Miskolczi Péter

Captivating the Audience

What Impact Does an Introductory Sociology Course Make on Students?

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Doktori értekezés

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1 Introduction

Why is introductory sociology important? Scholars in the field[1] have devoted a lot of attention to the introductory course and argued for its significance on several accounts.

Introductory sociology plays a part in *education*: it provides the foundational knowledge for the sociology major (Mitra & Sarabia, 2005; Greenwood, 2013) while also contributing to more general curricular learning goals such as the development of skills that improve the labor market prospects of students (Mitra & Sarabia, 2005; Zipp, 2012; Pike et al., 2017).

The introductory course bears the responsibility of being a *good representative for the whole field*: many stress the point that IntroSoc courses—as they are routinely referred to in the literature—are the first and only 'point of contact' with sociology for many students and constitute the *'public face'* of sociology. Their impact in shaping public perceptions about sociology is potentially enormous. In the United States, the number of students taking introductory sociology classes is estimated to be in the millions every year (Zipp, 2012; Greenwood, 2013), and we can be confident that it is in the thousands, potentially tens of thousands, in Hungary. These students are a "captive" audience for sociology (Burawoy, 2005a) whose long-term interest in the field can be secured if their initial experience is favorable (Gans, 2016).

Introductory courses are also capable of demonstrating the boundaries and *raison d'être* of the discipline in both its *social* and *scientific* nature. In a time when individualistic, psychologistic thinking and low-quality sources of information abound and public discourse often descends into an anarchy of competing opinions posing as facts, showing the value of good science and overcoming superficial everyday thinking is of critical importance (Greenwood, 2013).

Some also suggest that beyond scientific soundness and skill development, IntroSoc courses should be responsive and responsible towards students—"the most important public we *serve*" (Greenwood, 2013, p. 234, my emphasis)—in an ethical dimension, "helping [them] make more informed choices in their lives and communities"

[1] Throughout the dissertation, sociology (the social science which is practiced by sociologists and is taught in universities as a major) will be referred to as 'the field' or 'our field', 'the' or 'our profession', 'the' or 'our discipline'. Even though arguments could be made about which term is the most appropriate in which exact context, they will be used interchangeably, mostly with the humble purpose of not wanting to repeat 'sociology, sociology, sociology' a million times. In a similar vein, when talking about the introductory 'course' to sociology, the word 'class' will also be used in the same sense.

(Greenwood, 2013, p. 232). In the US context, introductory courses also fulfil a *recruitment* function for the major. Bright students will be attracted to the field if they see that it is relevant to them personally, it is relevant to current events in the world, that it offers useful knowledge (Greenwood, 2013, pp. 235, 239), and if they perceive it as offering a prestigious professional identity (Downey et al., 2008; Ballantine et al., 2016).

Virtually all of the points made above can be related to a 'bigger picture', first and foremost to the challenges facing *higher education* currently. As argued by Király and Géring (2021), there is a *legitimation crisis* apparent in the discourses surrounding universities along three main dimensions. The first is related to the *economic* role of higher education institutions and an increasing pressure on them to become market players by monetizing the knowledge they produce, thereby also making it possible for the state to reduce the funding provided to them. Notably, such an entrepreneurial approach typically regards humanities and social sciences as unproductive and of lesser value than other fields (Király & Géring, 2021, p. 59).

The marketization of higher education and reduced state funding can lead to a consumerist attitude on the part of students where a degree is expected to be earned in exchange for money and not on the merit of hard work (Delucchi & Korgen, 2002). That puts higher education institutions in a conundrum: should they continue to operate according to their own principles, safeguarding high standards, if that puts their existence in jeopardy, or do they have to cave in to external pressure? Fields that are popular and seen as prestigious can achieve a 'win–win' outcome: they can attract students of high ability even while maintaining their standards. Less prestigious disciplines—to which, by all accounts, sociology also belongs—often have to resort to accepting worse, or as Deflem (2013, p. 164) writes, the "worst" students. Enhancing the status of the field would be vital because it would bring in more talented students and more money, also enhancing the sense of self-worth of the whole profession and its practitioners (Downey et al., 2008).

Does Hungarian sociology have such a recruitment problem? Looking at data on student admissions (Felvi.hu, n.d.), the number of students admitted to sociology BA programs typically declined from its high mark in the early to mid-2010s, but there is no precipitous fall apparent. However, the number of university 'entry points' needed to get into state-funded BA sociology was highest at the turn of the 2010s (exceeding 400 at least once at every university that offered the program) and has firmly declined since, often to levels below 350. In 2022, the highest entry score was needed at the University

of Debrecen and ELTE, with 386 and 384, while Corvinus University of Budapest did not even start its sociology BA program[2] (BCE, n.d.). The trajectory of political science, a purported competitor of sociology (Szelényi, 2016), is not radically different, but psychology BA programs constantly require entry scores well in the range of 430-440 at virtually every university offering them.

The second aspect of higher education's legitimation crisis relates to its ability to contribute to producing *human value*, meant in the sense of human capital in the labor market (Király & Géring, 2021, p. 60). Such doubts are not new, already a decade ago Arum and Roksa (2011) sounded the alarm bells that "limited learning" was taking place on college campuses, and students were not making substantial gains in critical thinking, complex reasoning and written communication. Perhaps the fiercest critic of formal education is Caplan (2018) who argues against a state-funded education system, claiming that it does not foster meaningful learning but only serves a signaling function towards the labor market: those who could earn a university degree can be expected to be obedient and industrious enough to be employed. Amidst such doubts, universities are now facing increased pressure to 'prove their worth' in formal program assessments (Ballantine et al., 2016), and each course, introductory sociology included, should be able to show that it contributes to program-level learning goals (Howard & Zoeller, 2007). While such pressures are not readily apparent currently in Hungary, recent organizational changes ongoing in the higher education sector were often accompanied by messaging about performance improvements.

The third aspect of the 'legitimation crisis' mentioned above is related to higher education's *social value*, namely that it is a useful contributor to positive social outcomes (Király & Géring, 2021, p. 62). One aspect of higher education's social role is its contribution to public discourse, the part it plays in making sense of individual and collective lives. Currently that role is contested and will likely be taken up by "other types of 'influencers'—ones lacking intellectual rigor and nuance" (Király & Géring, 2021, p. 58). There are indeed signs that skepticism towards science is on the rise in the Western world (Nichols, 2017) and it can lead to adverse consequences such as vaccine hesitancy (Browne et al., 2015) or climate change denial (Huber et al., 2021). Citizens' positions taken on such issues often mirror the political divides of societies as well, as it has been shown in Hungary (Farkas et al., 2022).

[2] The claims relate to the Hungarian-language programs.

