

# **Diplomová práce - Projekt**

# Struktura semináře

13:00 – 13:50	Cíle semináře Problém a jeho uchopení
14:00 – 14:50	Metody výzkumu Nejčastější nedostatky Úkoly na příště

# Studijní materiály v IS.MU

- E-learningový kurz k tvorbě prací
- Šablona závěrečné práce – jednotný vizuální styl

# **Reflexe vašich dosavadních zkušeností**

Automaticky se předpokládá, že studenti něco vědí.

A hlavně se automaticky předpokládá, že si jsou vědomi toho, k čemu to vlastně je.

## **Proč píšete závěrečné práce?**

# Jak na úvod...

- O jaké téma se jedná?
- Proč je téma důležité?
- Co chcete Vaší prací sdělit?
- Jaké jsou mezery v dosavadním stavu poznání? Co nevíme?
- Jak k zaplnění mezery přispívá vaše práce?
- Jaké jsou cíle práce?
- Jak je práce členěna?

# Jak na teorii...

Jaká jsou vaše myšlenková východiska?

Co zkoumáte?

Jak to definujete? Definovat pojmy.

Někdy jsou názory různé a je třeba jasně definovat, co se tím myslí.

Lze to jednoduše měřit? Zkoumat? Jak to kdo měřil nebo zkoumal v minulosti?

Účelem je přispět k poznání = budovat teorii nebo ji nějak zpřesnit

# Jak na metodiku...

- Musí být zřetelná návaznost na teoretickou část.
- Vždy popisujte váš výzkum. Nejen metodu samotnou, ale metodu vždy zasazenou do vašeho výzkumu.
- Co jste dělali? Jak jste postupovali?
- Kroky
- Metoda sběru dat (jak jsem získal/a data)
- Metoda analýzy dat (co jsem s daty dělal/a)

# HOW TO CONDUCT INTERVIEWS FOR RESEARCH






## WHAT ARE INTERVIEWS?

Interviewing used as a research method is a technique that collects firsthand experiences from people and helps researchers better understand attitudes, behaviors, opinions, and related information. Interviews provide rich, story-driven accounts of events and feelings.



## WHEN SHOULD I CONDUCT INTERVIEWS FOR RESEARCH?

Use interviewing in research when it is valuable to collect firsthand accounts and life experiences of people. Conduct interviews when you want to understand a person's or people's interactions with a particular event, time period, or product.

STEP ONE	STEP TWO	STEP THREE	STEP FOUR	STEP FIVE
Recruit Participants	Establish Recording Method	Develop Questions	Interview Participants	Conduct Further Research
				
Determine what it is you hope to learn from interviewing and identify the people that will provide you the richest data and information possible. Scope of interviewing can vary widely, so determine an effective number of people to interview in advance. If the questions you are going to ask are sensitive in nature, be sure to let interviewees know this in advance: obtain IRB (institutional review board) approval when interviewing on sensitive topics or when interviewing children.	Interviews can be recorded in a number of ways. Commonly, interviewers will record using a phone app or other audio recording device. You may also wish to videorecord the interview, or simply take copious notes. Regardless of method, be sure that you obtain permission from each interviewee—in written format—before conducting the interview.	Determine whether it is best to conduct a structured interview or an unstructured interview (see explanations at the far right.) Develop questions that will provide rich and useful information. Avoid closed, yes/no questions. Rather, ask questions that will provide opportunity for interviewees to express feelings, attitudes, behaviors, opinions, perceptions, and so forth. Avoid leading questions (questions that make people feel or think a certain way before they have a chance to answer.)	Sit down with interviewees in a safe space where they feel comfortable and relaxed. Start with small talk to get them comfortable with you and talking out loud. If you are doing unstructured interviews, have your topics ready, but be prepared to have an open dialog with interviewee and ask follow-up questions when responses create interesting insights. When conducting structured interviews, be sure to stick to the questions and ask exactly the same questions to all interviewees.	Interviews are typically best when conducted as one piece of a larger research initiative. Much like a focus group, interviews give rich, insightful, albeit anecdotal evidence about how people feel and act. Interviews provide persuasive insights and direct quotes from people who "were there." However, interviews are not typically quantifiable and should be supplemented with questionnaires, observations, and other research.

