and criteria built into it, since without it causality could be inconstant due to undetected variables effecting the studied variables, or due to other reasons effecting the causality negatively (Smith & Albaum 2012, 17-18; Zikmund & Babin 2010, 47-48). Stevens et al. (2005, 40-41) add that although causal research is similar with descriptive research due to both being connected to studying variables on some level, they are two very different research designs since causal research focuses more on finding the cause-and-effect relationships between two variables, while descriptive research seeks to find strong correlation between them. Thus, caution must be practiced in order not to mix the two types of research designs into one. It must be added that causal research is often done in experimental fashion due to

it studying the causality of variables and not the characteristics of them, making it different from descriptive research in this regard as well as seen in picture 5.

3.3 Design the sample

Studying the entire target population that is wanted to be researched is not studied in most cases due to unpracticality and inefficiency of it, but accurate sample of it is gathered instead (Shantikumar, 2018). Thus, the sample needs to represent overall target population so that results gathered from it are reliable and valid for analysis purposes. Shukla (2008, 57) adds that planning accordingly is crucial to bring clarity around sampling process, because not planning well enough could lead to reliability and validity weakening sampling errors.

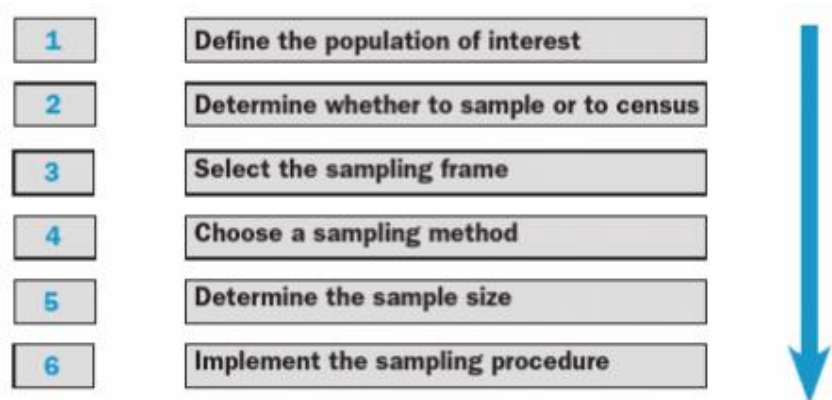


Figure 7. Sample designing process (Housden 2010, 188).

3.3.1 Define population of interest

The first step of designing a sample starts with defining target population that sample will be taken from. According to Greener (2008, 48) population can be defined as all of humans or objects that sample is taken from, while Hague (2006, 113) adds that population, also known as universe, refers only to individuals of certain group. Sarstedt & Mooi (2019, 38-39) then again state that population can be any collective set of individual measures that can be either human or inanimate. Thus it can be stated that when speaking of population, it refers to any set of subjects sharing

similar kind of measurable similarities that are categorizable. Researcher adds that when speaking of a group of people or other subjects, this refers to certain variables or characteristics that they have in common. This collective similarity could be geographical, psychological et cetera, so it is not bound to only certain types of similarities.

3.3.2 Determine whether to sample or to census

When target population has been established, next action is to choose if population in its entirety is studied or just a part of it. Census means that target population at large is being studied, when sample refers to a piece of it being studied. Often sample is being taken instead of census, because using sample is more efficient overall, although census can be better option if the population size is modest and feasible (Smith & Albaum 2012, 92-93). Siegle (2021) adds that in most cases size of target population has small or no effect on accuracy of sample, making sample usage even more viable option over census.

3.3.3 Select sampling frame

Sampling frame is a tool adopted to aid in selecting people for the study, that includes target population information which is used in sample selection. Selecting sampling frame can go through population definition phases, in which the sampling frame narrows by going through categories of population, making sure that same individuals are not in sample frame categories more than once (Turner 2003, 3). This makes it is easier to find the subjects through using lists of sources from these categories as well. Glen (2014) adds that sampling frame should contain all subjects of population while removing subjects not in it, and it should include some sort of contact information so that they can be reached. This way execution of sampling can be done effectively without sampling frame errors. Smith and Albaum (2012, 94-95) add that although sampling frame is a tool used to contact target population, if a list of target population information does not exist yet, sampling frame can be used to create this list from which it then selects the individuals as well.

3.3.4 Choose sampling method

Sample designs refer to used methods which with sample is chosen from the population. There are two kinds of sampling methods that can be used: probability sampling and non-probability sampling. These methods have their own, specific internal techniques used in different conditions, that researcher will go through as well.

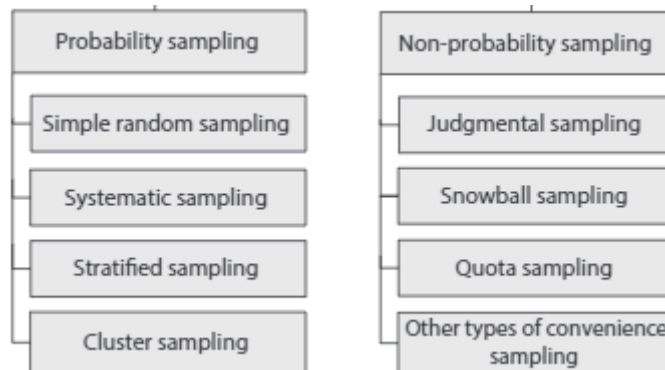


Figure 8. Sampling methods and available techniques (Sarstedt & Mooi 2019, 40).

Probability sampling is based on known mathematical probabilities. Each representative of target population has same chance to get chosen for study in a way that cannot be influenced by researcher. This way known and unknown sampling errors can be minimized, making results of sample more reliable (Housden 2010, 190). Probability sampling can be seen then as something that should be undertaken when accuracy and generalisation of results is important for research objectives, although Smith and Albaum (2012, 97) add that probability sampling cannot achieve this alone without comprehensive sample size complementing it as well.

When it comes to sampling probability techniques, there are four of them: simple random sampling, systematic sampling, stratified sampling and cluster sampling. Simple random sampling gives each participant of the target population the same distinguished possibility to be chosen by giving a numerical value to each participant randomly, that are then chosen randomly for sample. Systematic sampling then again mixes all subjects randomly, from which sample is gathered in chosen periodical intervals until wanted sample quantity is collected. In stratified sampling, target population is distributed to subgroups having same prechosen characteristics, from which sample is gathered, ensuring that all subgroups are presented in sample. From these sub-groups, sample is then gathered by using simple random sampling.

This technique gives researcher opportunity to get even more accurate information since stratified sampling reduces variance and errors, although making the sampling process more difficult and requiring deeper understanding of population from researcher. Cluster sampling includes dividing target population in groups as well, but they are heterogeneous instead of homogeneous, like in stratified sampling. From each of the groups, at least one group is chosen to represent sample by simple random sampling, instead of choosing subjects from each of these sub-groups. Cluster sampling is very similar to stratified sampling, but it is not as accurate statistically although being more efficient of resources (Stevens, et al. 2005, 186-187).

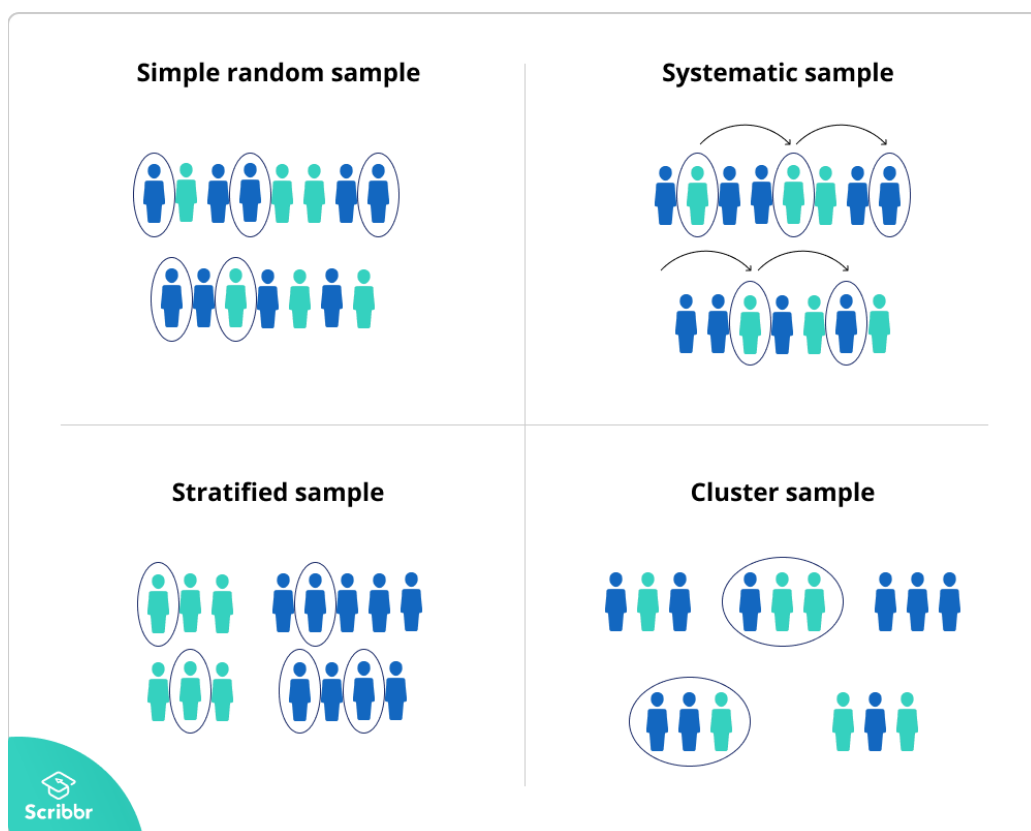


Figure 9. Probability sampling techniques (McCombes, 2019).

The second general sampling method used is non-probability sampling. According to Zikmund and Babin (2010, 311) non-probability sampling is not based on mathematical probabilities, nor does it give possibility to subjects of target population to be chosen equally, since researcher picks the sample. This makes probability sampling method inherently include sampling biases in its techniques. Showkat and Parveen (2017) add that although this method can be useful in creating comprehension of specific types of occurrences and events, it is not recommended to be used to create direct causal relationships between sample and

population due to its deficiencies, although Sarstedt and Mooi (2019, 43) argue that use of specific non-probability method techniques and knowledge of the researcher have effect on this as well. Housden (2010, 190-191) goes on to add that biggest deficiencies of this sampling method are the risk for the sample being not representative of population, lack of knowledge regarding plausible sampling errors and general suggestive nature of its results. It can be stated that generally probability sampling is better method to use due to its more systematic and scientific characteristics, although non-probability sampling can be used effectively if deficiencies of it can be tolerated and they will not risk the objectives of the research. Overall effectiveness, efficiency and convenience of this method make it lucrative method to use for early stages of market research, when the results do not need to be generalizable yet.

When speaking of non-probability sampling techniques, there are generally four of them: judgmental sampling, snowball sampling, quota sampling and convenience sampling. Judgmental sampling is based on skills of researcher when it comes to sample selection. In this technique, researcher chooses sample subjects by using his own skills and experience for his benefit. Company interview process can be compared to it, since it is also often based on the experience of the interviewer. Snowball sampling then again is based on getting new subjects included in sample through referrals of already existing sample participants. Quota sampling on the other hand is based on dividing the sample participants into categorial sub-groups, that have same predetermined features as target population, with the same distribution of them. This way each feature of the target population can be sampled in accordance with their natural distribution in target population through restrictive measures. Although this technique has similarities to probabilistic ones, it still might contain sampling errors due to not being random. Convenience sampling then again includes all of techniques that include circumstantial aspects in choosing the sample. In this technique samples are gathered due to them being conveniently and easily accessible, such as in social vicinity of the researcher or online sources, thus taking away the control about the content of the end sample (Sarstedt & Mooi 2019, 42).

3.3.5 Determine sample size

Determining sample size is often a challenging part of the sampling process due to multiple factors being considered that might be in conflict. According to Shukla (2008, 58) a researcher must take into account available resources together with the wanted quality and quantity of data collected. Sample size needs to be balanced with the objectives of the study since objectives determine how reliable results need to be and if they need to be generalizable. Although sample size is not only a variable in determining reliability and validity of results, Greener (2008, 50-51) adds that the actual sample size has a major effect on them through the rate of variability as seen in picture 10. From it one can see that after 1000 responses the marginal utility of each respondent gets negligible, and in some studies notably smaller samples can be taken, if a high rate of variability is not problematic as stated before. When it comes to the actual number of survey responses, Sarstedt and Mooi (2019, 43) add an important addition that a researcher needs to take into account before implementing a sampling procedure: the number of planned sample size will not be the same as the number of sent sample requests, since the percentage of reachable respondents, response rates and usable responses need to be taken into account as well. This way a researcher can calculate how many surveys are actually needed to be sent to get the wanted sample response quantity.

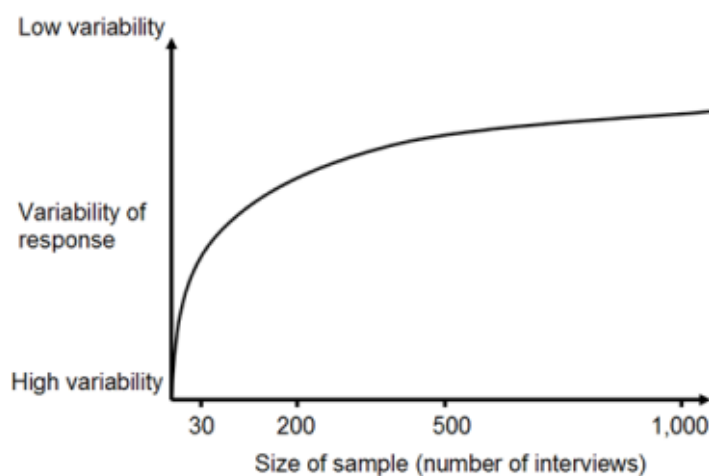


Figure 10. The effect of sample size on variability (Hague 2006, 120).

When it comes to communicating the rate of variability scientifically, confidence interval estimate and confidence level are used to express the variability. Zikmund and Babin (2010, 340-341) state that confidence interval estimate refers to range of numerical values in which target population mean is evaluated to exist, including estimated margin of error for mean that is measured in percents. Margin of error is calculated by taking in account effects of sampling errors, which according to National Business Research Institute (2021) can be seen as plausibility for the sample not being representative of population. Common examples of sampling errors according to Smith and Albaum (2012, 105-106) are sample size, sample variability and target population size. Non-sampling errors then again originate from sampling process itself according to Greener (2008, 48), and thus are harder to spot due to their uncalculatable nature. Confidence level then again states the certainty of confidence interval estimate happening in percents. It tells how often out of 100 times results of sample results will go between the range of predicted numerical values or how often the numerical mean will be within margin for error (Smith & Albaum 2012, 103-104). Confidence level and confidence interval estimate are directly related to each other. When data points are further away from each other, confidence level can be higher as well due to higher probability of including data points within more distant data points and vice versa.