How does Hungarian sociology fare in that regard? While it can be safely said that there is no widespread public skepticism towards sociology as a science, still the 2010s have been a turbulent decade for social sciences in Hungary. Universities and research institutes (most notably, those affiliated with the Hungarian Academy of Sciences) underwent changes in organizational structure and funding. On some occasions, the government positioned itself directly against practitioners of certain fields, notably, against philosophers in 2011, then summarily banned gender studies BA programs in 2018, and starting from 2017, gradually forced out the Central European University (Pető, 2020), the founder of which is a committed proponent of 'open society'. In spite of all that, a certain optimism about the future of Hungarian sociology can also be detected, signaled, for example, by recent conferences such as the one in 2020 titled 'Sociology on the brink of a successful century?', or the somewhat more dubiously named 'Who is interested in sociology anymore?' (2022), the goal of which was to prove sociology's relevance in finding answers to 21st-century challenges.

Another way for universities to create 'social value' is to forge partnerships with businesses or civil society (Király & Géring, 2021, p. 57). Sociology is generally regarded as well disposed to engage with the latter, with Downey et al. (2008) suggesting that community involvement might be an avenue towards raising the discipline's status. Supposedly, fostering relationships with civil society can improve the field's extra-academic reputation, while involving students in community-oriented research can bring about benefits in educational outcomes and scientific production (Downey et al., 2008). To that we can add that while government policy in Hungary seems to be in favor of certain kinds of community involvement, for example by requiring community service from students graduating from high school (Bodó & Markos, 2019), in other regards it is hostile towards non-governmental organizations (Szuleka, 2018), and in fact, Hungarian sociology is cautious of allying itself with civil society (Fleck, 2006, p. 114; Némedi, 2006, p. 100).

How do the macro-level phenomena just discussed relate back to introductory sociology? Marketization trends in higher education and the dilemma of selecting students for 'quality' or 'quantity' put the course's recruitment role in sharp relief. Even though in Hungary, students select their major right at the time of applying to university, it is plausible that an introductory class which projects the image of a well-defined and relevant field can play a part in elevating the discipline's status. Concerns about the learning provided by higher education are directly mirrored in the question of how

students benefit from any given course and what factors influence their success. As for higher education's contribution to social value, introductory sociology has the chance to relay the discipline's social role to students and win them over as favorable 'publics', open, attentive and trustful to sociology's scientific findings. For those reasons, one might risk the somewhat cheaply poetic statement that introductory sociology is a drop that contains the ocean.

This dissertation investigates the impact of one introductory sociology course, taught in the Fall semester 2015 at Corvinus University of Budapest. That *impact* will be investigated along three aspects, not directly reproducing but strongly relating to the points made above. The first is that of *learning*: a study in the vein of quantitatively minded education research will be presented, mapping out the individual, group-level and contextual variables that lead to a successful learning outcome in the course as measured by the qualitative concepts of 'deep' and 'surface' learning. Results of that investigation are important from the standpoint of learning in higher education, considering both the socio-economic background of students and the contextual elements of teaching practice.

Second, the *mental image* that students formed around sociology will be investigated, taken to be the representation of what sociology is and what it does in their minds. That general image is important because it shows one side of the 'public face' of sociology: whether students can recognize the boundaries of the field, whether they can make sense of it in a clear way, or more generally, whether they retain an idea of what it was about at all.

Third, the *social role and the reputation of sociology* as seen by students will be looked at. That aspect is important because it adds further layers to the 'public image': whether sociology is regarded as contributing to social change and taking sides in public issues, which relates to issues of politicization and skepticism towards science.

The research is longitudinal. Students of the introductory course were contacted three times: right before studying the subject, right after having studied it, and then two to three years later. Data gathering relied on *diagrammatic elicitation*, more precisely, the use of mind maps drawn by students. In light of that, the dissertation hopes to contribute to knowledge about learning in higher education and about the public image of sociology in the eyes of students while showcasing a mild methodological novelty as well.

1.1 A guide to reading the dissertation

Reading this dissertation will, at times, feel like looking into a kaleidoscope. The reader will see the elements of the same research project recur, arranged in different constellations, each one revealing a different aspect of the same underlying phenomenon: namely, the 'impact' that an introductory sociology course makes on students. Preparatory to everything else, Chapter 2 will provide the theoretical underpinning and empirical background. The presentation will be organized along the three 'strands' of the research: one, *learning*; two, *a general image of sociology and its reflection in the introductory course*; three, *the social role and reputation of sociology*. Following that, Chapter 3 begins with a description and assessment of the introductory course under investigation, then moves on to describing the sample and the data gathering waves. At the end of that chapter, the research questions are presented, along with the methods of data analysis chosen to answer them.

The subsequent chapters present the results of the research project. All are self-contained studies in their own right, one of them has been published and the others submitted to journals for review. They are presented in this dissertation with some modifications that serve to integrate them into a coherent structure and to reduce repetitions. Chapter 4 looks at the short-term *learning outcomes* of the course, investigated in the vein of quantitative education research. Next, Chapter 5 provides a qualitative description of the *general picture of what sociology is*, constructed in the minds of students, both immediately after the course and years later. Subsequently, Chapter 6 investigates the dimensions of the *perceived social role and reputation of sociology* in the views of students of the introductory course. Finally, Chapter 7 provides a brief summary and conclusion, as is customary.

The style of the prose will try to live up to the standards of scientific writing. In large parts of the dissertation, the text will strike an impersonal tone. At other times, however, the pronoun 'I' will be used, mainly because it is my position that by using it and making the author 'visible', I am taking responsibility for this research—after all, it was not just 'done' or 'conducted' by itself or some impersonal force. In some cases the pronoun 'we' will be used, implying, in the same way, that co-authors were involved, or that the introductory course which is the basis of the research was also a collectively fostered project.

I commend this dissertation, first of all, to teachers of sociology who are interested in the impact our activities make on students. Further, I am cautiously optimistic that educators and sociologists in general will be able to find interesting bits in it. Last but not least, those interested in the use of mind maps either for quantitatively or qualitatively minded research undertakings can benefit from looking into it.

2 Theoretical and empirical background

The purpose of this chapter is to provide a theoretical and empirical background to all three strands of the dissertation. First, the *educational* aspect will be underpinned by learning theory and empirical findings on learning in sociology courses. Second, the *self-image of sociology as reflected in the introductory course* will be reviewed by looking at various theoretical, polemical and policy documents debating the preferred content and goals of the course, and empirical findings about the 'sociological core'. Third, concerning the *social role of sociology*, philosophical and programmatic positions will be reviewed, along with the description of the Central-Eastern European experience in that regard. Some of the material and the arguments presented in this chapter will recur later in the dissertation, but in a different level of detail and arrangement.

2.1 Learning: Theoretical background and empirical research

2.1.1 Cognitive learning theory: deep and surface learning

The *quantitative conception of knowledge* entails the view that knowledge is ultimately about a lot of information. The cultured person can answer the million-dollar question about an obscure detail, the expert 'knows everything' about their field. Education, often at all levels, also gives the impression that the point of learning is to remember the material (Dahlgren, 2005, pp. 23–24). Classical psychological research into learning partly reflects this conception, insofar as it puts a lot of emphasis on studying memory, often by way of making participants remember meaningless syllables, besides studying the innate characteristics of IQ and motivation (Entwistle, 2005, pp. 7–8; Dahlgren, 2005, p. 25).