## UNSTRUCTURED INTERVIEWS

Unstructured interviews are interviews where questions may vary from one interviewee to another. In other words, you are having an open dialogue and you, as the interviewer, will modify the questions based on how people respond. Even though these interviews are less structured, the interviewer should still be prepared with a list of topics and have a clear sense of the type of information they are trying to learn from the interviewee.

Unstructured interviews are best when trying to capture anecdotal evidence to learn generally about different people's experiences. They are good for capturing stories and broad insights. They are not good, however, if you are trying to learn consensus or patterns between people.

## STRUCTURED INTERVIEWS

Structured interviews are interviews where questions remain exactly the same between all interviewees. Questions must be asked in the same way, using the same words. If follow-up questions are asked, they are typically saved until the end, and they are not compared to the responses from other interviewees.

Structured interviews are best when interviewing many people to better understand trends across a spectrum of people. Structured interviews are more likely to be quantified and measured and can be repeated, an important piece of scientific measurement and statistical correlation.

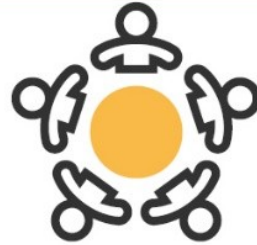
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# HOW TO CONDUCT FOCUS GROUPS








## WHAT IS FOCUS GROUP RESEARCH?

Focus group research is a qualitative research method where a trained moderator gathers opinions and insights from a small group of people to better understand how they think, feel, and behave. The goal: to inform decisions about new products or services.



## WHEN SHOULD I CONDUCT A FOCUS GROUP?

Focus groups are especially valuable when you want to launch or refresh a new brand, product, service, website, or idea. Use focus groups to glean opinions, feelings, and attitudes from your target audience to help you create what people actually want or need.

STEP ONE	STEP TWO	STEP THREE	STEP FOUR	STEP FIVE	STEP SIX	STEP SEVEN
Recruit Participants	Establish Recording Method	Develop a Peer Environment	Moderate Conversation	Analyze Data	Generate Hypothesis	Conduct More Research
						
<p>Recruit people who are willing to provide opinions, feelings, and attitudes about your new product, service, brand or idea. Look for people who fit your target audience demographic, who are willing to talk and share, and who you think will work well together (in terms of providing important insights) with others in the focus group.</p> <p>Group should be small, typically fewer than 12 participants.</p>	<p>Find effective methods for recording what the people say and do. Videorecording is often the best method, but your circumstances and participants may require other means, such as having a note-taker, recording audio only, or jotting down notes yourself (though basic note-taking is typically the <b>least effective</b>.)</p> <p>Regardless of method, be sure you record the session well!</p>	<p>Focus groups work best when participants feel comfortable in a non-threatening environment with people they can relate to. Establish an ambiance where participants come to feel like they are peers in some way—that they can relate to each other and that they can feed off of each others' statements and energy.</p>	<p>As a researcher, your goal is to function as a moderator that can pull interesting information from your participants. Thoughtfully consider in advance how you can get your participants to reveal what is and is not desirable to them about your product, what their emotions are, where they agree and disagree with each other, what processes they follow to accomplish things, and so forth.</p>	<p>As if assembling a puzzle, now review—once participants have left—their statements, facial reactions, nonverbal cues, patterns, and other responses. Pay particular attention to the stories they told, the metaphors they used to describe things, the memories they conjured, and so forth. Begin connecting dots between attitudes, opinions, and feelings and construct a picture of how they feel about the topics you addressed, looking for themes and trends.</p>	<p>Once you have analyzed your data and made connections about feelings and opinions, you are in a position to hypothesize what your participants revealed about your product, service, brand, or idea. Your hypothesis isn't a conclusion, but rather a statement that will likely draw more specific questions. For example, you may learn that your consumers have an adverse reaction to particular term—but now you want to know what else they may be adverse to and why.</p>	<p>Focus groups are great initial steps into research inquiry, but they rarely should be used on their own as decision-making research. Focus groups lead researchers to ask even more pointed questions, establishing ideas for more effective questionnaires, observation methods, interviews, polls, and other metrics.</p>

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# HOW TO CONDUCT OBSERVATIONS






## WHAT ARE OBSERVATIONS?

Observations are a type of ethnographic data collection method where researchers visit or participate in a location or with a group of people to better understand people, environments, interactions, behaviors, or other phenomena within the space.