3.4 Choose data collection method

When it comes to choosing appropriate data collection method and their subsequent techniques, researcher must take in account advantages and disadvantages of each method and contrast them on research objectives, research questions and chosen research design. Sometimes preferred and optimal methods cannot be used due to lack of resources, thus leading to some amount of compromise, although Poynter et al. (2014, 12-16) add that internet has revolutionized market research by making data collection more efficient and accessible for researchers with limited resources. More than one data collection method can be used as well. This is called triangulation, which according to Noble and Heale (2019) stands for a research technique that uses various research methods and sources of data to examine and validate

the overlap between results of different methods, which increases validity and reliability of results as well.

3.4.1 Types of data

Certain types of data exist for different research purposes. There are four general types of data as seen in picture 11. Primary data is gathered by the researcher through first-hand experience, and it is something that has not been collected before. It is gathered when there is none of pre-existing data available for the research in hand or when secondary data has not provided enough information for research questions to make any conclusions or when the research questions themselves are only researchable through primary research (Ajayi, 2017). Secondary data then again has not been directly collected by the researcher, nor does researcher has had any contact with it or its collection process. It is already existing data that has been gathered either by another researchers, organisations or institutions (Greener 2008, 73).

When discussing quantitative and qualitative data, they refer to actual types of data, not to origins of data itself as primary and secondary data do. Sarstedt and Mooi (2019, 30-31) bluntly state that quantitative data consists of numerical quantities and can be displayed as such, while qualitative data cannot due to being non-numerical. Since quantitative data is based on quantities and is numerical in its nature, one of main advantages of it is that large quantities of data can be handled and measured easily, making it a great data type when large set of data is being interpreted and analysed (NSW Government, 2020). Qualitative data then again is based on deeper qualities of data. It cannot be gauged as objectively as quantitative data, since qualities of qualitative data could be construed in multiple ways by different spectators, ultimately making it subjective. This makes comparison of qualitative data hard, while at the same time making it undisputed data type when nuanced information is needed that cannot be measured in numerical values (Pickell, 2021).

Krishnaswami & Satyaprasad (2010, 85) go on to add that data regarding humans can be seen also as demographic data and behavioural data, from which latter is also known as psychographic data. According to Tunggal (2020) demographic data refers to socio-economic factors and is often tied to space and time, when psychographic data refers to deeper, behavioral characteristics of a person. Due to these distinctions demographic data can be seen as quantitative data since it can be measured in quantities, while psychographic data can be seen as qualitative data due to being more nuanced and abstract in its characteristics.

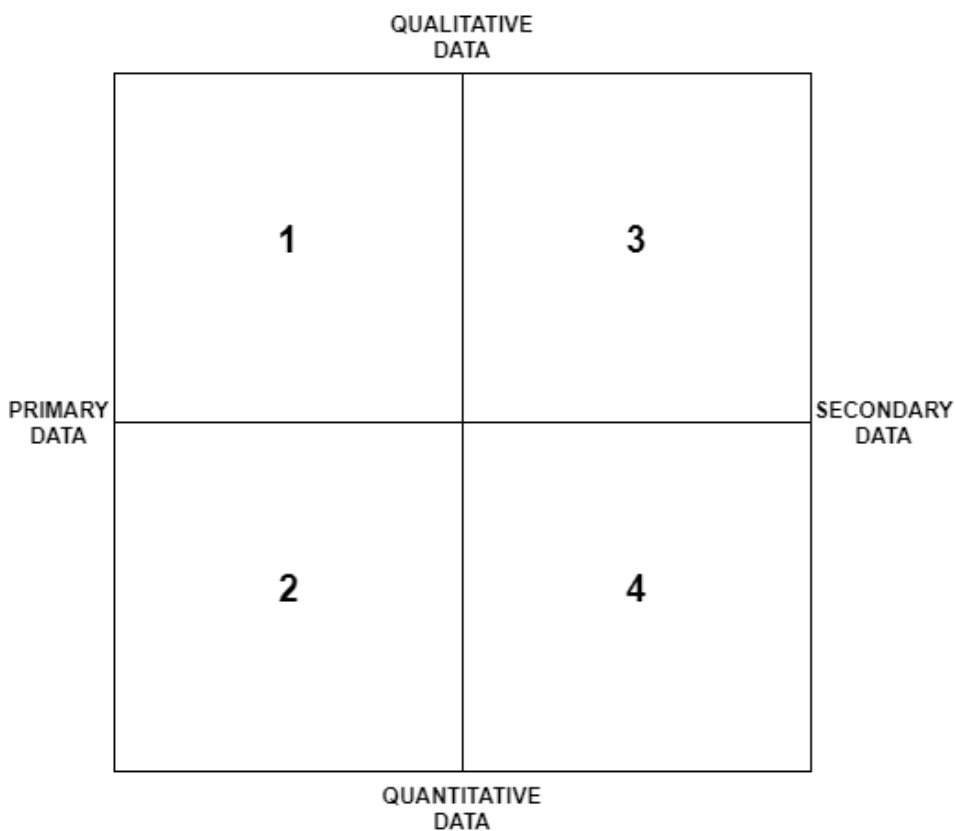


Figure 11. Basic data type categorization: 1) Primary-Qualitative, 2) Primary-Quantitative, 3) Secondary-Qualitative and 4) Secondary-Quantitative

In addition, quantitative data is also labelled as discrete or continuous data, while qualitative data is labelled as categorical data. These categories are divided into their sub-categories as well. Categorical data includes in it nominal and ordinal data, while discrete data includes in it the data types of interval and ratio data (Curley & Milewski, 2020). It is important to go through these sub-categories of data because data type which is gathered in data collection phase determines which type of descriptive statistics are used to present data, and which type of techniques are used to analyse it (Sarstedt & Mooi 2019, 116-117). Rennemeyer (2019) and Nykiel (2007,

60) go on to specify these data sub-categories: Nominal data describes characteristics of variables that are qualitative in nature, such as colour of hair or city of residence. Ordinal data then again states the order of these qualitative variables in accordance with respondent preferences. Interval data is quantitative data which measures not only order of variables, but intervals of variables as well. Ratio data then again is like interval data, but it cannot have negative values because it can be measured from absolute zero point forward. For example, when interval data can measure negative temperatures of air, ratio data cannot since it doesn't measure values below zero.

3.4.2 Secondary data collection methods

Primary data collection is often very expensive and time-consuming process, making collection of secondary data recommendable first step. Although secondary data can be inaccurate due to not knowing background and processes used in its collection, it should be the preferred method when first looking out for research data due to its feasible, economic and prompt nature (Nykiel 2007, 29). Krishnaswami and Satyaprasad (2010, 87) go on to add that even if primary research is conducted, secondary data can work as a great bench mark for design of the study and results of it. Thus, it can be stated that primary data collection should be considered only if secondary data cannot be found, or it is useless for study purposes.

Secondary data can be collected from primary or secondary sources. According to Healey Library (2020) primary sources stand for sources that have actual, original connection with data presented. This data has been gathered by same researcher, which presents it in given primary data source. Secondary data sources then again stand for sources, that don't have initial contact with original data presented; it is gathered from primary sources, and it is presented by new researcher which might add new interpretations to it. When it comes to topic of business, Kuada (2008, 103-105) adds that primary and secondary sources of secondary data can be seen also as internal data sources and external data sources. Internal data sources stand for any available internal sources of the business or organization, such as data on sales

or receipts. External data sources then again refer to locations outside of the business, such as online sources or libraries.



Figure 12. Secondary data collection methods (Sarstedt & Mooi 2019, 50).

3.4.3 Primary data collection method categorization

Primary data collection methods can be categorized in different ways. According to Stevens et al. (2005) primary data is gathered through method of communication or observation. Collecting primary data through method of communication always includes direct interaction between researcher and interviewee, while in method of observation researcher monitors the subjects in prearranged environment. Sarstedt and Mooi (2019, 58) add experimentation as third type of primary data collection method, which is combination of communication and observation. Nykiel (2007, 10) specifies experimentation to be a method in which the researcher controls certain predetermined primary variables and studies their effect on secondary ones. Each of these categories can be either quantitative or qualitative in nature, depending on the used used techniques within them.

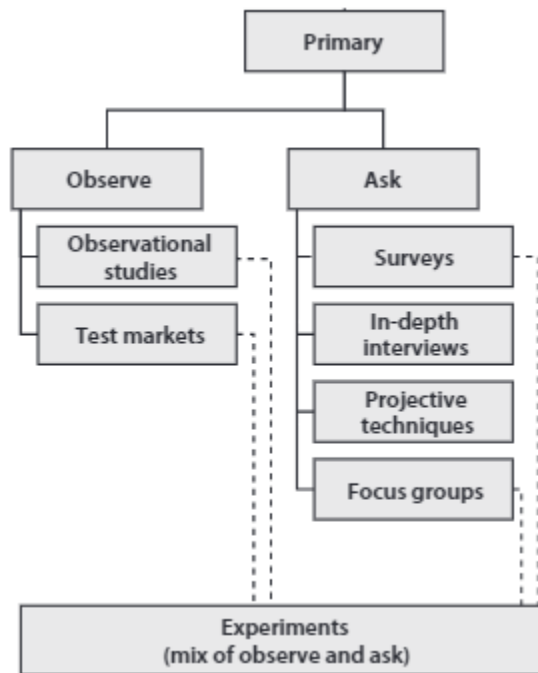


Figure 13. Example categorization of primary data collection methods through observation, communication and experimentation (Sarstedt & Mooi 2019, 50).

Another way to categorize primary data collection methods is to divide them into quantitative and qualitative methods (ESOMAR 2007, 65). These methods can be then either observational, communicative or experimental in nature, subsequent to techniques used in each category. Categorization of methods this way provides clarity and adds continuity to types of data, although most authors and sources favour the prior categorization method.

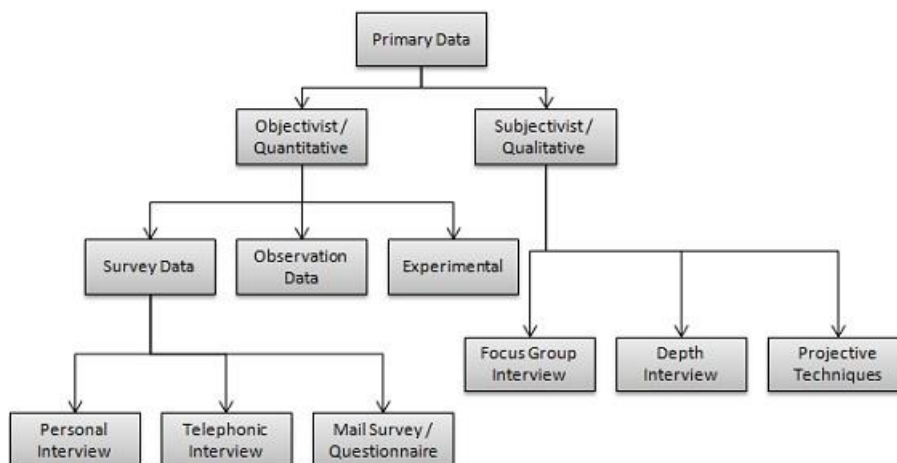


Figure 14. Example categorization of primary data collection method types through qualitative and quantitative methods (Tutorialspoint, 2021).

Quantitative and qualitative methods refer to their research types of quantitative and qualitative research, thus brief introduction of them and their differences is discussed next. According to USC Libraries (2021) quantitative research seeks to find connections between population variables and it is used in descriptive and experimental research designs. In addition, it generally uses quantitative data which can be then categorized easily and systematically to report findings and correlations, often in descriptive and causal research design as seen in picture 15. What comes to primary data collection methods, collecting and analysing of it is easier and more cost-efficient in comparison to qualitative methods, thus according to Housden (2010, 161) usage of quantitative methods are more commonly used. According to Sarstedt and Mooi (2019, 77) qualitative research then again focuses on gathering and examining qualitative data to deepen the comprehension of characteristics of studied subjects. They add that it is used to comprehend why certain phenomenon happen, thus being great research type to use in exploratory research setting, since often very little is understood of the customers in general at that point. Nykiel (2007, 39-40) adds that qualitative research is often used as a step towards conducting quantitative research, and that its results cannot be statistically analysed nor can they be generalized on the population as whole, although at the same time it can provide deeper understanding of subjects that quantitative research cannot due to its numerical nature. He goes on to add that these outcomes largely depend on the approach used as well. Direct approaches refer to participants knowing the true nature of the study, while indirect approaches refer to them not knowing it. Thus, it can be concluded that indirect approaches might give one more accurate results due to not having as many biases from the participants since they don't know the true nature of it, although ethical questions arise from this approach at the same time, especially if subjects don't know of the existence of study in first place.

Qualitative Research	Research Aspect	Quantitative Research
Discover Ideas, Used in Exploratory Research with General Research Objects	Common Purpose	Test Hypotheses or Specific Research Questions
Observe and Interpret	Approach	Measure and Test
Unstructured, Free-Form	Data Collection Approach	Structured Response Categories Provided
Researcher Is Intimately Involved. Results Are Subjective.	Researcher Independence	Researcher Uninvolved Observer. Results Are Objective.
Small Samples—Often in Natural Settings	Samples	Large Samples to Produce Generalizable Results (Results that Apply to Other Situations)
Exploratory Research Designs	Most Often Used	Descriptive and Causal Research Designs

Figure 15. Differences of qualitative and quantitative research (Zikmund & Babin 2010, 94).

As seen, both categorization types include same data collection techniques, but they are categorized in different ways. Researcher of this thesis will explain the primary data collection methods through categorization of observation, communication and experimentation, while dividing communicative methods into qualitative and quantitative methods as well. This is done because communicative methods can be clearly divided into separate methods that include their own specific processes, when again division of quantitative and qualitative methods is not as clear with experimentation and observation, thus they been discussed separately.

3.4.4 Communicative primary data collection methods

Choosing appropriate communicative data collection method depends on research design and type of primary data needed. According to Sarstedt and Mooi (2019, 58) communicative primary data collection methods include surveys, in-depth interviews, focus groups and projective techniques. Housden (2010, 139-162) states that surveys are considered being a quantitative method, while Hague (2006, 76) adds that in-depth interviews, focus groups and projective techniques then again are considered being qualitative methods.

Surveys are the most used primary data collection method due to its resource friendly nature, although they need to be designed well to evade systematic errors

and random sampling errors. They are often used in descriptive research due to surveys` ability to be helpful in describing phenomenon (Zikmund & Babin 2010, 146-149). Each survey has built in structure in it, which is followed throughout the interview or survey, giving it frame and base for data evaluation. Surveys can include both close-ended and open-ended questions, making it versatile tool in regards finding quantitative data that is specific but also rich in nature, although Zikmund and Babin (2010, 146) state that surveys can have some qualitative features in them as well. According to Shukla (2008, 47-51) surveys can be conducted either through personal interviews, telephone interviews, mail interviews or online interviews. Housden (2010, 162) goes on to add that while personal interviews and telephone interviews are executed with interviewer being included in the data collecting situation, mail interviews and online interviews are done by the respondent alone. Sarstedt and Mooi (2019, 62-65) add important clarification about the terminology behind correct survey types: they state that while survey methods include same methods which Shukla stated, they call mail interviews and online interviews by names of mail surveys and web surveys, since they are not done in the presence of researcher. This goes well with Housden`s clarification of dividing survey methods into interviewer including and excluding types. Adams et al. (2014, 130) go on to add that surveys can be done though social media as well, although research needs to pay even more attention to survey design and biases, if doing so.