Teachers however, especially at the university level, never name memorization as a goal of education, citing instead the mastery of a field, creative and critical thinking, communication and problem-solving skills—and this is not the result of a recent paradigm shift, but has been so for decades (Entwistle, 2005, pp. 4–6). Such a *qualitative conception of knowledge* moves beyond the mere storage of information and emphasizes other aspects of cognitive functioning: the ability to form links between existing knowledge and newly acquired information, to evaluate previously unencountered statements, to apply knowledge to new problems, to tell the difference between the abstract and the concrete, the ability to think inductively and deductively. Various levels of qualitative

learning outcomes have been systematized in taxonomies, such as that of Bloom (Bloom et al., 1956) or SOLO (Dahlgren, 2005, pp. 31–32).

Besides knowledge, which is the outcome, the *process* is equally important in learning. Starting in the 1970s, the focus of education research moved from innate, largely fixed characteristics of the learner to that process (Case & Marshall, 2009): what do people do when trying to complete a learning task, and what circumstances bear an influence on that. Marton & Saljö (1976; 2005) developed the influential, empirically grounded theory of *deep and surface learning approaches*. In their experiment, students were given a text to read and were asked to give a summary of it. Crucially, after the task, the researchers interviewed the students and asked them how they approached the task, what strategy they applied to complete it. It was found that most of those students who did not manage to give a good summary of the text simply did not look for its essence, but rather tried to 'memorize it all'. On the other hand, more successful students tried to grasp an overall/underlying structure of the text instead of focusing on detail, and tried to integrate its meaning into their already existing knowledge. The former approach was called the surface approach, and it correlated with surface-level outcomes on the task, while the latter, the deep approach, mostly resulted in deep outcomes (Marton & Saljö, 2005, pp. 39–44).

The theory of deep and surface learning approaches entails a number of implicit assumptions. It is grounded in a social constructivist epistemology, acknowledging that learning happens in an interaction of the learner and the environment, but at the same time, the personal nature of the process, and the individual intention and effort required for deep learning, is also reflected in it (Howie & Bagnall, 2015, pp. 354–358). It also has to be noted that these learning approaches are highly context dependent, in more than one way. First of all, a deep approach is not a single 'way of doing things' that is applicable to any kind of task, rather it is a more general "search for *understanding*, using whatever strategy can meet this end" (Case & Marshall, 2009, p. 11, my emphasis). Second, it is widely acknowledged that in real-life settings, pedagogical decisions bear an influence on the learning approach that students adopt.

Whatever the stated goals of education in general or a course in particular may be, the key elements of course design that matter most for the way students learn are the amount of workload, the type of instruction and the way of assessment. A high level of student engagement is supposed to lead to deep learning approaches (Floyd et al., 2009), and in turn, problem-based instruction (Lublin, 2003) or the perceived value of the course

(Floyd et al., 2009) increase that engagement, while lecturing acts in the opposite way (Lublin, 2003). Unclear course goals, lack of flexibility, and multiple-choice testing also encourage a surface approach (Case & Marshall, 2009, p. 14). Pedagogical practices that move away from the 'memorization' model and force students to look for, construct and assess meaning in the material personally should foster a deep approach, but in practice, such a change was found to be hard to enact. For example, Struyven et al. (2006, quoted by Case & Marshall, 2009, p. 17) compared student approaches between a traditional lecture-based course and another explicitly designed for 'activating students', and by the end of the semester, the participants in the latter were found to be more 'surface' in their learning approach. A truly successful way of pushing students towards the deep approach seems to be the reduction of workload (Case & Marshall, 2009, pp. 16–17). It has been observed that generally, students increasingly 'become surface' as they progress with their university studies (Biggs et al., 2001, p. 6; Mogashana et al., 2012, p. 786).

Whether a student approaches a task with a deep or surface orientation can be measured with established instruments, such as Biggs's 20-item Study Process Questionnaire (Biggs et al., 2001). It has to be stressed that learning approach is not a lasting personality trait (Lublin, 2003), most students are able to adopt either a deep or a surface approach depending on the task. That also means that if a study finds certain variables or student characteristics to be associated with a deep or surface learning approach, the relationship should not be 'reified' but should only be accepted within the educational context it was found (Case & Marshall, 2009, p. 15).

As a final point, it should be added that while the 'deep' and 'surface' labels are above all used to characterize students' *approaches* to learning, they can also refer to *outcomes*. A deep learning outcome is one where the student meaningfully integrated newly acquired information into their already existing knowledge, making connections between what they already knew and what they freshly learnt. Hay (2007) used concept maps to measure such outcomes, and his study was in part a model for the present research (see more in Chapter 4).

2.1.2 Learning and identity

Education research often takes the social environment into account, typically by looking into how class size or the ability of other students influence individual outcomes. There is a further way in which peers can influence the learning process: by reinforcing attitudes and behaviors, or even providing an identity—if the group is large enough—that are either

favorable or hostile to academic achievement. Most of the relevant research studied adolescents, and the peer groups involved were typically those of immediate friends of students, or larger social categories such as ethnic or cultural background. Both attitudes towards school and achievement have been shown to correlate with the same attributes of close friends of students (Schibeci, 1989; Ryan, 2000). In the context of a psychology course at the university level, it has been demonstrated that "students' social identification as a university student" was associated with deep approaches to learning and "positively predict[ed] academic achievement" (Bliuc et al., 2011, p. 559). The famous study about the 'burden of acting White', purportedly holding back Black students from excelling in school (Fordham & Ogbu, 1986) also proposed a model of 'peer pressure' influencing learning outcomes. Although that study has been criticized and reassessed since when it comes to specifics (Horvat & Lewis, 2003), the influence that peers exert on attitudes and behaviors in several areas of life still seems to be clear, and there is no reason to think that education is an exception (Ryan, 2000).

The relationship between learning and identity goes the other way as well. University studies are a transformative experience for students, exposing them to new relationships, institutional situations, and knowledge, endowing them with new capabilities, and a change of self (Hordósy, 2021). It has been suggested that for such a transformation to happen, the worldview of students has to be challenged and contested (Trede et al., 2012, p. 375). While socialization into a profession is an increasingly manifest function of higher education (Barbara-i-Molinero et al., 2017), the definition of what a 'professional identity' entails has not always been clear-cut in the literature (Trede et al., 2012, p. 374). Clarke et al. (2013) highlight that professional identity is a multi-layered concept, entailing, on the one hand, the ideas the individual holds about themselves, and on the other, the sense of being embedded in "communities and institutions which have their own languages, conceptual structures, histories, traditions, myths, values, practices, and achieved goods" (Kogan, 2000, quoted by Clarke et al., 2013, p. 9). While the adoption of a professional identity is beneficial because it provides a sense of belonging, it can also come with a sense of separation from 'others' (Trede et al., 2012, p. 380). Barbara-i-Molinero et al. (2017) suggest that fields with a 'clear-cut' image such as medicine have an easier time cultivating the professional identities of their students than ones which are 'blurry'. Empirical results of one study by Tomlinson & Jackson (2021) indicated that students of various social scientific fields did not report a

more developed level of professional identity than arts and humanities or STEM students (while health and social care students did).