## WHEN SHOULD I CONDUCT INTERVIEWS FOR RESEARCH?

Observations are best when researchers are highly unfamiliar with a people or location and researchers hope to gain insights about how the people or environment act, respond, interact, behave, or otherwise engage.

STEP ONE	STEP TWO	STEP THREE	STEP FOUR	STEP FIVE
Identify Objective	Establish Recording Method	Develop Questions and Techniques	Observe and Take Notes	Analyze Behaviors and Inferences
 <p>Determine what you want to observe and why. Are looking to see how students respond to a new environment? How customers interact with employees? How bosses interact with subordinates? When conducting observations, you are trying to learn habits, patterns, behaviors, reactions, and general information about people in a particular environment to better understand what they do and, hopefully eventually, why they do it (though observations alone often won't tell you the "why").</p>	 <p>To make observations most effective, it's important that you minimize or eliminate any disruptive or unfamiliar devices into the environment you wish to observe. For example, it is often least effective to videorecord observations in situations where the people being observed know they are being filmed (but it's usually unethical to film without telling them. Note-taking is the most common method, though in some public spaces you can take photographs, audio recordings, and other methods.</p>	 <p>Determine whether you are conducting an informal or a formal observation (see explanations to the far right.) Knowing your objective, determine if there are specific questions you have or if you are going in completely open-minded. What you hope to learn will help you know what specifically to look for. Be prepared when entering an observation space by having a sound understanding of the type of information you are trying learn.</p>	 <p>Visit the space you are hoping to get information from. Be as unobtrusive as possible, taking notes, photographs, audio, and film, only where it is allowed, you have permission, and it makes sense for the research without disrupting the environment. If you are doing formal observations, will you need to code certain behaviors, actions, words, visuals, and other observed data.</p>	 <p>Separate the difference between what you observed (which are factual behaviors) and why what you observed happened. Typically, to make some sense of your observed data, you will need to interview people in the environment you are observing, either during the observation itself, or afterwards. Make connections between interactions, responses, behaviors, and other phenomena.</p>

## INFORMAL OBSERVATIONS

Informal observations are conducted when you have little or no concept about what to expect, and you are simply going to observe people in order to learn about their behaviors. You enter these environments with a completely open mind, hoping to gain some insight about the people in the environment. Often, you may enter these informal observations with particular questions in mind, but you aren't necessarily seeking to codify data or follow strict checklists or time frames.

Informal observations are good for obtaining initial insights that can be later followed up with other types of research.

## FORMAL OBSERVATIONS

Formal observations are structured, repeatable observations where researchers are looking for specific cues to codify and report. Researchers in formal observations will have identified in advance types of phrases, actions, settings, or other environmental surroundings to look for and will take note of each of them, codifying them in pre-determined ways. Formal observations often have checklists that researchers are following and they may be timed—meaning, researchers may be looking for what happens at different intervals.

Formal observations are good for repeated studies of behavior that can be duplicated for future research and quantified.

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# HOW TO DO ETHNOGRAPHY









## WHAT IS ETHNOGRAPHIC RESEARCH?

Ethnography research is a technique researchers use to learn about people in a specific environment. More in-depth than observational research, ethnographic research actually requires that the researcher participate in the environment that they are observing.



## WHEN SHOULD I DO ETHNOGRAPHY?

Ethnographic research is especially valuable when a researcher hopes to learn about the complexities and idiosyncrasies of an environment from first-hand experience. Ethnography may be used to research organizations, communities, cultures, and other environments.