Survey type	Advantages	Disadvantages
Mail	<ul style="list-style-type: none"> • Easy, cost efficient • No interviewer, respondents may be willing to share information 	<ul style="list-style-type: none"> • Response rates typically low • Not appropriate for low literacy audiences • No interviewer, respondents can't be questioned
Phone	<ul style="list-style-type: none"> • Large scale accessibility in many countries • Rapid data collection • Quality control • Anonymity • Flexibility 	<ul style="list-style-type: none"> • Lack of visual materials • Call screening is common • Limited open-end questions • Wariness • Inattention
Online	<ul style="list-style-type: none"> • Low cost • Automation and real-time access • Less time needed • Convenience for respondents • Design flexibility • No interviewer 	<ul style="list-style-type: none"> • Limited sampling and respondent availability • Possible cooperation problems • No interviewer
In person (face-to-face)	<ul style="list-style-type: none"> • Good response rates • Longer interviews more likely to be tolerated • Attitude can be observed 	<ul style="list-style-type: none"> • Expensive • Time-consuming • May produce a non-representative sample

Figure 16. Advantages and disadvantages of survey types (Dalton, 2015).

According Sarstedt and Mooi (2019, 78-79) in-depth interviews then again are one-on-one discussions in which interviewer and participant discuss certain subject matter together. Participants can be consumers, decision makers or other representatives. They go on to add that although in-depth interviews can be fully structured, normally they have semi-structured design in which the interviewer asks certain questions while encouraging the interviewee to continue and add on his answers. Zikmund and Babin (2010, 109) refer to this type of encouragement as a technique called probing, which stands for these kind of delving questions that gets the interviewee to explain their answers in more specific and deep way. Since it is important to understand differences between interview structures, Greener (2008, 89) clarifies them by stating that in structured interviews certain questions are asked without fluctuation from them. She goes on to add that in semi-structured interviews a question guide is followed, although interviewees can fluctuate from questions and they can add other comments to answers, while unstructured

interviews do not have pre-existing frame at all. What comes to purpose of in-depth interviews, Hague (2006, 79) goes on to add that they reveal the broad and deep-seated thoughts of respondent on certain matter, which according to Smith and Albaum (2012, 81) makes this method require empathy from the researcher as well. Housden (2010, 145) adds that strengths of this method come to fruition only with adequate professional and emotional skills of researcher since non-verbal communication adds a layer of nuanced information to communication, making this method infeasible for some researchers even with the help of probing as assisting technique.

Focus groups then again are similar to in-depth interviews, but the difference is that while focus groups involve a group of people that is normally 6 to 10 people in size discussing chosen topic together, in-depth interviews include only interviewer and interviewee. Interviewer aims to create certain level of rapport and discussion between participants so that they could exchange ideas and thoughts freely, with interviewer still leading and having control of the conversation on background. Since there are many individuals participating to discussion at the same time, focus groups have a higher risk of getting derailed from topic in hand, making them initially more complex in comparison to in-depth interviews. Other problems could originate from only certain individuals participating to discussion and peer pressure effecting the answers of individuals, thus creating bias to interview itself (Sarstedt & Mooi 2019, 80-81). Smith and Albaum (2012, 75-78) add that focus groups' strengths are at discovering needs, wants, habits and thoughts of participants, which makes it very helpful tool in experimental research. They also go on to highlight the importance of interviewers since they have responsibility to keep the discussion going within the wanted limits, while at the same time striving to observe the discussion without participating in it. This way interviewer can see and understand thoughts of interviewees about discussed subject matters.

Projective techniques refer to techniques which grant respondents to express their internal thoughts and feelings of external objects or subjects (Housden 2010, 147). Nykiel (2007, 45) states that these thoughts and feelings are projected to hypothetical situations. He also clarifies that projective techniques are always indirect in nature, thus the respondents cannot know for sure the true purpose of

study, which helps in minimizing biases in usage of this method. This way researchers can test different kinds of stimuli and see how participants respond to them honestly, which according to Sarstedt and Mooi (2019, 79) is the biggest strength of projective techniques; when participants don't know the purpose of study, less censorship happens from participants themselves. Projective techniques let participants be expressive and free, especially when emotionally delicate topics are being studied because they don't have to consciously tell answers due to projecting them externally, often sub-consciously. Nykiel (2007, 44-45) goes on to list some of these techniques: word association, sentence completion, story completion, cartoon tests, role playing and third-person technique.

3.4.5 Observational primary data collection

Observation as data collection method includes observing some variables of subject activity. It is used mostly when some distinct behavioral variables are assessed, since it cannot observe mental outlooks of subjects as well as communicational methods can (Stevens, et al. 2005, 124-125). Housden (2010, 117-118) goes on to add that observation is always done wordlessly and without having direct communication with subjects. These aspects make observational methods great tool to use when extremely distinct objective data is needed since collected data reflects actions of participants, instead of their words. This reduces biases in data collection phase as well, although observation lacks in measuring more specific, psychographic data. Shukla (2008, 52) adds that clear division between qualitative and quantitative observational data collection methods are hard to separate, since this is still under discussion between researchers.

Although multiple techniques of observational method exist, observation types can be generally divided by role of researcher, observational mode and observational control type. Role of researcher refers to participant observation or non-participant observation. In participant observation, researcher is part of the studied setting, both as a researcher and participant. In non-participant observation research is not part of the studied setting in any way. Obviously in participant role researcher can study behaviour more distinctly, although biases might reduce objectivity this way.

Observational modes refer to direct observation and non-direct observation. In direct observation, researcher is observing the phenomena personally as it's happening in present moment, while indirect observation observes the setting through mechanical device. Direct observation allows for more delicate observation to happen, while at the same time risking objectivity through biases again. Observational control types then again refer to either observation being controlled or uncontrolled. In controlled observation researcher has control of all variables of the study, while in uncontrolled observation researcher doesn't have control. Controlled observations are observed often in environments built by researcher, while uncontrolled environment are often in real life surroundings and situations (Krishnaswami & Satyaprasad 2010, 94-95). As seen, any type of involvement of researcher in observations might lead to more nuanced data, while at the same time risking the objectivity of it due to biases that are born from researcher involvement. Deciding how much researcher is involved in the process must be planned before doing observation in practice so that plausible outcomes of researcher involvement can be taken into account, since observation is costly for resources in comparison to communicational methods.

3.4.6 Experimental primary data collection

According to Sarstedt and Mooi (2019, 81-83) experimentation studies one or more variables that are changed with intention to see how they affect other variables, so that causality between variables can be determined. They add that those variables chosen to manipulate are referred to as independent variables, when again variables that the effect is measured on are called dependent variables. When independent variables are manipulated so that the dependent variables respond directly to them, causal relationship can be made. They go on to add that generalization of experimentation largely depends on environment in which it is conducted in; experimentation in controlled setting creates validity only in comparison to similar kind of controlled environments, which makes generalization of results hard to make in external, natural environments in which all variables cannot be controlled. Adams et

al. (2014, 96) go on to add that for this reason experiments are uncommon in business research, since the purpose of marketing research is to generate actionable results that help in decision making as discussed earlier in this thesis. Smith and Albaum (2012, 112-113) state that validity in controlled setting is called internal validity, when again the conclusiveness of the results in across external environments is called external validity.

When it comes to experimentation, they can be done either as laboratory experiment or field experiment. In laboratory experiments the environment is controlled so that effect of any unknown variables are minimized, thus creating higher internal validity for experimentation. In field experiments then again the environment is more natural in regard to studied variables, although it is controlled to some degree as well. Generally speaking laboratory experiments create higher internal validity, although these highly controlled settings might change behaviour of subjects on some level. When it comes to data collection methods used in experimentation, surveys and observation tend to be used the most (Shukla 2008, 47).

3.5 Analyse the data

After data has been collected it is analysed properly, since data itself doesn't offer any insight; only analysis of data leads to interpretation of it. Data analysis methods can be categorized generally into two separate types: quantitative data analysis and qualitative data analysis. Regardless of analysed data type being quantitative or qualitative in nature, Nykiel (2007, 99) states that data analysis process always follows organization, categorization and prioritization of data.

3.5.1 Quantitative data analysis

Process of quantitative data analysis starts with creating a structure which includes saving and dividing the data into different catalogues, so that the data can be found easily for the analysis itself. Then, data is entered into computer program which will actually turn data into a data set. After it has been saved and entered, it is cleaned thoroughly. Data cleaning refers to process of examining the data for any type of

inconsistencies, errors or abnormalities that would endanger the validity and reliability of data (Sarstedt & Mooi 2019, 93-106).

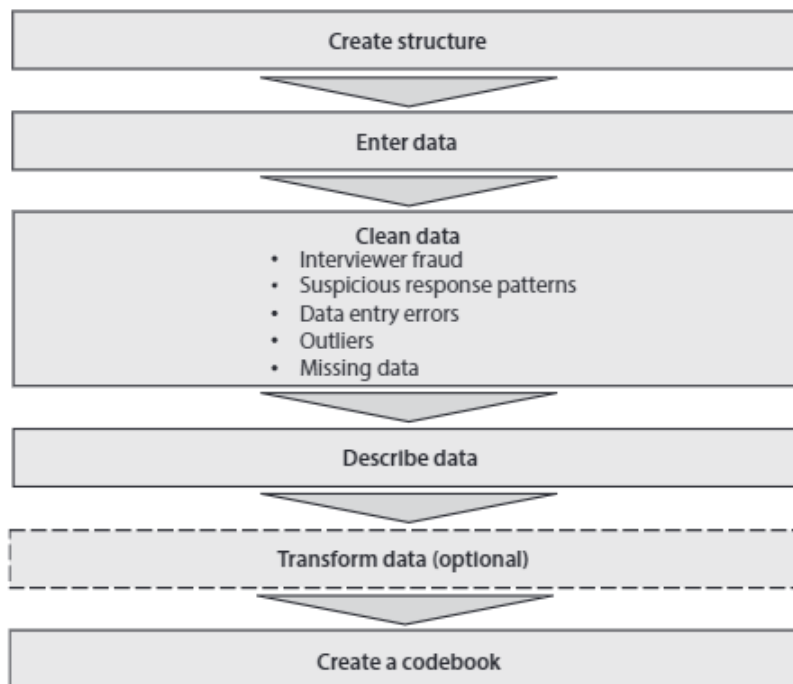


Figure 17. Process of basic quantitative data analysis (Sarstedt & Mooi 2019, 94).

After basic steps for quantitative data analysis have been done, data is described. According to Crump et al (2019) data description is done because data by itself does not make any sense. In most cases descriptive statistics is used to achieve this, although inferential statistics can be used as well. Frost (2021) states that while descriptive statistics describes and compiles certain features of data taken from a sample, inferential statistics then again seeks to generalize the data taken from the sample to the population as whole. Shukla (2008, 99-101) adds important remark: in addition to describing data, descriptive statistics acts as introductory data analysis technique itself that is executed to inspect the normality of dataset. He goes on to add that since advanced analysis techniques which might be used later in analysis process are vulnerable to data errors, inspecting data through descriptive statistics first makes these errors visible, thus exposing location and reason for data errors in precursory stage of analysis. Since descriptive statistics will be used in this thesis instead of inferential statistics, it will be addressed more specifically. Sarstedt and Mooi (2019, 106) state that descriptive statistics can describe data either through graphs and tables or through statistical tools, depending on how the data is being

wanted to present. These descriptive tools also differentiate from each other when it comes to using either univariate or bivariate analysis, although Bhatia (2018) adds that descriptive research is mostly used for univariate analysis. Hossain (2019) goes to clarify that univariate analysis stands for description of a single variable, while bivariate analysis refers to comparing how two variables are related to each other.

Data can be transformed as well if research objectives demand it. Data transformation refers to a process of molding data from its initial form into a form that is needed to conduct data analysis (Zikmund & Babin 2010, 380). For example analysis of categorical data in its original form might be hard to put into descriptive statistics, but transforming this data into discrete form makes it viable to describe statistically.

Last phase is to create a codebook. It includes all the specific information regarding data collection and data itself. The reason for creating codebook is to have direction for coding responses since only way to analyse quantitative data is to give mathematical values to it. In addition to this, codebook exists so that researcher has a document for gathered data and a place to keep meaning of codes placed in data analysis program (ResearchArticles.com, 2018).

3.5.2 Qualitative data analysis

According to Adams et al. (2014, 152) analysing qualitative data can be a challenging task due collection of qualitative data often leading to large quantity of nuanced and rich information. They go on to add that analysis can be done either manually or by using text analysers found in data analysis software, although this depends on quantity of qualitative data as well. The process of qualitative data analysis follows steps of data exploration and classification of it, so that conclusion can be made of it. These conclusions then offer a model for data, which is then tested.

Hague (2006, 159-161) then again proposes that qualitative data analysis process seeks to recognize categories of data, define meaning for them, find frequency of categories and clear up abnormal data instances for clarity. He goes on to add that qualitative data is often written down into a transcript, so that it can be written clean.

Only after the data is in clean form, can it be classified. In addition, he goes on to add that qualitative data often derives from open-ended questions and answers may vary from respondent to respondent, thus coding of these responses might take away from richness of answers, at the same time making it necessary to categorize data into groups for analysis. He goes on to add that usage of software packages that help in data categorization is recommended as well, although responsibility of the researchers is profound in categorization phase since they gathered data, and have deeper understanding of it, due to seeing sub-communication of respondents during collection process.

Nykiel (2007, 99-102) adds slightly different model for analysing qualitative data. According to him process starts with assessing if there were any internal or external variables that could had influenced results, which leads to reviewing data collection process itself for any inconsistencies, which then again leads to examination of any issues regarding control variables of research. Only after these pre-emptive steps that measure reliability and validity of data, can it be interpreted and prioritized in a way that leads to further, suggested action steps. As seen, this model for analysing qualitative data is slightly different from others since it includes review of the process from collection phase to gathered data.

Even though all of these models offer different ways to analysing qualitative data, they all have certain characteristics in common: organising data in a way that helps in assigning meaning for it, so that it can be categorized for interpretation. Even though qualitative data cannot be stastically analysed to the extent of quantitative data, it can offer direction for assessing differences within data in a way that gives sufficiently specific formation of data that can be interpreted accurately enough.