2.1.3 Research on long-term learning

A substantial part of education research measures outcomes right after an intervention or at the point of 'output' such as the end of high school, university, or a course. However, long-term retention of knowledge has also been studied extensively in educational psychology, and was often investigated empirically involving Introduction to Psychology classes. The problem is most often approached quantitatively, whereby retention is measured against a theoretical '100 percent', and an Ebbinghaus curve of retention can be drawn up along the time elapsed (Franklin et al., 2014). Roughly, the consensus is that out of a given material, students forget a good 70 percent in the first two to six years, but 20-30 percent is remembered even after several decades (Conway et al., 1992; Custers & Cate, 2011; Landrum & Gurung, 2013; Jones et al., 2015).

Some variables can influence the levels of retention. For example, applying active learning methods in education acts positively on recall, and using videos to introduce concepts has the same effect (VanderStoep et al., 2000; Cherney, 2008; Franklin et al., 2014). Also, declarative knowledge (something one simply has to 'remember') is forgotten much easier than procedural knowledge (something that can 'be done'), for example, in a study reviewed by Conway et al. (1992), it was found that students recalled 75 percent of the material of a methodology course where they had to design and conduct their own research.

Landrum and Gurung (2013) compared two-year retention rates of the material of an introductory psychology course between students doing their capstone courses in psychology and others who had taken the intro class but were not majoring in the field. It was found that psychology majors scored significantly better on the test, but their result was still only 63 percent (compared to 56 percent of the others).

The qualitative nature of the material is also related to levels of retention. If a free-recall method is applied, students will typically remember general experiences of the course such as the blackboard, the tests, or having liked it or not. In Introductory Psychology classes, there seems to be a pattern of students remembering certain types of topics: either ones which are out of the ordinary or exciting (e.g. pathologies, sexuality), or ones that are immediately relevant to their selves and/or are actionable or practicable

in some way (e.g. personality, therapy) (VanderStoep et al., 2000; Cherney, 2008; Landrum & Gurung, 2013).

2.1.4 Quantitative research on learning in introductory sociology

Education research has a vast body of empirical evidence, of which it would be foolish to attempt a summary. Quantitative models can broadly be classified as 'education production functions' (Monk, 1989), and typically they include input variables that grasp both individual and social characteristics, as well as contextual elements of the learning process. Among the generally accepted findings are that female students perform better in higher education than males, that socio-economic background is associated with educational success, that group-level phenomena such as class size or ability of peers, and teacher effects also play their part. Chapter 4 will revisit those in more detail. Here, an overview of quantitative studies about learning *in introductory sociology courses* will be presented.

Table 1 contains a concise summary of 11 such studies. While the list cannot claim to be exhaustive, it is illustrative of past research efforts in the area. Most of those studies investigated introductory sociology courses with sample sizes in the hundreds. There is no true experimental study among them, although Driscoll et al. (2012), Rickles et al. (2013), and Killian and Bastas (2015) did compare groups of students who were exposed to different 'treatments' before being tested on the dependent variable. The outcome under investigation was some manifestation of success in the course, e.g. final grade, as in Howard (2005) or Kwenda (2011), or a measure of sociological knowledge, often constructed from several dimensions, as in Howard et al. (2014). In most cases, sociological knowledge was measured with multiple choice instruments.

Table 1. Quantitative studies on learning in sociology courses (continued on the next two pages).

Study	Purpose	Type	Sample size	Dependent variable	Measurement tool[a]	Statistical method[b]	Independent variables: significant[c]	Independent variables: other[d]
Dietz 2002	Looking for effect of online activity and learning groups on performance in an introductory sociology course.	cross-sectional	227	Total points in the course	3 multiple choice tests and 3 essays	correlations and comparisons of means	class attendance (+), reading the assigned material (+), being in a study group (–)	usage of online learning tools, student seniority[e], amount of time spent studying
Driscoll et al. 2012	Comparing learning outcomes in face-to-face and online courses.	quasi-experimental (no random assignment)	443 (231 face-to-face, 212 online)	final exam score	multiple choice and short answer items, short essays	OLS regression	GPA (+), preference for interaction with instructor (–)	gender, student seniority, preference for group work, credit hours taken, weekly paid work hours, course format (i.e. face-to-face or online)
Howard 2005	To map out the effect of certain online activities on learning outcome in introductory sociology.	cross-sectional	210	course grade	multiple choice and essay questions, class activity, short paper	linear regression	weekly study hours (–), weekly paid work hours (–), class attendance (+), reading the assigned material (+), practice exams (+)	gender, time spent studying for exam, participation in online learning, critical thinking score
Howard et al. 2014	Measuring the effectiveness of a newly introduced thematic introductory sociology course.	pretest-posttest	280	Pretest score (4 dimensions of sociological knowledge)	multiple choice instrument	regression	student seniority (+)	gender, having studied sociology in high school, sociology major or not
				Posttest score (4 dimensions of sociological knowledge)	multiple choice instrument	regression	student seniority (+), pretest score (+), having studied sociology in high school (–)	gender, sociology major or not
Keesler et al. 2008	Assessing (piloting) an advanced level introductory sociology course; the main aim was not to look for variables predicting success.	cross-sectional	22	sociological knowledge	composition of various complex tasks	comparison of means	(none)	gender

Study	Purpose	Type	Sample size	Dependent variable	Measurement tool[a]	Statistical method[b]	Independent variables: significant[c]	Independent variables: other[d]
Killian & Bastas 2015	Comparing student performance under two different teaching strategies: team-based and lecture-based.	cross-sectional	74 (31 lecture-based, 43 team-based)	final exam score	unclear	comparison of means	(none)	teaching method (team-based or lecture-based)
Kwenda 2011	General: looking for variables associated with successful learning in introductory sociology.	cross-sectional	255	Model 1: pass versus fail in the course	multiple choice tests	logistic regression	GPA (+), class attendance (+), major: social science other than sociology (–)	gender, ethnicity, age, student seniority, full- or part-time student
				Model 2: best grade (A) in the course vs lower grades (BCD)	multiple choice tests	logistic regression	student seniority (+), GPA (+), class attendance (+), ethnic minority (–)	gender, age, major, full- or part-time student
Neuman 1989	Replication and extension of Szafran (1986).	pretest-posttest	106	Pretest score	multiple choice instrument	regression	reading vocabulary (self-reported score) (+)	age, gender; several variables reflecting the concepts: family background, general academic background, social science background, social science interest factors
				Posttest score	multiple choice instrument	regression	GPA (+), knowledge of a foreign language (+), pretest score (+)	
				Learning between pre- and posttest	multiple choice instrument	regression	GPA (+), knowledge of a foreign language (+), pretest score (–)	
				Total points in the course	multiple choice tests, class attendance points, completion of study guide	regression	GPA (+), pretest score (+), class attendance (+), completion of study guide (+)	
Rickles et al. 2013	Assessing whether a specifically designed sociology course improved critical thinking more than a traditional one did.	quasi-experimental (no random assignment)	101 (66 control, 35 experimental)	posttest score in critical thinking	essays	essays	being in the experimental group (+), pretest score in critical thinking (+)	GPA, gender, ethnicity, instructor, credit hours taken, Pell grant