STEP ONE	STEP TWO	STEP THREE	STEP FOUR	STEP FIVE	STEP SIX	STEP SEVEN	STEP EIGHT
Identify Research Question	Determine Location(s) for Research	Formulate Presentation Method	Acquire Permissions and Access	Observe and Participate	Interview	Collect Archival Data	Code and Analyze Data
							
Determine what problem you are seeking to better understand. Develop a problem statement that raises questions you seek to know more about. The problem or question may be about nearly any topic that addresses people in a designated environment. You may be wishing to better understand things like culture, relationships, interactions, processes, or anything else that affect how people think and/or behave.	Identify the best place to conduct the participatory research. You may choose more than one location if the research question/problem warrants it. Select a location that will provide the best opportunity to observe, participate, take field notes, and understand how the people in that environment act, communicate, and think.	Consider the most effect way(s) to obtain objective information. Will you be adopting a role of a person in the community or organization you are observing? Will you be covert or will others know you are conducting research? Recognize that if others know you are a researcher, they may act and respond differently. If they don't know, on the other hand, consider the most ethical way to observe and collect data.	Because ethnographic research can be a bit intrusive, it's usually necessary to obtain permission for access into the location you plan to research. Always obtain permission in writing. Let decision-makers know what your observational methods will be, how you plan to participate, how the information you collect will be used, and so forth. Being ethical and considerate is critically important.	Ethnography requires more than just observation. To research effectively, you will want to participate in the organization you are researching in some capacity. Determine the types of things you are looking for in regards to your question and problem and determine the most effective ways to collect notes. Be as objective as possible when observing and participating. Write running descriptions, things you remember, impressions and feelings, ideas that come to mind, and so forth.	To increase your understanding of behaviors and actions, interviews may be necessary. You may do these interviews immediately after witnessing something, at the end of a designated observation period, at the end of the day, or even at the end of the entire research period. Determine who is best to interview and what questions are critical to helping you understand your research question.	Many organizations, communities, and cultures have other artifacts and information that you can use to assist in your data collection. Review things like papers, emails, physical artifacts, phone conversations, marketing collateral, websites, and other information-rich sources to enhance your understanding of the environment.	Code your data in a way that makes the most sense for your observations. Consider the following methods for analyzing and summarizing data: code and label things you saw and heard; sort for patterns; identify outliers; compare with theories; take note of reflective remarks.

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Source: file:///C:/Users/cnewbold/Downloads/HowtoConductEthnographicResearch.pdf

# HOW TO DO SURVEYS

## WHAT ARE SURVEYS?

Surveys are a method of data collection that asks people to self-report on how they feel, think, or act in specified circumstances or about specific products or ideas. If a large enough sample size is used, results can be analyzed using statistical methods.