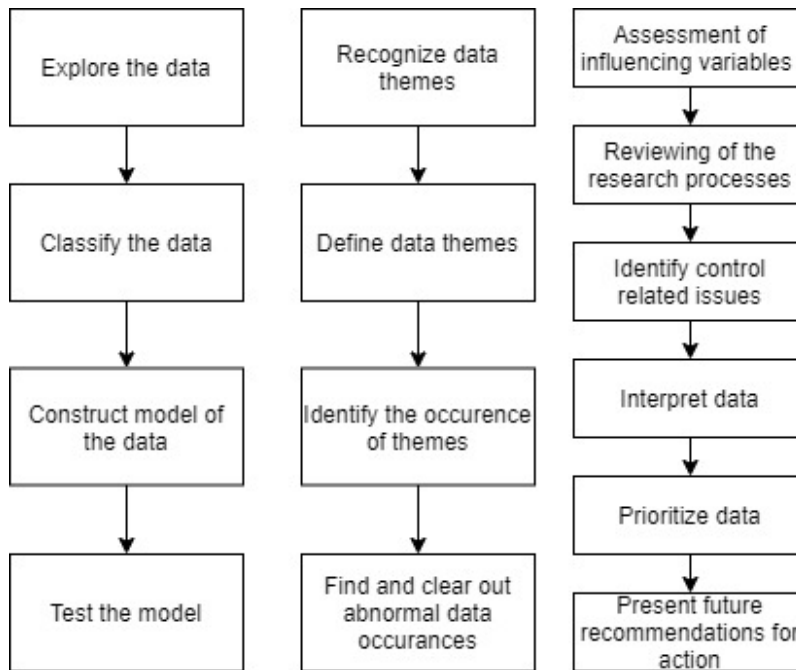


Figure 18. Different types of basic qualitative data analyses (Adams, et al. 2014, 152; Hague 2006, 159-161; Nykiel 2007, 99-102).

3.5.3 Data analysis techniques

After basic data analysis, it can be analysed more deeply if needed. When it comes to choosing appropriate techniques for data analysis, multiple different factors need to be taken into account beforehand. First of all, according to Greener (2008, 56) different data types have impact on chosen technique since data types have different qualities which are explained and analysed differently. Qualitative and quantitative data in addition to their sub-categories, have their own techniques that can be used. Secondly, amount of analysed variables have impact on chosen technique as well. Often descriptive statistics alone is enough for univariate analysis according to Bhatia (2018), while Glen (2015) states that bivariate analysis has its own data analysis techniques. In addition to this, if more than 2 variables are analysed, multivariate analysis is used which then again include tens of possible techniques (Glen, 2021). Thirdly, chosen technique depends on type of analysis category as well, since each category contains certain applicable techniques. These categories include descriptive, diagnostic, predictive and prescriptive analyses. Descriptive data analysis seeks to explain what happened, while diagnostic analysis looks for why something happened. Predictive analysis then again seeks to anticipate what probably will happen in future, when prescriptive analytics seeks to

find how to take preemptive action in case of future difficulties (Stevens, 2020). As seen, these analysis categories are very different, and need different analysis techniques for their purposes. Fourthly, Mishra et al. (2019) state that objective and aim of the study have major impact on chosen technique as well, since needed information stems from them, making techniques mere tools that produce the needed information.

3.6 Presentation and follow-up

After data has been analysed, it is presented by researchers. According to Adams et al. (2014, 272) presentation of findings is not merely description of actions taken in research, since it needs to be presented with research objective in mind so that everything included in presentation is purposeful. Nykiel (2007, 309-313) also states that presentation for its own sake is futile endeavor, and that it's just as important part of research process as other parts. He goes on to add that presentation adds to overall value of research and vice versa, thus it cannot be overlooked at any cost. According to him, researcher needs to take into account type of audience, research complexity and aimed outcome for the research. With these factors in mind, presentation can be molded into proper form. Housden (2010, 245-255) clarifies that presentation can be done in written or oral form. When it comes to written report, most important factor is that it follows clear and easily understandable format. In oral presentation then again, preparation is a paramount. He goes on to add that when presenting, it is a good idea to use visuals as well, because this makes people understand and remember presentation better.

After presentation, only task left is follow-up. In business field, it often includes helping client to execute findings in practice, which refers to clarification of any blindspots arising in presentation and helping client to choose following action steps in regards to subject matter. In addition to this, feedback is asked both externally from the client and internally from research conducting organisation, so that future betterment can be made in general (Sarstedt & Mooi 2019, 373-374).

4 RESEARCH METHODS

4.1 Research design

As stated in Introduction-chapter, commissioner of this thesis has done already exploratory research in which he found problem categories from university level students regarding studying and learning. The objective of this thesis is to find frequency of these categories to define customer needs more specifically. As such, this research is descriptive in design, since it strives to analyse events and repetitiveness of variables, as stated in chapter 3.3.2. What comes to other characteristics, this research is quantitative and primary in nature. These characteristics are explained in chapter 3.4.3.

4.2 Sample

Population of interest is all university level students living in Finland. Since this is quite large population, sample will be taken from it. Sampling frame will not be created for the purposes of this thesis, since researcher sees it as unnecessary tool for research objectives. Researcher will use to his benefit public online student groups found in Facebook and internal communication channels of applied university of Seinäjoki. Thus, this research`s sampling method is non-probability sampling, more specifically technique of convenience sampling is used, which was discussed in chapter 3.3.4. Samples were be gathered between 10.5 - 14.5.2021.

4.3 Data collection method

This research will collect data through communicative primary data collection method of online survey. Since online survey is quantitative and descriptive in nature, it goes well with the objective and research question of this research study. In addition, online survey is very efficient on resources, which helps researcher to conduct this study in effective way. Surveys are discussed in chapter 3.4.4.

4.4 Technical aspects of questionnaire

According to Zikmund and Babin (2010, 273) close-ended questions are questions that contain limited possibility for answer, since responses are chosen from predetermined options which are closest to views of respondent. They go on to add that close-ended questions can be used when researcher is conscious of possible answers already. Since researcher of this thesis knew problem categories found by commissioner, close-ended questions were chosen to be used.

Answers to close-ended questions were chosen to be measured on a Likert scale. According to Shukla (2008, 77) Likert scale measures opinions and views of respondents on certain statements chosen by researcher, often on a 5-point scale. Since the aim of thesis is to find frequency of problems found in target market, usage of frequency-based Likert scale was chosen to be used in this questionnaire. Questionnaire collects both ordinal and nominal data, which are explained in chapter 3.4.1. Questions collecting basic background information about survey participants gather nominal data, while questions seeking the frequency of occurrences gather ordinal data.

4.5 Questionnaire design

Thesis commissioner found 4 main categories previously in his own qualitative research. Since objective of this thesis is to find frequential occurrence of these categories in target market, researcher bases his own questionnaire on them as well. Categories found by commissioner are time related problems, learning related problems, motivation related problems and emotion related problems. Researcher of this thesis came up with multiple statements in relation to each category, which were then used to develop questionnaire. These statements can be imagined as sub-

categories to larger categories found by commissioner, through which frequential occurrence of each sub-category can be studied in relation to actual larger category.

4.6 Data analysis

Descriptive statistics were used for analysing and presenting data, which is discussed in chapter 3.5.1. Specifically, stacked bar charts were used to analyse and present answers of different answer groups. Different answer groups are analysed, because researcher wants to see if data groups of age, gender and level of study have different answers, which might provide more specific information about them. Researcher didn't use any specific research analysis techniques since they were not needed for the aim and research question at hand.

4.7 Reliability and validity of the study

4.7.1 Reliability

According to Adams et al. (2014, 245-246), reliability assesses how dependable and consistent results of study are. Greener (2008, 37) adds that reliability refers to repeatability of research. Researcher believes that study conducted was reliable, since questionnaire was carefully worded and designed. Reliability of this study could be weakened by false interpretation of data, since researcher is quite inexperienced with analysing data, he could have conducted research error in theory. Regardless, researcher believes in reliability of this study. One factor that promotes it, is use of multiple questions in all four question categories of questionnaire. This way somewhat similar questions were able to be compared to each other to see if answers were similar.

4.7.2 Validity

According to Zikmund and Babin (2010, 270) validity explains how accurate results of a study are or the magnitude to which they represent population correctly. Most important factor adding to validity of this study is clear formation of questions in questionnaire, since these questions measured wanted problem categories clearly and accurately. All questions of questionnaire were mandatory as well and it was done anonymously, thus non-respondent biases couldn't happen, adding to validity of the study. Researcher adds that since sample was gathered with non-probable method of convenience sampling, certain types of participants could have participated more often than others, although this is speculation. In addition, sample was gathered mostly from respondents studying in Seinäjoki university of applied sciences, thus answers were slightly biased towards bachelor level respondents, although researcher gained multiple responses from open Facebook student groups as well. This also might have effect on validity of results in comparison to overall population, since certain types of students could be overrepresented in public Facebook student groups, although this is speculation. Regardless of these factors, researcher states that validity of results is good enough for objective of study and research questions of it, although results cannot be generalized over all students residing in Finland due to uneven representation of respondent groups and small sample size.

5 RESULTS AND ANALYSIS

5.1 Participant information

Researcher aimed for 100 respondents, but questionnaire was answered by 66 respondents in the end. Researcher will go through basic participant information, which will help in analysing data. Reliability and validity of data is considered partly through following information as well.

5.1.1 Gender

As seen in grouped bar chart below, 45 % of respondents were male and 55 % were females. Both genders were quite balanced in quantity in bachelor level students and master level students. Majority of men were studying in university, and age group of 25 to 29-year-olds included slightly more men than women. Women then again were majority in all other data groups, especially in respondents over 30 and respondents between ages of 17 to 20. Women also resided more in universities of applied science, than universities.

1. Gender

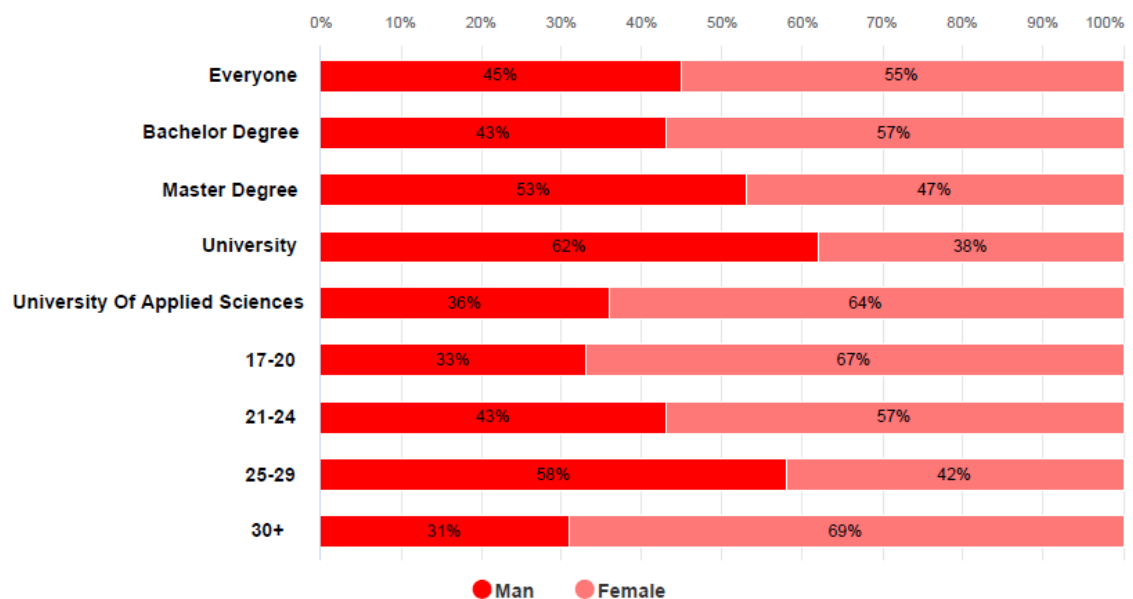


Figure 19. Question 1.

5.1.2 Age

Distribution of age groups ranged from 24 % to 36 % in age groups of 21-24, 25-29 and above 30. Age group of 17-20 were represented only by 5 % of respondents. This is very low percentage from already small sample size, thus they are not represented outside of participant information statistics as their own answer group, because accurate data analysis of this group cannot be done from this small sample size.

2. Age

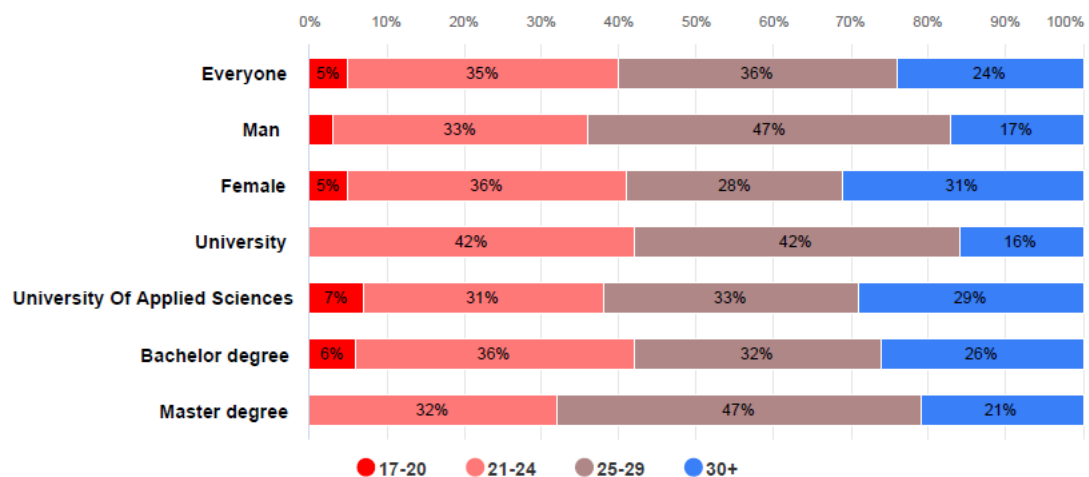


Figure 20. Question 2.

5.1.3 Type of study place

64 % of respondents studied in university of applied science, while 36 % of them studied in university. Half of men studied in both places, while majority of female respondents studied in university of applied sciences. Age groups were divided quite evenly between study places, although majority from over 30-year-old respondents studied in university of applied sciences. Variable of study place, including options for university and applied university, was disregarded as comparison group because researcher needed specific data on students and their problems regarding learning and studying; level of study describes study complexity and problems of students better than type of study place alone. In addition, universities and applied universities both have bachelor and master level students, making analysis of respondents

in different kind of universities redundant for the aim and research question of this thesis. On top of this, 84 % of respondents studying on master level studied in university, while 83 % of respondents studying on bachelor level studied in applied universities. This created similarities in answers between variables of study place and level of study, making study place even more redundant as comparison group.