Study	Purpose	Type	Sample size	Dependent variable	Measurement tool[a]	Statistical method[b]	Independent variables: significant[c]	Independent variables: other[d]
Szafran 1986	To map out and argue for the advantages of pretesting students in an introductory sociology course.	pretest-posttest	324	Pretest score	multiple choice instrument	regression	GPA (+), student seniority (+), parental education (+)	age, gender, settlement type (i.e. urban or not), having studied sociology in high school, having studied social science in college before
				Final score	multiple choice instrument	regression	GPA (+), pretest score (+)	age, gender, settlement type (i.e. urban or not), parental education, having studied sociology in high school, having studied social science in college before, student seniority
Wright & Lawson 2005	To map out the effect of collaborative online activities on learning in introductory sociology.	cross-sectional	363	average quiz score	multiple choice and matching questions	OLS regression	SAT score (+), logins to online learning space (+), online forum grade (+)	gender, age, ethnicity, student seniority
				final exam score	not entirely clear (multiple choice?)	OLS regression	being female (–), age (+), SAT score (+), online forum grade	ethnicity, student seniority, logins to online learning space
				paper grade	4-to-6-page essay	OLS regression	SAT score (+), logins to online learning space (+), online forum grade (+)	gender, age, ethnicity, student seniority

[a]: *Measurement tool* refers to the way of measuring the dependent variable.
[b]: The method is described as it was described in the original. Where the type of regression is not specified, it is because the original article did not specify it.
[c]: The variables listed should be interpreted in the way that a *yes* value or a higher level of the variable is either positively (+) or negatively (–) associated with a better or more successful outcome, i.e. a higher level of the dependent variable.
[d]: *Other* independent variables are ones that were included in the given study but were not statistically significantly associated with the dependent variable.
[e]: *Student seniority* refers to the concept also described as *class level* in the literature, i.e. whether a student is first-, second-, or third-year etc.

As for correlates or 'determinants' of success, traditional measures of academic performance, namely Grade Point Average (GPA, indicating performance at university) and the Scholastic Assessment Test score (SAT, indicating high school performance) were most often found to be significantly positively associated with good outcomes in sociology courses (Szafran, 1986; Neuman, 1989; Wright & Lawson, 2005; Kwenda, 2011; Driscoll et al., 2012). Class attendance was also shown to contribute to better outcomes in more than one study (Neuman, 1989; Dietz, 2002; Kwenda, 2011), as were various ways of effort put into studying such as reading or online activity (Neuman, 1989; Dietz, 2002; Howard, 2005; Wright & Lawson, 2005), and more than one article showed that students with more university experience also performed better (Szafran, 1986; Kwenda, 2011; Howard et al., 2014). There were also strong indications that some form of cultural capital, measured e.g. by parental education (Szafran, 1986) or the knowledge of a foreign language (Neuman, 1989), or encapsulated in the pretest score (Szafran, 1986; Neuman, 1989; Rickles et al., 2013; Howard et al., 2014), also acted positively on outcomes. Some more surprising results include the fact that gender was very rarely found to be associated with success, that previous studies of sociology were either insignificant (Szafran, 1986; Neuman, 1989) or a negative influence (Howard et al., 2014), and being in a study group was also detrimental (Dietz, 2002).

What is common in those studies is that the majority of them relied on a quantitative measurement of knowledge or learning outcome. Several of the independent variables included in their models were individual or socio-demographic characteristics of students, while others captured some aspects of the context of learning (e.g. class attendance, measures of student effort). The results overall suggest that good performance in a sociology course is part of a bigger overall picture of academic excellence and experience, hence the positive associations with GPA, pretest scores, and student seniority.

2.1.5 Qualitative research on learning in sociology

The outcomes of sociology education, either in specific courses or over the major, have been investigated qualitatively as well. There is a rich genre of studies which demonstrate the development of one skill, the improvement in the understanding of one key concept, or a similar smaller element of the curriculum, often coupled with the description of the teaching method that helped effect the change (Dougherty & Andercheck, 2014; Weinzimmer & Bergdahl, 2018; Cebulak & Zipp, 2019; Platts, 2019). Research that aims

to describe more overarching results, and especially those of an introductory course, in terms of content, is much harder to find.

Table 2. Selected studies which investigated outcomes of introductory sociology courses or sociology education qualitatively.

Study	Research aim/question	Sample size	Data and method	Main conclusions
Ashwin et al. 2014	How does students' account of sociology change as they go through their studies?	32	phenomenographic analysis of interviews; longitudinal	Students' accounts of sociology develop over time towards a deeper understanding.
Bandini et al. 2016	What do students think they learn in the sociology major?	25	content analysis of interviews	Students reported gaining knowledge on certain topics and in analytical, writing and presentation skills.
Howard & Butler 2018	What are the most important things that students think they learned in introductory sociology?	461	content analysis of reflective essays	Most frequently mentioned topics: socialization, stratification, the sociological eye, social structure.
McKinney & Naseri 2011	How does the level of engagement and identity of sociology students change while going through the major?	18	content analysis of questionnaires, essays, and interviews; longitudinal	Students' identities as learners developed, as did their mastery of sociology, but the latter in a limited way.
Medley-Rath 2019	Which concepts do students rely on in captioning their photographs in a visual sociology exercise (as part of an introductory course)?	165	content analysis of photo captions	Students relied on broad concepts in their homeworks, and seemed unable or unwilling to develop a deep understanding of the material.
Schneickert et al. 2019	Describing a 'de facto sociological canon' of preferred methods and authors of sociology students	1245	survey	Political views, gender, and the university attended influence student preferences of authors, theoretical schools, and methods.

Table 2 summarizes six studies that have dealt with the effects of sociology education in a qualitative manner, illustrating the variety of research aims and questions, designs, and analysis methods. Notably, longitudinal studies on learning in sociology are especially rare. This body of literature will be reviewed in more detail in section 5.1.

2.2 Sociology: its 'core' and image as reflected in the introductory course

Introductory courses in any discipline are supposed to contain "foundational" knowledge which can be "remarkably enduring" over time. "In most well-established disciplines, there are fairly stable views as to the content of the early stages of the degree program, which can remain virtually unchanged for decades" (Coate, 2009, p. 79). In addition to such 'core' content being *consensual*, Stephan & Massey (1982) also observe that it is *primary*, meaning that it often covers knowledge which has been established early in the given discipline's history, that it is relatively easy, and amenable to quantification and graphical representations which are easy to understand for novice students.