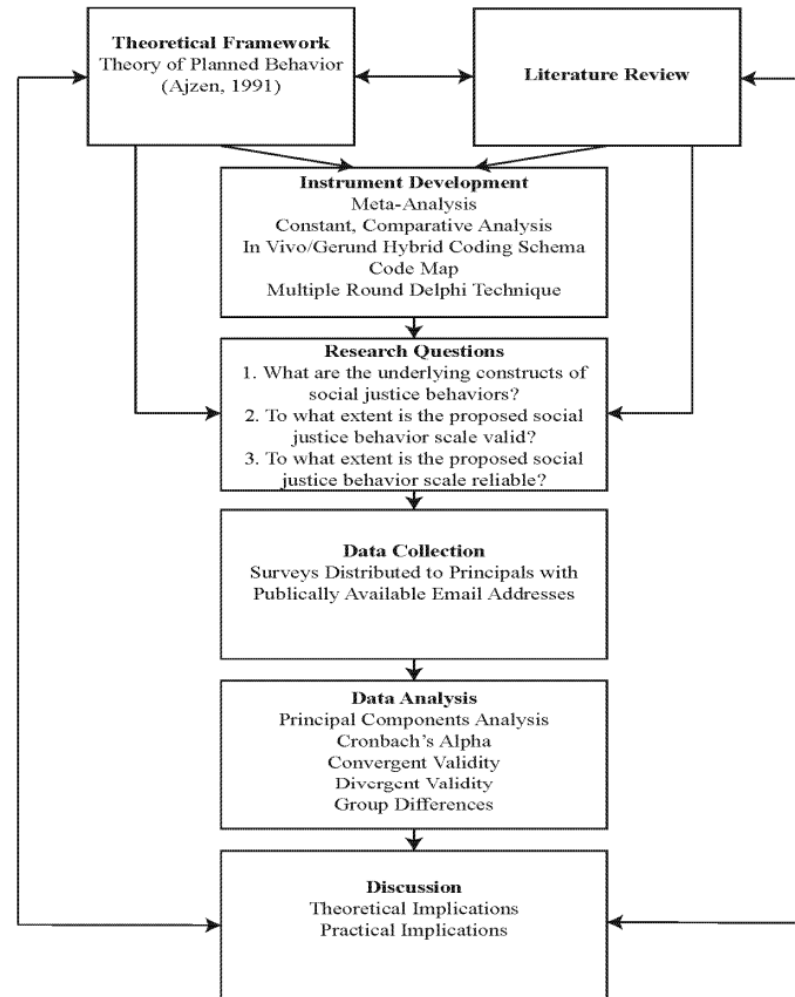
## WHEN SHOULD I CONDUCT A SURVEY

Surveys are especially useful when you need to collect a lot of information in a short amount of time with relatively little cost. Surveys can be sent to dozens, hundreds, or even thousands of people and are useful to learn about their thoughts and attitudes.

STEP ONE	STEP TWO	STEP THREE	STEP FOUR	STEP FIVE	STEP SIX	STEP SEVEN
Determine Participants	Identify Platform(s) & Distribution Method	Develop Questions	Distribute Survey	Analyze Data	Generate Hypothesis	Conduct More Research
<p>Determine who you think will provide you the most important information. Consider the demographics of the people you want to ask to learn about a particular attitude, perspective, belief, behavior, or characteristic. Determine how many people in this demographic will be necessary to ask to make an effective decision and if you'll be able to draw statistical conclusions based on the number of responses.</p>	<p>Review your budget and possible distribution channels. Is this a survey that can be distributed for free, created on a platform like SurveyMonkey and sent through social media? Is this something you would send in an email to people in your database? Or is this something that should go through a paid service or agency? The bigger the scope and the more the questions, the more likely you'll need to move to a paid service. Most simple surveys can be done for free and distributed on social media and in emails.</p>	<p>Write questions that will give you the most useful responses. Be careful not to ask leading questions. Some types of questions include:</p> <ul style="list-style-type: none"> <li>+Closed (multiple choice with only one option)</li> <li>+Open (multiple choice with multiple options)</li> <li>+Likert (gives options for a scale, such as "never," "sometimes," and "always")</li> <li>+Free response (allows written answers)</li> <li>+Request (asks for suggestions or questions)</li> </ul>	<p>Send the survey to the people you determined through the channels you identified. Be sure to let respondents know in advance three things:</p> <ol style="list-style-type: none"> <li>1. Why you're conducting the survey and/or why they should care.</li> <li>2. How long the survey will take</li> <li>3. When they need to have it completed by.</li> </ol> <p>Keep survey relatively short (the less time it takes, the higher the response rate you will usually get) Send reminders if necessary.</p>	<p>Collect all survey responses and determine how many of people responded. Make connections between responses, looking for patterns, trends, and other insightful information. If your survey sample was large enough and the responses merit quantifying the results, do a statistical analysis.</p>	<p>Once you have analyzed your data and made connections about attitudes and behaviors, you are in a position to hypothesize what your participants think or feel. Your hypothesis isn't a conclusion, but rather a statement that will likely draw more specific questions. Surveys are best used in combination with other research methods, since the subject responses aren't usually a great measure on their own of actual, generalizable data.</p>	<p>Surveys are great additions to a body of research but they rarely should be used on their own as decision-making research. Surveys lead researchers to ask even more pointed questions, establishing ideas for more detailed questionnaires, observation methods, usability tests, interviews, polls, and other metrics.</p>

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# Design výzkumu



# Jak na diskusi...

- Jak se vaše výsledky jeví ve světle výzkumů, které citujete nebo popisujete v teoretické části?
- Potvrdily vaše výsledky to, co jste popsali v teorii? Nebo to vaše výsledky nepotvrdily? Které minulé výzkumy dopadly podobně, jako ten váš?
- V čem jsou vaše výsledky unikátní? Co nového přináší vaše práce?
- Proč vaše výsledky dopadly tak, jak dopadly?
- Jaké jsou limitace vašeho výzkumu? Co byste příště udělali jinak a lépe?