3. Type of Study Place

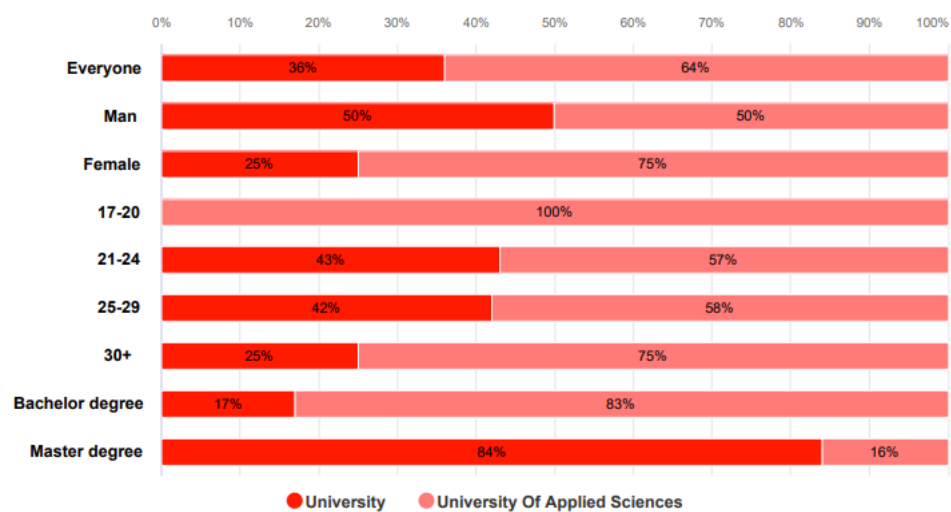


Figure 21. Question 3.

5.1.4 Level of current study

71 % of respondents were studying bachelor's degree, while 29 % were studying master's degree. Comparison groups were generally distributed in a similar way, with around two thirds of respondents studying bachelor level degree, although place of study had impact on current level of study. 33 % from respondents in university were studying on level of bachelor, while 66 % of them were studying master level degree. In universities of applied science then again, almost everyone studied on level of bachelor.

4. Level of Current Study

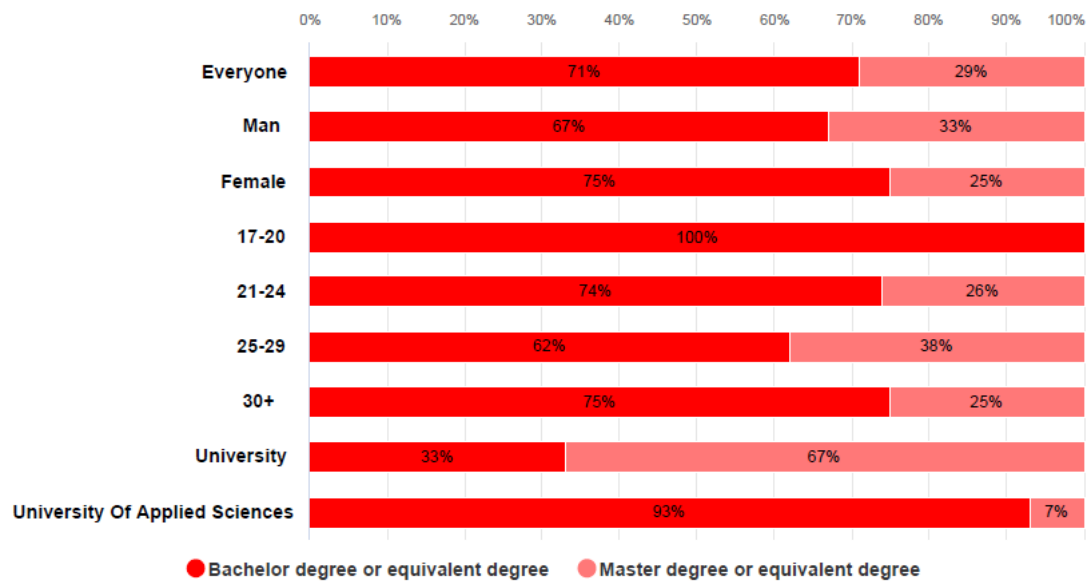


Figure 22. Question 4.

5.2 Time related statements

Most frequently experienced time related problem was effect of work in relation to studies. Especially women, master level students and over 30-year-old respondents experienced this category more problematic than others. Study workload was second most frequently experienced problem in relation to time and studies. It was generally experienced frequently in around third of respondents. Lack of time experienced due to study complexity was found to be somewhat often experienced, while free time activities` effect on time were experienced least frequently.

5.2.1 I think that lack of time to study due to study workload affects my studies negatively

As seen in figure 5, almost third of respondents thought often or very often, that not having enough time due to study workload was a problem. Women found this statement to happen twice as frequently in answer category of "Very Often" in comparison to men, while generally fifth of men and women found this statement to be true often. In addition, bachelor level respondents found this statement to happen slightly

more frequently in comparison to master level respondents, while over 30-year-old respondents experienced this more frequently than other age groups.

5. I think that lack of time to study due to study workload affects my studies negatively

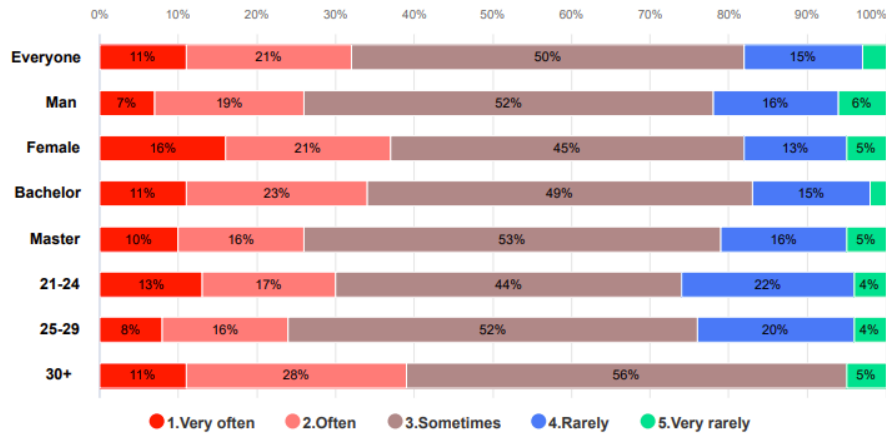


Figure 23. Question 5.

5.2.2 I think that lack of time to study due to study complexity affects my studies negatively

Lack of time to study due to study complexity was somewhat frequently experienced as well. Around 20 % of respondents experienced this statement to be true often or very often from all the groups, although over 30-year-olds didn't find this very problematic. Half of respondents experienced this sometimes, although study complexity's effect on lack of time was less common in master level students.

6. I think that lack of time to study due to study complexity affects my studies negatively

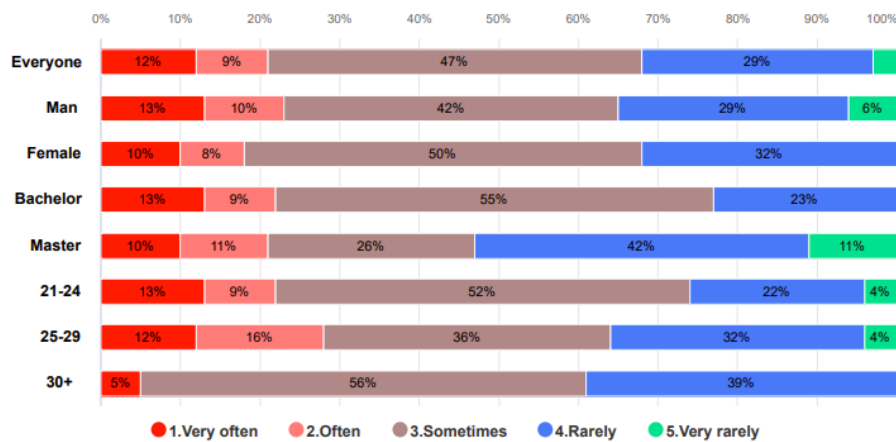


Figure 24. Question 6.

5.2.3 I think that lack of time to study due to working outside studies affects my studies negatively

Working outside studies was most frequent problem from time related problems. Generally, around 40 % of respondents found this to be problematic very often or often. Higher level of study and age had direct impact on how often this statement was experienced negatively. Over 30-year-old respondents found this statement to be true very often or often, over 60 % of the time. In addition to this, females experienced this statement over twice as often in “Very often”-category in comparison to men.

7. I think that lack of time to study due to working outside studies affects my studies negatively

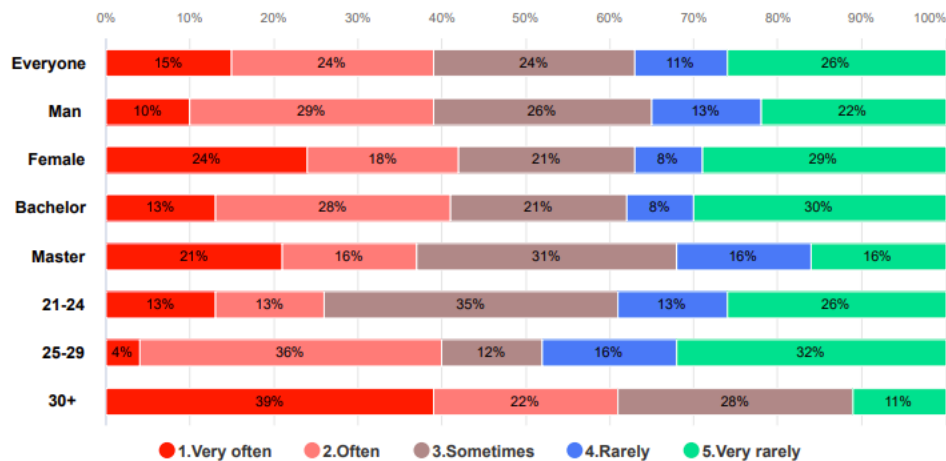


Figure 25. Question 7.

5.2.4 I think that lack of time to study due to free time activities outside my studies affects my studies negatively

Lack of time to study due to free time activities was not found to be frequently experienced. Around half of respondents didn't think this to have huge negative impact on their studies. 10 % of master level respondents found this to have negative impact very often, while bachelor level students experienced it more in “Often”-category. In addition to this, men found this statement to be experienced negatively more than twice as often in comparison to women.

8. I think that lack of time to study due to free time activities outside my studies affects my studies negatively

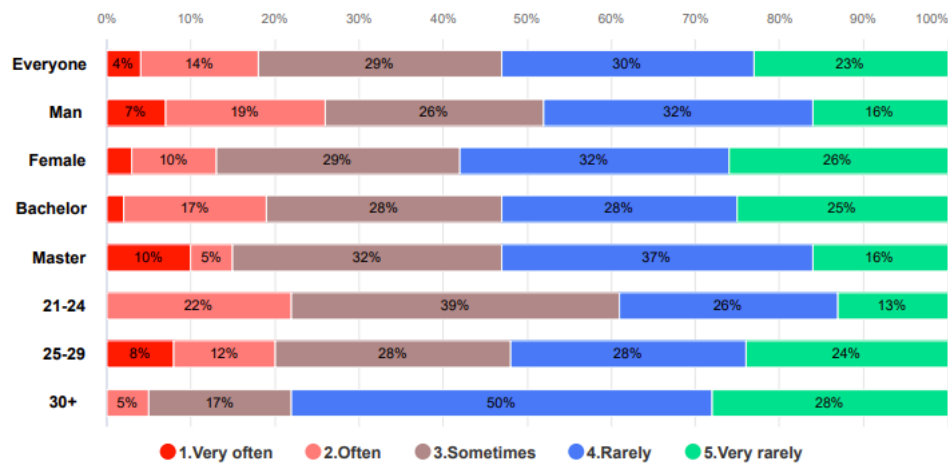


Figure 26. Question 8.

5.3 Motivation related statements

Lack of motivation was the only statement of this category, which was experienced very often or often around third of the time across respondent groups. Other statements were generally rarely or sometimes experienced in all groups. Only group that truly emerged in frequency of occurrence in rest of the statements were men, which depending on statement experienced them very often or often at least 10 % of the times, although bachelor level respondents and younger respondents had more frequency in relation to their counterparts as well.

5.3.1 My studies get affected negatively because I do not have motivation for studying

Almost 40 % of respondents found this statement to have negative effect very often or often. Higher study level and age had negative effect on how frequently this statement was experienced. Over fifth of bachelor level students found this statement to be true very often and almost fifth of them experienced it often, while not even one respondent from master level students experienced this very often, although over third of them experienced it often. Over 30-year-old respondents didn't experience this statement to be true frequently when compared to other groups. It is important

to notice that 51 % of men found this statement to be true very often or often, in comparison to only 26% of women.

9. My studies get affected negatively because I do not have motivation for studying

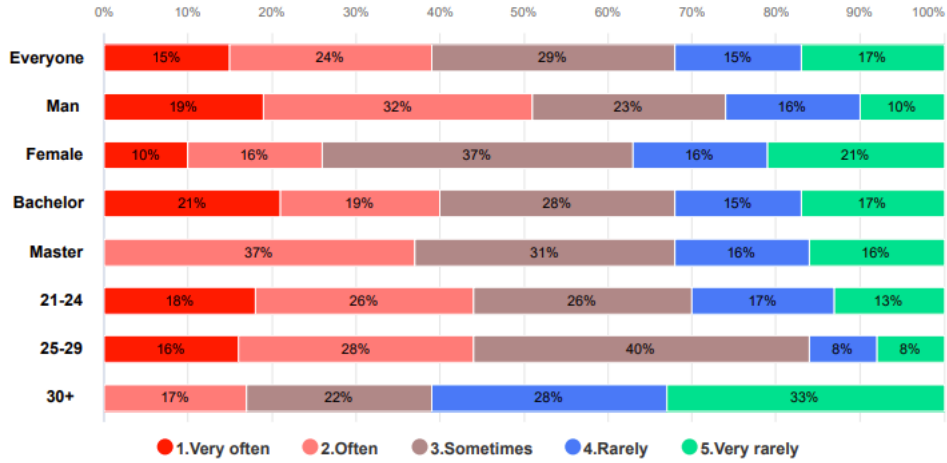


Figure 27. Question 9.

5.3.2 My studies get affected negatively because I am not interested in subject of my studies

Negative effects from lack of interest were experienced rarely in all groups. 48 % from age group of 25 to 29-year-olds experienced this sometimes, which was higher than other age groups. Each group had some respondents who experienced this statement very often or often, but none of them represented more than 10 % of their own group.

10. My studies get affected negatively because I am not interested in subject of my studies

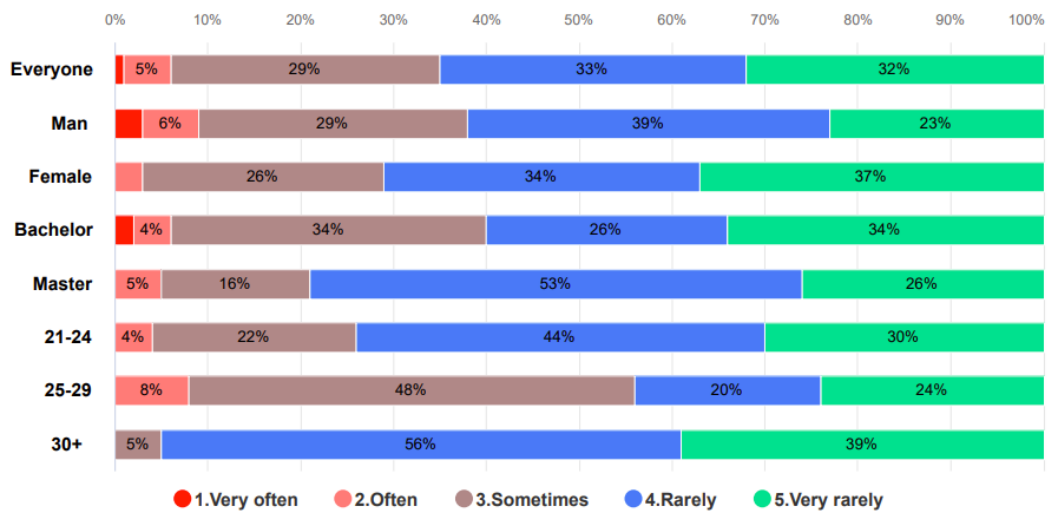


Figure 28. Question 10.