2.2.1 Looking for the elusive sociological core

Sociologists have been looking for such a 'core' throughout the history of the field, without clear success. Already in 1909 a group of selected experts failed to define it (Ballantine et al., 2016). More recent attempts have either looked for the core in a 'reified' form such as textbooks or syllabi, or made renewed tries at finding expert consensus.

Keith and Ender (2004) studied sociology textbooks from the 1940s and the 1990s to see if there was a stable core which endured over time. While it was found that on the level of chapter headings, there was agreement between the decades, on the level of concepts, only a very small 'core' was discovered. There were only 11 concepts which were covered in 90 percent of textbooks in both decades (see Table 3 for details).

Table 3. Empirical findings about the 'sociological core' in four selected studies.

Study	**Keith & Ender 2004**	**Wagenaar 2004**	**Persell et al. 2007**	**Lowney et al. 2017**
Method	Analysis of 16 textbooks from the 1940s and 19 from the 1990s	Survey of 301 experts	Interviews with 44 experts	Analysis of 65 introductory sociology syllabi
Describes the 'core' in terms of…	Stable 'domains' (chapter headings) over the decades	The most important "concepts, topics, and skills" for introductory sociology (average score on a 7-grade Likert scale)	What students should understand after taking introductory sociology (from most to least frequently mentioned)	What percentage of syllabi covered the topic as a 'standalone' topic. Only the topics scoring above 65%.
The 'core':	• culture • groups • social class • interaction • race • family • government • religion • economy • population	• stratification – general (5.6) • sociological imagination (5.5) • social structure (5.3) • class (5.3) • sociological critical thinking (5.2) • gender (5.2) • race and ethnicity (5.2) • power (5.2) • socialization (5.1) • culture (5.0) • applications to students' lives (5.0)	• learning to think sociologically • the scientific nature of sociology • complex and critical thinking • the centrality of inequality • a sense of sociology as a field • the social construction of ideas • the difference between sociology and other social sciences • the importance of trying to improve the world • the importance of social institutions	• What is sociology? (96%) • gender (94%) • race (89%) • class and stratification (88%) • culture (80%) • deviance/social control (75%)

Wagenaar (2004) surveyed the opinions of 301 experts in the field, asking them to rate the importance of certain "concepts, topics, and skills" on a 7-grade Likert scale from the viewpoint of an introductory sociology course. The most important item,

"Stratification – general", received a mean score of 5.6, and there were 10 other items scoring at least 5.0 (see Table 3). However, there were a further 28 items scoring at least 4.0 points, indicating that while it was possible to establish a ranking on average, expert opinions were diverse and tended to find a lot of things important. It is worth noting that items belonging to the categories of 'Methods and Statistics', 'Applied Sociology', and 'Values and Commitments' all scored below 4.0.

Persell et al. (2007) conducted interviews with 44 experts and asked them open-endedly about what they thought "students should understand" after taking introductory sociology. After the content analysis of interviews, a broad 'agreement' was claimed to have been found. "Learning to think sociologically" and "the scientific nature of sociology" were the two leading items, while the third, "complex and critical thinking", was only mentioned by less than third of respondents (see also Table 3).

Lowney et al. (2017) studied 65 'Introduction to Sociology' syllabi submitted for their research call. It was found that six content areas were covered as 'standalone topics' by at least two-thirds of syllabi, namely 'what is sociology?', gender, race, class and stratification, culture, and deviance/social control (see also Table 3).

As the findings presented above already indicated, the terms in which the sociological core was to be defined often tried to encompass the whole spectrum between 'information, facts, topics' and 'a skill, a way of seeing and studying the world', although different authors and approaches placed more emphasis on one endpoint than on the other. In that sense, the search for the core was indicative of a deeper, vexing question: what, after all, is sociology?

Abbott (2000), for example, contended that sociology was "organized around an archipelago of empirical questions: race and ethnicity, work and occupations, stratification, population, urban studies, organizations, and so on. It is not organized around a method […]; nor around a theoretical system […]; nor around a concept […]." And if 'an island of the archipelago would decide to secede', "sociology ha[d] no obvious way of retaining dominion" (Abbott, 2000, p. 297). He called for a "big new theoretical idea" to delineate the contours of sociology better.

The views of Collins (1998) partly stand in opposition to and partly answer Abbott's woes about what makes sociology special: he places the 'sociological eye' above all else, he posits that if there is any core, it is not an "eternal essence" but an activity. Putting prime importance on this ability to view the world in a special way, whether it is called the 'sociological perspective' or the 'sociological imagination', reverberates through the

literature on the ‘core’ and the introductory course (D’Antonio, 1983; Keith & Ender, 2004; Wagenaar, 2004; Persell et al., 2007; Keesler et al., 2008; Howard et al., 2014; Ferguson, 2016), although it has also been noted that even the definition of the sociological imagination is unclear and contested (Howard, 2015).

Another skill valued highly and seen as naturally connected to sociology and its education is that of critical thinking (D’Antonio, 1983; McKinney et al., 2004; Persell et al., 2007; Keesler et al., 2008; Zipp, 2012; Greenwood, 2013; Rickles et al., 2013; Howard et al., 2014; Pike et al., 2017), often coupled with the idea of ‘debunking’—which originates with Peter Berger (1963) and refers to sociology’s ability to challenge empirically wrong, often individualistic common-sense ideas about the social world. While the skill of critical thinking does seem to be fashionable, Buechler (2008) warned that it is sometimes portrayed as a ‘general technique’ applicable in any context, making it similar to instrumental rationality—eventually rendering it uncritical, and he called for a more precise definition of what is meant by ‘critical thinking’ in the context of sociology.

In the 2010s, practitioners seemingly put more and more emphasis on the (practicable) skills that sociology—either in its introductory incarnation or over a major—can impart in students. Even though the respondents of Wagenaar’s (2004) survey thought little of applied sociology, less than a decade later, Spalter-Roth et al. (2010), Zipp (2012), and Greenwood (2013) argued that sociology education only serves its students well if it prepares them for a career—and not solely for an academic one. Thus, the pendulum seems to have swung to ‘skills’ from ‘content’. However, there have been warnings that sociology would do well to ‘guard its territory’ in terms of subject matter. Huber (1995) wrote that a weakly defined core invited intrusions (which have indeed come, from economics and sociobiology). Best (2003) seems to be arguing for something similar when he writes that it would greatly improve sociology’s standing if we were able to show “that we actually know things about the real world […] that not everyone else knows” (Best, 2003, p. 9).

2.2.2 Why have a core at all?

Seeing that a century of efforts has not yielded a definitive ‘core’ of sociology, some have questioned whether it was even sensible to look for it. Keith and Ender (2004) argued that the requirement to come up with a core presupposes that the scientist operates ‘outside the world’, which is clearly impossible for sociologists for whom the ground ‘changes

beneath their feet'. Schweingruber (2005) argued that the internal diversity of sociology making it hard to define a core was actually a treasure. Ferguson (2016) suggested dropping the term 'core' from the discussion because it became so contentious as to hinder rather than help progress.