# Jak na závěr...

- Co bylo cílem vaší práce?
- Na co jste přišli ve vztahu k cílům vaší práce?
- Jak vaše výsledky přispěly k rozvoji teorie a jak je možné s nimi pracovat v praxi?
- Jaká doporučení vyplývají z vašich výsledků?
- Jak je možné na vaši práci navázat? Jaké další výzkumné otázky do budoucna vaše práce otvírá?

# Kde budu shánět články a relevantní monografie?

1) Produkce ČR a SR:

<https://katalog.npmk.cz/> (pedagogické články, knihy...)

<http://www.geobibline.cz/> (geografické články, knihy...)



2) Zahraniční produkce:

<http://ezdroje.muni.cz/>



# Na co si dát pozor?

- V případě, že práce není pedagogická, je třeba do úvodu/závěru explicitně uvést možnosti jejího využití v geografickém vzdělávání.
- Je třeba uvádět vědecké cíle (vztahují se k samotnému výzkumu). Ostatní cíle se neuvádí (např. řešerše literatury).
- Cíle je třeba definovat pomocí aktivních sloves.

# Úkoly na příště: magisterský den

Prezentace projektů Mgr. prací před komisí

OSNOVA:

- Název projektu
- Cíle projektu
- Zdůvodnění cílů projektu
- Co, kde, na jakém souboru, kdy, a jak bude zkoumáno?
- Jak a k čemu bude možné využít výsledky?

## Úkol do příště č. 1:

Sehnat 10-20 relevantních článků a 1-3 relevantní monografie.



Zdůvodnit výzkumný problém.

Proč je třeba zkoumat právě to, co chcete zkoumat?

- 1) Argument z literatury
- 2) Argument z literatury
- 3) Argument z literatury

## Úkol do příště č. 2:

Sehnat 10-20 relevantních článků a 1-3 relevantní monografie.



Vypsat a definovat stěžejní pojmy, se kterými se v literatuře týkající se  
Vašeho výzkumného problému operuje.

- 1) Pojem č. 1 a definice z literatury (možno i více)
- 2) Pojem č. 2 a definice z literatury (možno i více)
- 3) Pojem č. 3 a definice z literatury (možno i více)

## Úkol do příště č. 3:

Sehnat 10-20 relevantních článků a 1-3 relevantní monografie.



Formulovat téma práce a cíl výzkumu\*.  
Téma práce i cíl výzkumu by měly vycházet z úkolů 1 a 2.

\*cíl výzkumu je třeba formulovat pomocí aktivních sloves:  
vysvětlit, zjistit, porovnat, popsat, analyzovat, ilustrovat, zhodnotit, navrhnout, kriticky posoudit...

# Co bychom (v mgr. práci) měli mít?

- 1) Název
- 2) Úvod: nástin výzkumného tématu a zdůvodnění jeho prospěšnosti a užitečnosti (vzhledem k teorii, praxi, potřebám společnosti apod.).
- 3) Cíle výzkumu (ověřitelné).
- 4) Definice klíčových pojmů opřené v literatuře (jsou to ty pojmy, které váš výzkum profilují a zpravidla se vyskytují také v názvu práce).
- 5) Shrnutí dosavadních výzkumů (domácích, zahraničních - může být doplněno i souhrnnou tabulkou).
- 6) Stručný popis metodiky výzkumu - pokud možno opřený a propojený se všemi výše uvedenými body.
- 7) Popis výsledků (přímá návaznost na cíle)
- 8) Závěr (přímá návaznost na úvod)