5.3.3 My studies get affected negatively because I do not know why I should learn the things I am learning

Generally, this statement was rarely experienced. Only group that truly stands out in frequency of experience are men. Almost quarter of men experienced this statement very often or often, which is remarkable difference to both average answers of groups and group of women. Bachelor level students and age group of 21 to 24-year-olds had also more frequency to equivalent groups. Otherwise, frequency of experience went down with higher age and level of study.

11. My studies get affected negatively because I do not know why I should learn the things I am learning

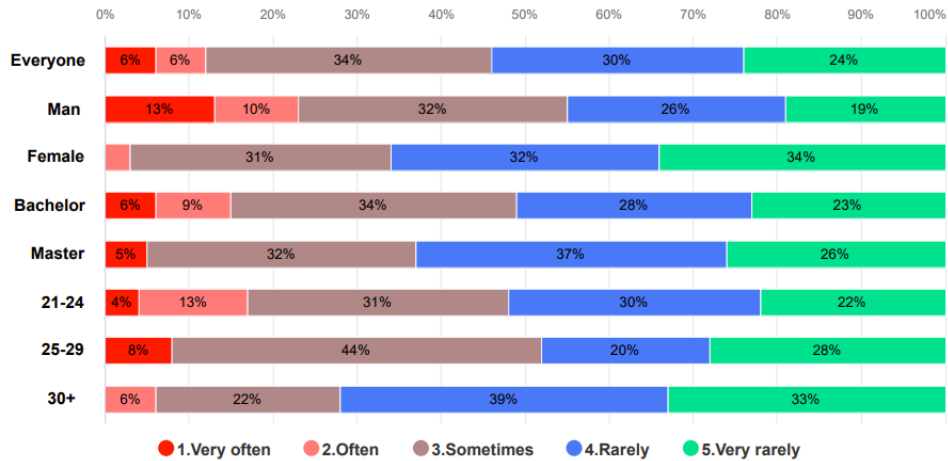


Figure 29. Question 11.

5.3.4 My studies get affected negatively because I do not know why I should study in general

This statement was most rarely experienced from category of motivation, although generally every tenth respondent experienced it very often or often. Men experienced this to be true much more frequently when compared to women. Bachelor and master level students experienced this quite rarely, although bachelor level students faced this more frequently altogether. Frequency of occurrence went down in each consecutive age group, with over 30-year-olds experiencing this either rarely or very rarely altogether.

12. My studies get affected negatively because I do not know why I should study in general

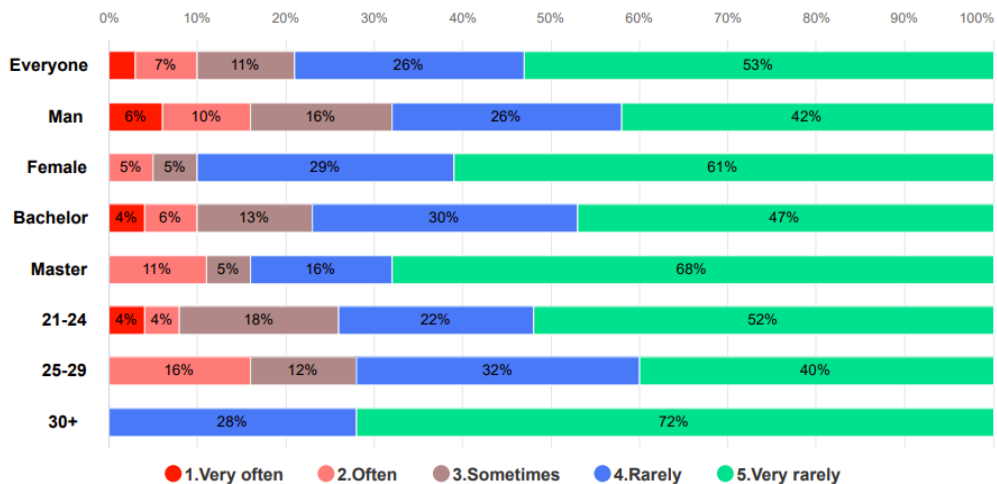


Figure 30. Question 12.

5.4 Learning related problem statements

Frequency of occurrence in learning related problem statements were very frequent in general, although some volatility between respondent groups occurred. Most frequently experienced problem was getting distracted by external factors, in which 47 % of respondents experienced it negatively very often or often. Another frequently experienced problem statement was studying from home, which 44 % of respondents experienced negatively very often or often. 36 % of respondents thought inability to focus in studies to have negative effect very often or often. Lack of organization was found to be a frequent problem in 31 % of the responses, in which it was experienced very often or often. Lack of right study habits were also found to have negative effect very often or often in 27 % of responses. 26 % of respondents thought that lack of discipline was experienced very often or often as a problem. Learning new things and not knowing which material to study were not as frequent problems.

Generally, as the age of the respondents went up, less learning related problems they faced on a frequent basis in comparison to younger counterparts, although some age groups experienced certain statements to effect negatively on frequent basis. In addition, men experienced every learning related statement to be true more frequently in all statements in comparison women. Study level had some impact on the frequency of occurrence in learning related problems, although both master and bachelor level respondent answers were very similar to each other.

5.4.1 My studies get affected negatively because I do not find it easy to focus while studying, even though I try to

36 % of respondents found it hard to focus in their studies in a way that had negative effect very often or often, while 38 % experienced this sometimes. Bachelor level students experienced this slightly more often, while frequency in master level students was lower than in average. Biggest differences within respondent groups occurred in age groups. Over quarter of 21 to 24-year-olds experienced this statement very often, while 18 % of them experienced it often and 26 % sometimes. 8 % of 25 to 29-year-olds experienced it very often, while over third of them experienced it

often and almost half faced it sometimes. Then again from at least 30-year-old respondents only 11 % experienced it often, 56 % sometimes and third of them rarely.

13. My studies get affected negatively because I do not find it easy to focus while studying, even though I try to

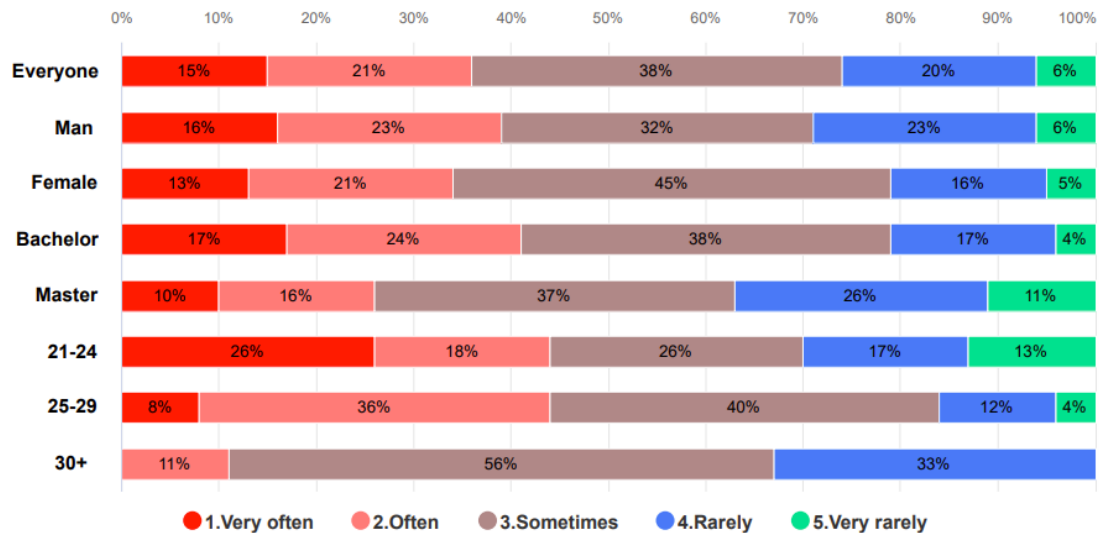


Figure 31. Question 13.

5.4.2 My studies get affected negatively because I get easily distracted by external factors (Phone, TV, social media etc.)

17 % of respondents thought this statement to be true very often, while 30 % experienced it often and almost half sometimes. As seen from the graph below, infrequent answers are represented scarcely in all groups, meaning that all groups except for over 30-year-old students faced this problem often. Men experienced this problem slightly more frequently than women did, especially in answer category of “Very often”. Same phenomenon was seen in bachelor level students in comparison to master level students, although the difference is less obvious. Over half of 25 to 29-year-olds respondents experienced this statement often, while 16 % of them faced it very often. 21 to 24-year-olds faced in generally less frequently, although 26 % of them experienced it very often. Although over fifth of at least 30-year-olds faced it often, overall experienced frequency of occurrence was low, especially when compared to other age groups.

14. My studies get affected negatively because I get easily distracted by external factors (Phone, TV, social media etc)

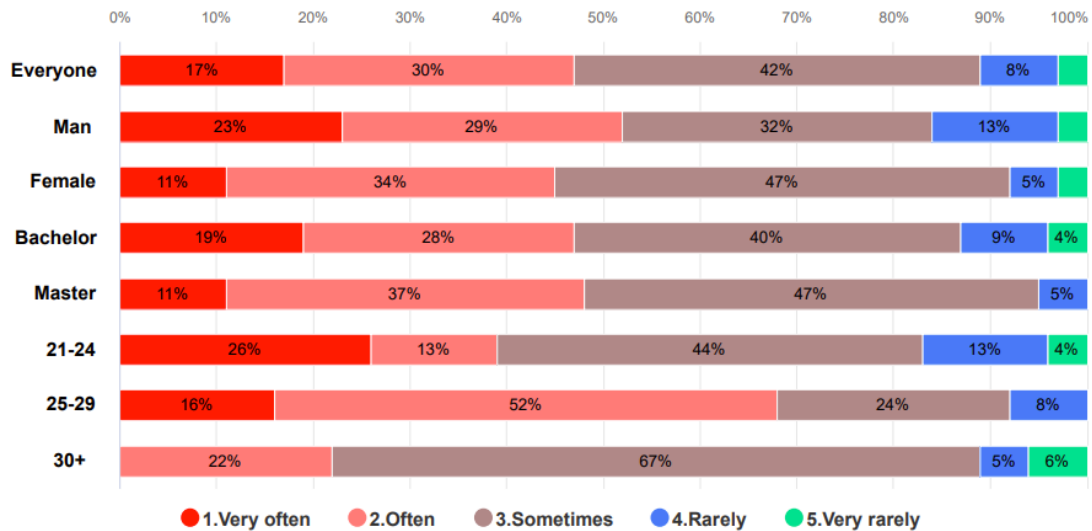


Figure 32. Question 14.

5.4.3 My studies get affected negatively because I need to study from home

26 % of respondents experienced this statement very often, while 18 % often and 30 % sometimes. As such, almost half of respondents faced this on frequent basis. Men and women experienced this similarly in answer category of “Very often”. In addition, almost third of men thought this statement to be true often, while only 5 % of women experienced it often, which is remarkable difference. Master level students faced this statement slightly more frequently in comparison to bachelor level students. It is also important to notice that while younger age groups experienced this statement around half of the time, only 11 % of over 30-year-old respondents faced is on a frequent basis.

15. My studies get affected negatively because I need to study from home

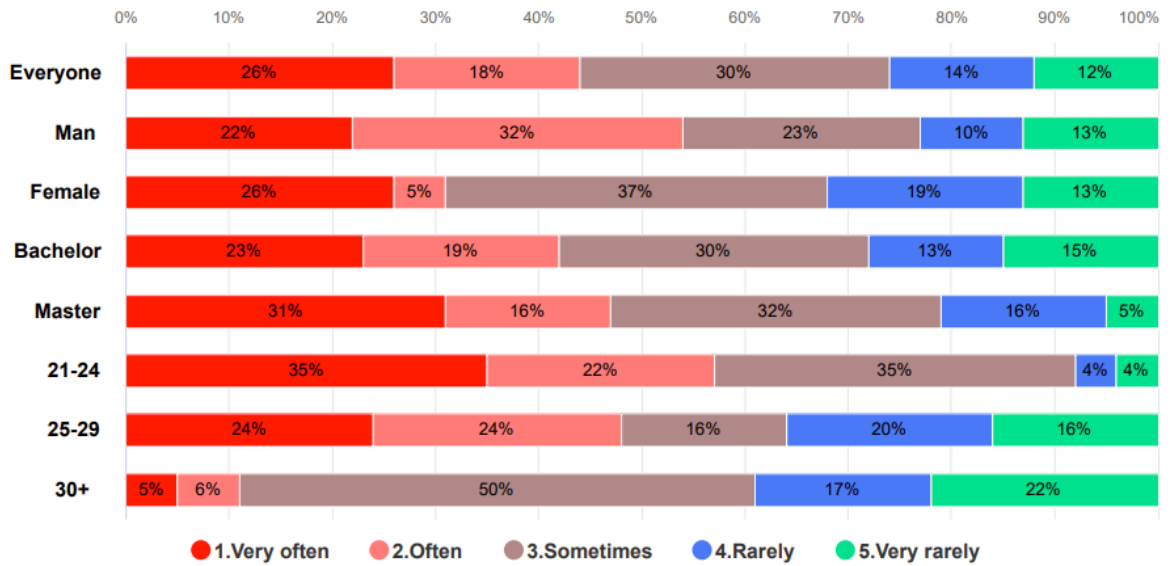


Figure 33. Question 15.

5.4.4 My studies get affected negatively because I do not find it easy to get started with studying

29 % of respondents faced this statement very often, while 23 % of them experienced it often and 32 % sometimes. Men experienced it slightly more often in comparison to women, as did master level students in comparison to bachelor level students. Over half of the younger age groups faced it frequently, while over 30-year-olds faced this statement rarely in comparison to other age groups, although over fifth of them faced it on frequent basis.