Ballantine et al. (2016), on the other hand, provided several strong reasons to keep on with the project of defining a 'core' (or something under a different name that serves the same function). These partly overlap with the arguments presented in Chapter 1 for introductory sociology's importance. First, as Ballantine et al. (2016) write, a well-defined 'core' provides a benchmark for measuring student learning—the essence is that it eventually helps educational practice. Others seem to concur, largely due to two reasons. First, standardizing introductory sociology courses to a degree helps student transfers, the ease of which is a requirement towards higher education nowadays. Second, higher education in general is facing increased scrutiny—at least in the United States where these debates largely unfold—about the value it provides and has to 'prove' it through program assessments (Ferguson & Carbonaro, 2016).

Second, having a core would provide clarity about the boundaries of sociology, both for those inside and outside it, strengthening the field and its professional identity (Ballantine et al., 2016). This 'existential' importance is argued for in the way that if sociology does not define a core for itself, one will be forced upon it by "others" such as "administrators, assessment experts, or government officials" (Ferguson, 2016, p. 2), suggesting a fear of a loss of autonomy. Such fears, in the US context, are coupled with threats of suffering cuts in funding or the elimination of whole programs and departments from certain universities (Huber, 1995; Greenwood, 2013; Ferguson, 2016).

Third, many have observed that the introductory sociology course was the 'public face' of the discipline, and for vast numbers of students, it was the 'first and only point of contact' with sociology (Schwartz & Smith, 2010; Zipp, 2012; Ferguson & Carbonaro, 2016). While this point is repeatedly being made in the literature, it is interesting to observe that authors rarely delve deep into what is currently wrong with this public face. It seems to be the assumption that a well-defined core, along with a carefully designed, pedagogically sound, engaging introductory course, will improve this image by itself.

2.2.3 Challenges of the introductory course in practice

The most recent scholarly contributions have moved on from trying to define a clear-cut core of sociology to delineating the introductory course in terms of practicable *learning*

goals. The Sociological Literacy Framework (SLF) by Ferguson & Carbonaro (2016) lists five essential concepts and six essential competencies to inform teaching in both the introduction and the sociology major (see Table 4).

Table 4. A brief summary of the Sociological Literacy Framework (SLF) by Ferguson & Carbonaro (2016).

Five essential concepts:	**Six essential competencies:**
• **The sociological eye.** The key theoretical traditions and the sociological imagination. • **Social structure.** On micro, meso, and macro levels. Power, authority. Relationships, groups, organizations. • **Socialization.** Self and society. The role of culture in shaping human action. • **Stratification.** In terms of power, status, income, wealth. Race, class, gender. Social mobility. • **Social change and social reproduction.** Movements and collective action, effects of macro-level changes.	• Applying sociological theories to understand social phenomena. • Critically evaluating explanations of human behavior and social phenomena. • Applying scientific principles to understand the social world. • Evaluating the quality of social scientific methods and data. • Rigorously analyzing social scientific data. • Using sociological knowledge to inform policy debate and promote public understanding.

Even with a fine blueprint however, the actual practice of teaching introductory sociology runs into several challenges. One of them lies in the fact that in most universities, it is attended by students who will major in sociology and many more who will not. The difficulty of striking a balance between teaching to a 'general audience' and the need to provide professional foundations for sociologists which will be required in later courses (Greenwood, 2013, p. 235) has been noted (Mitra & Sarabia, 2005; Howard & Zoeller, 2007), and some have suggested that separate introductory courses would serve both audiences better (Wagenaar, 2004; Greenwood, 2013, p. 236).

Several authors have noted that textbooks, instead of facilitating the teaching of introductory sociology, often have the opposite effect: they contain too much material, up to the point of being intimidating or unteachable (Zipp, 2012; Greenwood, 2013; Howard et al., 2014). Manza et al. (2010) described the motivations and constraints that textbook writers and publishers face, highlighting the fact that it is a risky business where catering to the widest possible audience by including excessive amounts of material is a safeguard against failure. Furthermore, because teachers of introductory classes are often not at the cutting edge of the discipline, textbooks they feel comfortable using will always lag behind the state of the art—which is true for other scientific fields as well. Ferguson & Carbonaro (2016) noted that the 'textbook survey model' of introductory courses was still very much alive.

Surpassing the 'old model' of lecturing and multiple-choice testing is crucial in order to achieve the ambitious learning goals that are often set for IntroSoc courses. In general, teaching methods and types of assessment that improve student engagement are suggested, such as teamwork, student mentoring, problem-based learning, case studies, service learning, and everything that forces students towards 'reflection' (McKinney, 2007). The course described by Rogers et al. (2020), designed with the state of the art of scholarship of teaching and learning sociology in mind, can be considered a model introductory class currently. It operates with approximately 50 pages of readings a week, three types of written reflections (again a weekly task), student discussion groups of six, 'sociological imagination' assignments, as well as simulations and games in the classroom—although it has to be noted that this was a class with 50 students, whereas in large enrollment courses, the room for maneuvering is severely limited (Schwartz & Smith, 2010). Another departure from the traditional 'survey of the discipline' method is the use of thematically organized classes which focus, for example, on health & illness, sports, or urban issues (Schwartz and Smith, 2010, Better, 2013, Howard et al., 2014).

There has been a change in the degree to which the taste of students is taken into account when designing IntroSoc classes. In the 1980s, D'Antonio (1983) explicitly stated he was against tailoring courses for the audience, and similarly, Stephan and Massey (1982) criticized the tendency of covering current events in introductory courses, saying it made the class look like "current politics" and it "attracted the wrong kind of students to the field" (Stephan & Massey, 1982, p. 430). By the 2010s, being 'responsive' to the student audience seems to be a given (Greenwood, 2013), even to the point of facing up to the reality that they do not want to spend long hours studying (Zipp, 2012). Howard and Butler (2018) make the point that measuring student knowledge can provide instructors with valuable insights that they can feed back into course design.

2.3 Changing the world? – The social role and public image of sociology[3]

Besides everything discussed in section 2.2, one more thing recurs frequently in discussions about what an education in sociology—either at the introductory or the major level—can or should provide: the idea of making an impact on the world. Sociology is

[3] This subchapter contains portions of text adapted from a co-authored article of mine (Miskolczi & Király, 2016). Sections 2.3.1 to 2.3.4 amount to a restructured, at times shortened, at times extended version of largely the first half of that article. In this way, very little of Gábor Király's original contributions are retained, and those will be marked where they occur.

said to prepare students for civic engagement and playing their part in reducing the negative effects of social inequality (McKinney et al., 2004). The "importance of *trying to improve the world*" was among the stated goals of IntroSoc for the experts interviewed by Persell et al. (2007, p. 309). Speaking of ethnic minority students, Keesler et al. (2008, p. 347) write that "sociology can provide a mechanism for combining higher education aspirations with the tools and ability to *impact society* on a macro level". According to Better (2013, p. 395), "students deserve innovative teaching that helps to *create change* both in their lives and their communities". "Sociology can at one and the same time emphasize critical thinking and *advocacy for a more just society*" (Pike et al., 2017, p. 10). (All emphases mine in the quotations.) Further, Huber (1995, p. 213) observed that sociology "suppl[ied] the knowledge needed to run welfare states" while Greenwood (2013, p. 234) claimed that it largely prepared for the human/social service sector. In contrast, 'service learning' and 'promoting social change' were among the lowest rated goals of the introductory course in Wagenaar's (2004) survey of experts, but both received higher marks when considered as part of the sociology curriculum.