16. My studies get affected negatively because I do not find it easy to get started with studying

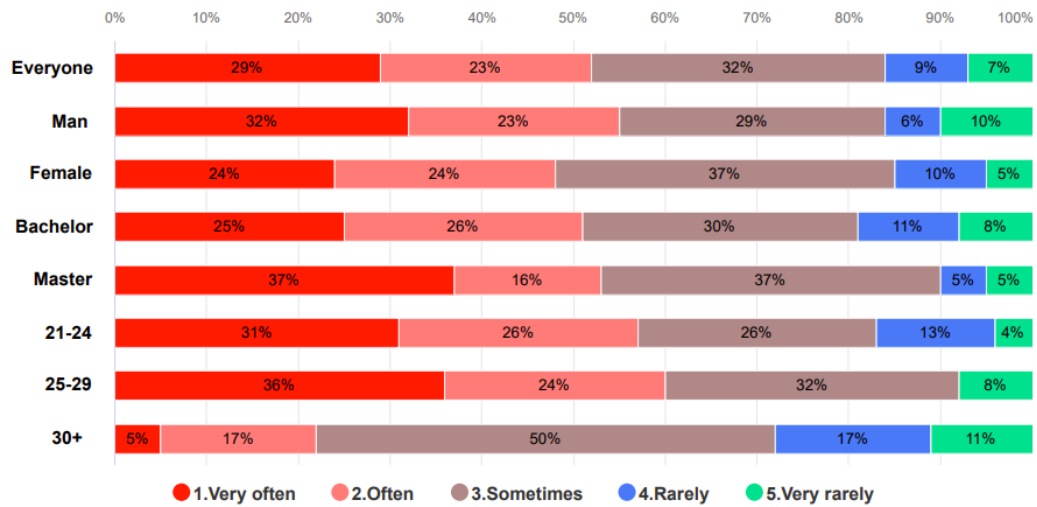


Figure 34. Question 16.

5.4.5 My studies get affected negatively because I do not find learning new things easy

71 % of respondents faced this statement very rarely or rarely. Answers between respondent groups were quite similar to each other, although bachelor level students faced it more often than master level students, since 17 % of bachelor level students faced it very often or often, while master level students faced it often only 5 % of the time. Younger age groups also thought to face this problem statement more frequently in comparison to over 30-year-olds, since around 15 % of younger groups found this a problem on frequent basis in comparison to only 5 % of over 30-year-olds.

17. My studies get affected negatively because I do not find learning new things easy

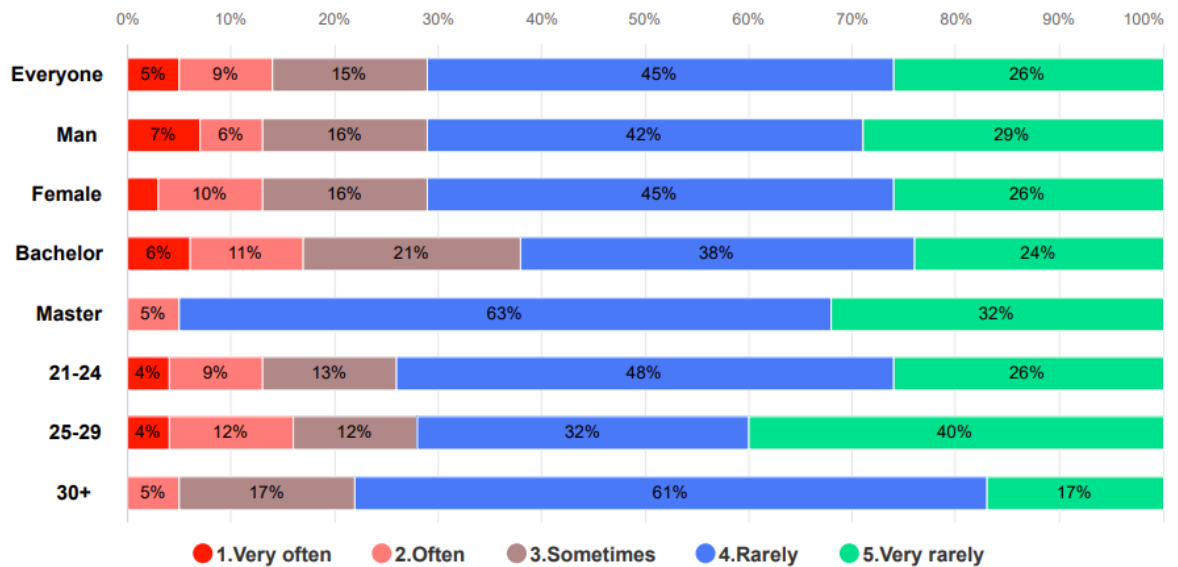


Figure 35. Question 17.

5.4.6 My studies get affected negatively because I have not found the best studying habits for me

Over quarter of respondents faced this statement very often or often, while 26 % of them experienced it sometimes. Men experienced it more often than women, since 36 % of them faced it very often or often, in comparison to 21 % of women facing it very often or often. Bachelor level students also faced it more frequently in answer category of “Often”, since 21 % often thought this in comparison to 5 % of master level respondents, although at the same time over third of master level students faced it sometimes in comparison to 21 % of bachelor level students. 36 % of 25 to 29-year-olds faced it very often or often, while 21 to 24-year-olds faced it slightly less frequently. Over 30-year-old respondents never faced it very often, although 16 % of the, faced it often and 28 % sometimes.

18. My studies get affected negatively because I have not found the best studying habits for me

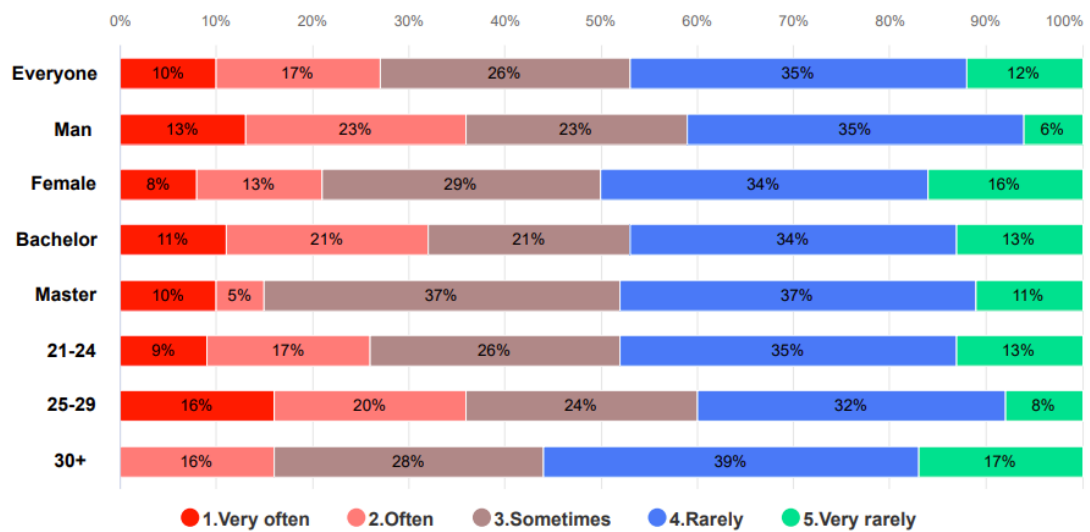


Figure 36. Question 18.

5.4.7 My studies get affected negatively because I want to be consistent and disciplined in my studies, but I find it hard to do so

12 % of respondents thought lack of self-discipline to affect their studies negatively very often, while 14 % faced it often, and 51% sometimes. Men faced it twice as frequently in answer category of “Very often” in comparison to women. Older age groups then again experienced this less frequently. 22 % of 21 to 24-year-olds faced this very often in comparison to 8 % of 25 to 29-year-olds, while only 4 % of younger group experienced this often in comparison to 24 % of latter age group. From over 30-year-olds only 11 % experienced this often, 50 % sometimes and 39 % rarely.

19. My studies get affected negatively because I want to be consistent and disciplined in my studies, but I find it hard to do so

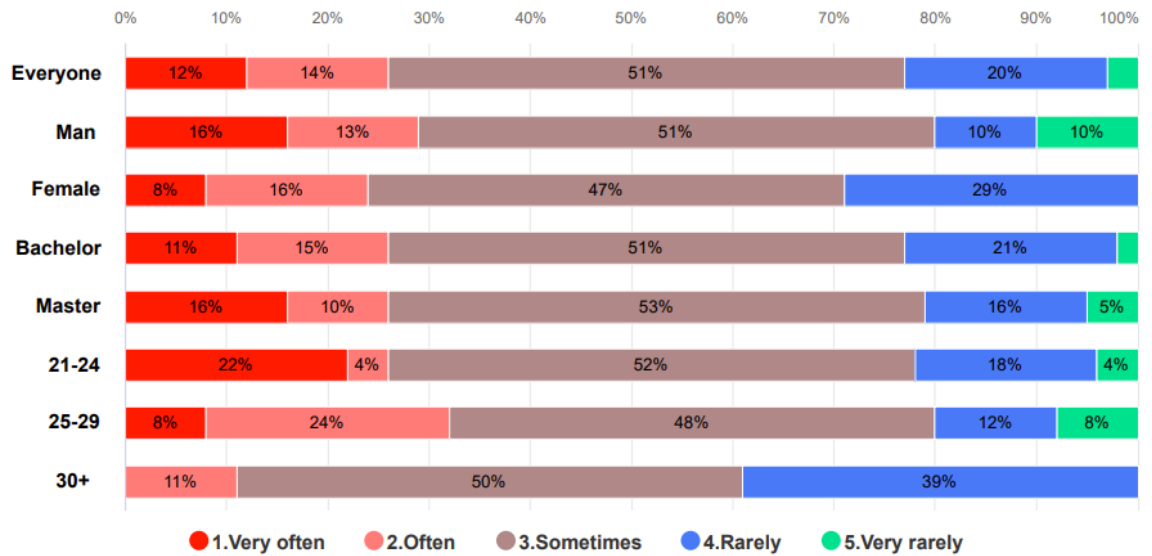


Figure 37. Question 19

5.4.8 My studies get affected negatively because I don't know how to organize my studying

This statement was experienced frequently in around third of responses. Biggest difference is between men and women: while 16 % of men faced this very often, only 5 % of women experienced this very often. Also, 26 % of men thought this statement to be true often in comparison to only 16 % of women thinking same. Otherwise answer groups were quite close to each other, although there were no answers given by 30-year-olds respondents in answer category of "Very often".

20. My studies get affected negatively because I don't know how to organize my studying

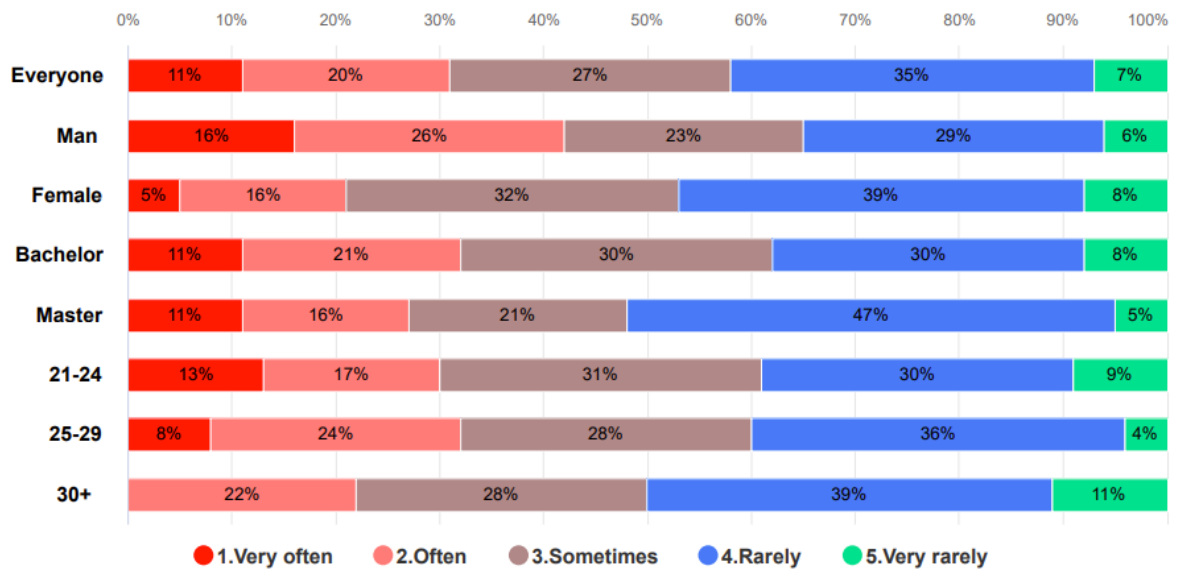


Figure 38. Question 20.

5.4.9 My studies get affected negatively because I do not know which study material I should study

As seen in stacked bar chart below, most of respondents found this statement to occur on infrequent basis, since over half of respondents answered either very rarely or rarely. As seen, men experience this statement to be true more often than women, because 10 % of men faced this problem very often and 6% of men experienced it often, while almost half of them faced it sometimes. Then again, only 10 % of women faced it often and 24% of women experienced it sometimes.

21. My studies get affected negatively because I do not know which study material I should study

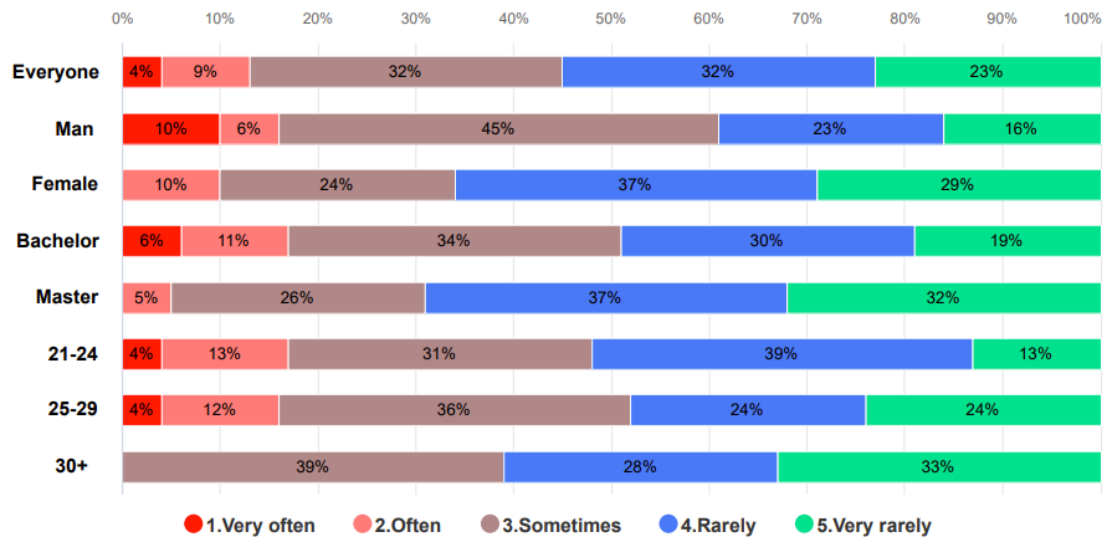


Figure 39. Question 21.

5.5 Emotion related statements

Study related stress and anxiety were the biggest problem faced by respondents from emotion related statements with almost half answering either “Very often” or “Often”, and almost third answering “Sometimes”. There wasn’t much fluctuation between answer groups, although bachelor level respondents felt more negative effects in not knowing how to deal with stress and anxiety. In addition, respondents over the age of 30 faced emotion related statements less frequently in comparison to other age groups.

5.5.1 Study related stress and anxiety affect my studies negatively

Study related stress and anxiety were thought to have negative effect on studies frequently throughout respondents with 45% of all respondents answering very often or often, while almost third answered sometimes. In addition, 26 % to 29 % of all groups experienced this statement often. Master level students experienced slightly more frequently when compared to bachelor level students. Frequency in age groups was close to average results, although over 30-year-old respondents had least number of answers in “Very often”-category from all groups in general, although at the same time they had most answers in “Sometimes”-category. Men also

experienced this category less frequently in comparison to women, since they experienced this statement very often over twice as much more in comparison to men.

22. Study related stress and anxiety affect my studies negatively

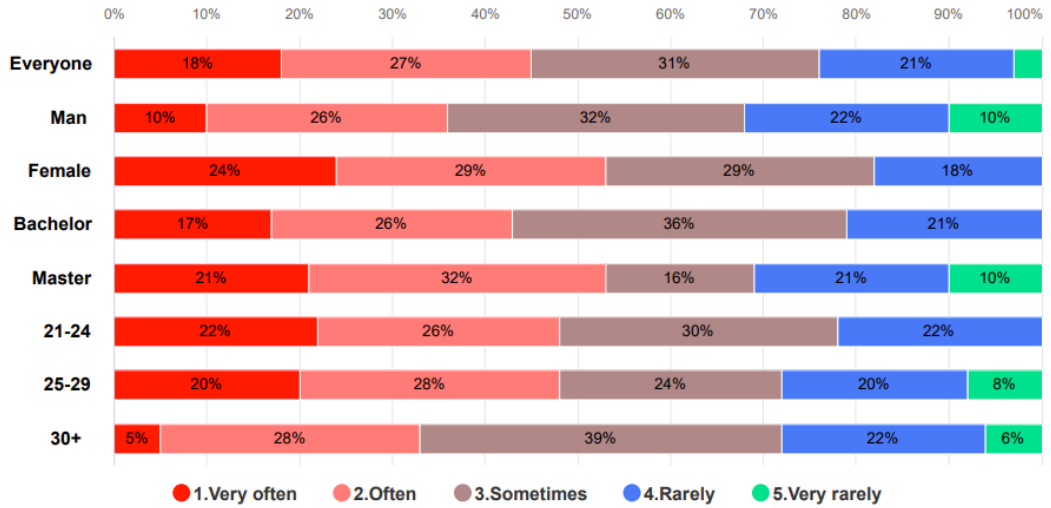


Figure 40. Question 22.

5.5.2 Emotional problems in my life that are related to factors outside of my studies, affect my studies negatively

Around 25 % of respondents experienced this statement very often or often, with 41 % experiencing it sometimes. Answers were quite similar throughout respondent groups, although over 30-year-old respondents didn't find this to be a very frequent occurrence at all. 21 to 24-year-old respondents experienced this statement less frequently when compared to age group of 25 to 29-year-olds, although the younger group had biggest quantity of answers from "Sometimes"-category.

23. Emotional problems in my life that are related to factors outside of my studies, affect my studies negatively

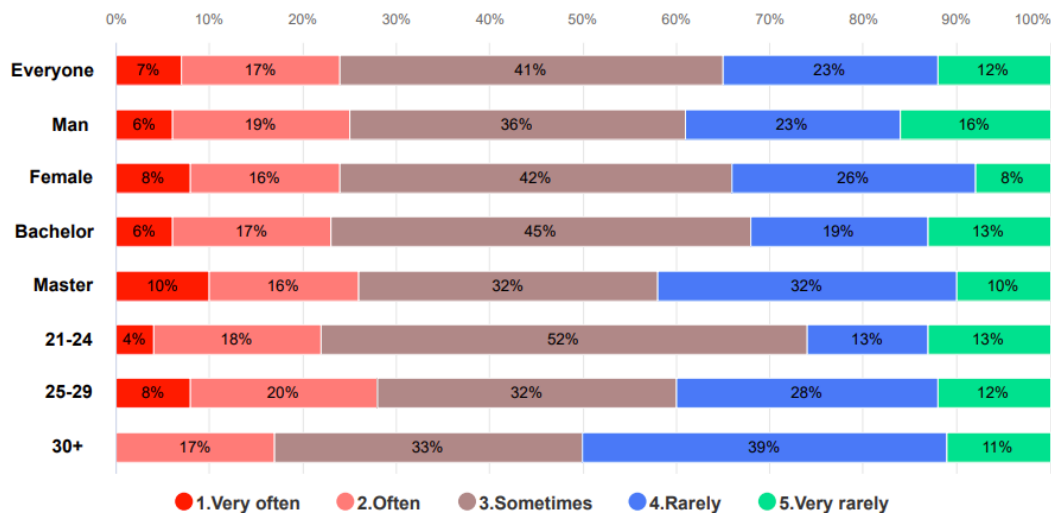


Figure 41. Question 23.

5.5.3 My studies get affected negatively because of lack of emotional support (Lack of peer group support, lack of family support etc)

Around quarter of respondents answered “Very often” or “Often” to this statement. Answers throughout groups were very similar to each other, although frequency seemed to go down with older age groups. In addition, men thought this statement to be true twice as frequently in “Very often”-category in comparison to women, although women had slightly more answers in “Often”-category and half as more in “Sometimes”-category.

24. My studies get affected negatively because of lack of emotional support (Lack of peer group support, lack of family support etc)

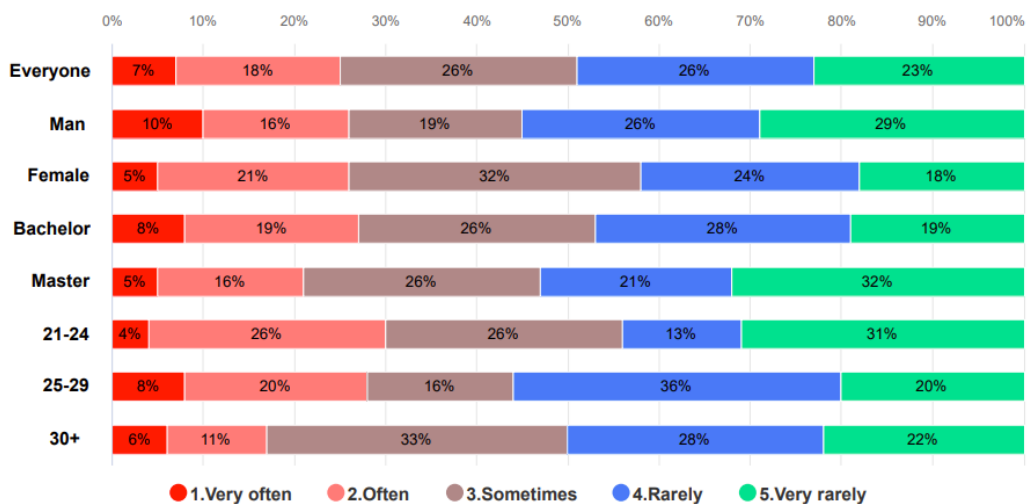


Figure 42. Question 24.

5.5.4 My studies get affected negatively because I do not know how to deal with stress and anxiety

Generally, every tenth respondent experienced this statement very often, while every fifth respondent experienced it often and almost third of respondents sometimes. Bachelor level students experienced it twice as frequently in answer categories of “Very often” and “Often”, although most frequent answer in master level respondents was “Sometimes” with 47 % of answers. 25 to 29-year-olds experienced this statement most often from age groups while having 3 times more answers in category of “Very often”, when compared to age group of 21 to 24-year-olds. Over 30-year-olds experienced this statement very rarely, since there were no answers from this age group in frequent answer categories.

25. My studies get affected negatively because I do not know how to deal with stress and anxiety

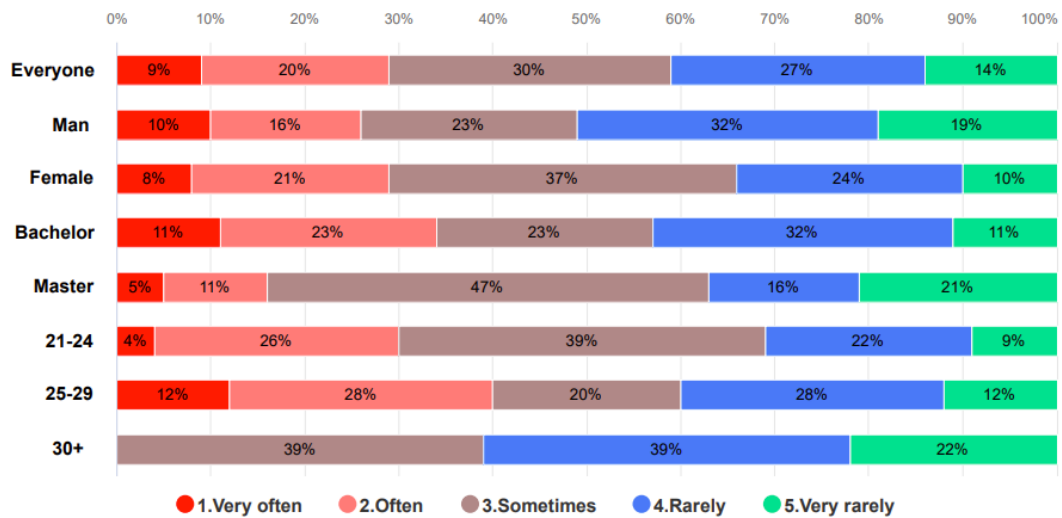


Figure 43. Question 25.

6 CONCLUSIONS

Aim of this research was to investigate frequency of problem categories experienced by university level students residing in Finland. Problem categories previously found by commissioner of this theses were time related problems, motivation related problems, learning related problems and emotional related problems. Researcher found multiple problem statements from each category, which were experienced more often than others in general. Variance between answers also occurred between different comparison groups, which generated deeper insight about target group problems.

Time related problems were generally experienced somewhat often. Commissioner should not base his business entirely around fixing time related problems since it's out of his reach, because largest time related problem was working outside studies. He might help some students with teaching time organization skills to students who experience it frequently, since negative effect of study workload on lack of time occurred either very often or often in around third of respondents.

Category of motivation was generally experienced negatively most often by men, especially when compared to women. Younger students and bachelor level students also had slightly more problems than their counterparts. Although respondents were interested in their studies, they didn't always find purpose in them, especially when talking about of men. Almost half of all respondents stated to have problems with motivation in general with men, younger students and bachelor level students finding it harder than others, although most respondents didn't experience problems with motivation often. Since portion of these groups face motivation related problems frequently, they provide great base for commissioner to develop his business idea around.

Commissioner should focus most on finding solutions and building a business around learning related problems, since they were most often experienced problem category in general with lowest amount of volatility between statement answers. Although generally all comparison groups experienced them quite similarly, over 30-year-old respondents didn't find face them as often when compared to other groups. In addition, bachelor level respondents, men and younger respondents experienced

this category in general more frequently than others. Lack of focus, procrastination and distraction from external factors such as social media and phone were found to be big problems that commissioner could help students with. Commissioner could also come up with solutions to studying from home, since around half of respondents experienced this negatively in their studies. Organisational skills, habits and lack of discipline were also experienced frequently by almost third of respondents, especially in men. As stated before, this is the most fruitful category for commissioner's future business in opinion of researcher.

Category of emotional problems was somewhat frequent with more than quarter of respondents experiencing this category very often or often, although at the same time more than third of respondents experienced this category rarely or very rarely. Study related stress and anxiety were experienced frequently by almost half of respondents, while stress and anxiety from external sources outside studies effected respondents' lives negatively around half as much. Thus, management of study related anxiety and stress could be something that commissioner wants to focus on in his business, since almost third of respondents didn't know how to deal with stress and anxiety. In addition, commissioner could act as emotional support for some students since around quarter of respondents frequently experience lack of it, which might have negative correlation with study success.

In conclusion, it was found that learning related problems should be thought as a priority to focus on for future business idea of commissioner, since this category was experienced to be problematic most frequently. Motivation related problem category would be the next best option to focus on. Emotion related problems could be productive category as well, although it is mostly limited to management of study related stress and anxiety. Although time related problems could be focused on, it is difficult to come up with solutions to this category outside of teaching time management skills.

When it comes to most occurring problems in different target groups, generally younger students and bachelor level students face problems in all categories more often in comparison to their counter parts. In addition, men seem to face learning and motivation related problems more frequently in comparison to women, while women face more emotional and time-related problems. Commissioner can use this

knowledge to his benefit when creating services for different target groups by adjusting to their specific needs.

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APPENDICES

APPENDIX 1. Questionnaire.

APPENDIX 1. Questionnaire

Study Problems of University Level Students Located in Finland**BASIC BACKGROUND INFORMATION****1. Gender ***

- Man
- Female

2. Age *

- 17-20
- 21-24
- 25-29
- 30+

3. Type of Study Place *

- University
- University Of Applied Sciences

4. Level of Current Study *

- Bachelor degree or equivalent degree
- Master degree or equivalent degree
- Licentiate or doctorate degree or equivalent degree

INSTRUCTIONS FOR FOLLOWING PAGES

All of the following questions will be asked in a context to studying and learning in your academic life. Each of the following pages contain claims from four different categories. You will be asked how often following sentences apply to your studies in scale of 1-5, as explained below:

1. Very often
2. Often

- 3.Sometimes
- 4.Rarely
- 5.Very rarely

Please answer as accurately as possible and answer all of the questions.

5. I think that lack of time to study due to study workload affects my studies negatively *

- 1.Very often
- 2.Often
- 3.Sometimes
- 4.Rarely
- 5.Very rarely

6. I think that lack of time to study due to study complexity affects my studies negatively *

- 1.Very often
- 2.Often
- 3.Sometimes
- 4.Rarely
- 5.Very rarely

7. I think that lack of time to study due to working outside studies affects my studies negatively *

- 1.Very often
- 2.Often
- 3.Sometimes
- 4.Rarely
- 5.Very rarely

8. I think that lack of time to study due to free time activities outside my studies affects my studies negatively *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

9. My studies get affected negatively because I do not have motivation for studying *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

10. My studies get affected negatively because I am not interested in subject of my studies *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

11. My studies get affected negatively because I do not know why I should learn the things I am learning *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

12. My studies get affected negatively because I do not know why I should study in general *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

13. My studies get affected negatively because I do not find it easy to focus while studying, even though I try to *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

14. My studies get affected negatively because I get easily distracted by external factors (Phone, TV, social media etc) *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

15. My studies get affected negatively because I need to study from home *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

16. My studies get affected negatively because I do not find it easy to get started with studying *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

17. My studies get affected negatively because I do not find learning new things easy *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

18. My studies get affected negatively because I have not found the best studying habits for me *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

19. My studies get affected negatively because I want to be consistent and disciplined in my studies, but I find it hard to do so *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

20. My studies get affected negatively because I don't know how to organize my studying *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

21. My studies get affected negatively because I do not know which study material I should study *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

22. Study related stress and anxiety affect my studies negatively *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

23. Emotional problems in my life that are related to factors outside of my studies, affect my studies negatively *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

24. My studies get affected negatively because of lack of emotional support (Lack of peer group support, lack of family support etc) *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely

25. My studies get affected negatively because I do not know how to deal with stress and anxiety *

- 1. Very often
- 2. Often
- 3. Sometimes
- 4. Rarely
- 5. Very rarely