It is an interesting question what instinctive reactions it would arouse to hear a student of physics, biology, medicine, economics, psychology, philosophy, or engineering speak about a desire to 'change the world' via their profession—probably it would be markedly different in each case. But is it desirable, or even allowed, for a social scientist to voice such aspirations? What *social role* can sociology play besides studying society? The current subchapter discusses that question by presenting the arguments that have been put forward in the field, along with a number of 'ideal types' for the ways sociology should engage with the world. Special attention will be paid to the Central-Eastern European experience of sociology and the roles it played in society.

2.3.1 Value-free and value-involved sociology

The debate about the *value-free* or *value-involved* nature of sociology looks philosophical at first sight. Yet it is practical in its implications because it pertains to the discipline's possible roles of *producing knowledge* and/or *shaping society*. Since sociology studies social life, it is inevitable that value judgements and moral issues will fall under its scope. However, it is not at all obvious whether the discipline can present evaluative, judgmental statements as its scientific *findings*. If sociology can be value-free (or, as some assert, it can be *only* that), then it has no grounds whatsoever to prescribe a direction for shaping society.

Gorski (2013) is a defendant of the value-involved position. He argues from the standpoint of ethical naturalism, which states that since human beings will flourish under certain conditions and falter under others, it is possible to tell what is 'good' for humans from what is 'bad' for them (Gorski, 2013, p. 543). Moreover, facts and values are not easily separated even philosophically. On the one hand, facts are often *value laden*, being established with the help of 'good' theories or 'the best possible' methods, which inherently carry a value judgment. Conversely, values are also *fact laden*, because they have an 'experiential basis', and we adjust our values on the basis of facts we encounter. Therefore, science is fit to investigate values as well as facts. "The object of these investigations is [to deliver] *discoverable truths about the good life and the good society*" (Gorski, 2013, p. 543, my emphasis). Even so, he does not think sociology can 'legislate' values or become a "Ministry of Ethical Information" (Gorski, 2013, p. 553).

In response, proponents of the value-free position assert that philosophically, facts and values are totally distinct worlds with no logical connection. The only foundation that a value-free social science needs is the mere ability to construct value-free statements, and that is perfectly possible. Confronting the idea of facts being value laden, they agree that *within* the practice of social science, 'good' theories and methods are selected in an evaluative way. However, this value judgment is *internal* to science, which in no way compromises the *output*, which can be presented in a value-free way. What they reject are *external* value judgments, whereby social science evaluates the world it studies, or gives advice on how the world 'ought to' be (Black, 2013, pp. 767–768; Campbell, 2014, pp. 446–447). They also refer to Max Weber, who in an essay on the topic repeatedly called "all matters of evaluation scientifically undemonstrable" (Weber, 1949, p. 6). For them, such a value-involved social science is simply *not science*. Thus, what is the ethos they suggest for sociology and the sociologist? Campbell (2014) allows that scientific findings can be put to use in order to achieve an end, and that rigorous scientists, outside their scientific roles, can engage in honest and well-separated value-involved activities (echoing Weber, 1949, p. 5). However, this dual role of the scientist might 'confuse audiences' and, therefore, it is best to stick to one's "true vocation" instead of playing the "high priest of humanity" (Campbell, 2014, pp. 449–451).

2.3.2 Public sociology and its critique

Michael Burawoy's (2005a) call *For Public Sociology* proposed an ambitious and influential program for sociology both in the roles of producing knowledge and shaping

society. Burawoy's starting point was a threat of market and state encroachment upon civil society, which meant that the academy was subjected "to political surveillance" (Burawoy, 2007, pp. 144–145) while being financially insecure as well (Burawoy, 2005a, p. 7). According to him, this experience is not unique to the West: in post-Socialist European countries, the free reign of the market was damaging civil society and the practice of sociology (Burawoy, 2009, p. 191). Burawoy saw the flourishing of civil society, by which he meant "organizations, associations and movements that are neither part of the state nor part of the economy" (Burawoy, 2009, p. 196), as essential for both a functioning democracy and the very existence of sociology, and for the case of their disappearance, he drew up frightening comparisons with Nazi and Communist regimes (Burawoy, 2005a, p. 24; 2009, p. 196).

Table 5: The fourfold division of labor within sociology as proposed by Burawoy (2005a).

		Type of audience	
		academic	extra-academic
Type of knowledge	instrumental	Professional sociology	Policy sociology
	reflexive	Critical sociology	Public sociology

Burawoy outlined a fourfold division of labor for sociology along two axes (see Table 5): the type of knowledge (instrumental or reflexive) and the audience (academic or lay). The first branch of the four is *professional sociology*, which defines its research programs according to its own considerations and executes them with the utmost methodological rigor and exactness (Burawoy, 2005a, p. 10). It produces instrumental ('factual') knowledge for an academic audience. Burawoy repeatedly stresses the prime importance of professional sociology (Burawoy, 2005a, p. 10; 2005b, p. 424; 2007, pp. 139–140), because this is the branch that provides *legitimacy* and *expertise* for the others. Without it, all sociology could be discredited as unscientific.

Next, *policy sociology* is "in the service of a goal defined by a client" (Burawoy, 2005a, p. 9), instrumental knowledge aimed at an extra-academic (lay) audience. The client can be the state and private organizations alike; a general risk here is that the privately defined goal can divert the scientific process (Burawoy, 2005a, p. 17). Then, *public sociology* „brings sociology into a conversation with publics" (Burawoy, 2005a, p. 7), providing reflexive ('evaluative') knowledge to extra-academic audiences. Finally,

critical sociology provides reflexive knowledge to academic audiences, and acts as some sort of 'conscience' of the discipline. His critical sociology is not the internal value-judgment of an otherwise value-free sociology: it questions the very foundations of established paradigms as its duty, serving scientific progress (Burawoy, 2005a, p. 10).

The program of public sociology is, therefore, *engaging sociology and society in a dialogue*. Burawoy also refers to Habermas's (1984) notion of "communicative action" in his discussion[4]. He claims that "public sociology has no intrinsic normative valence, other than the commitment to dialogue" (Burawoy, 2005a, p. 8). He sees this activity as a must in the present time of market and state colonization. By defending civil society, sociology defends "the interests of humanity" (Burawoy, 2005a, p. 24). For him, this is seemingly self-evident since he believes that most sociologists were driven to the profession by a "passion for a better world" (Burawoy, 2005a, p. 5).

Burawoy's vision of public sociology was not met with unqualified enthusiasm. Even those sharing his passion for a 'better society' did not wholly agree with him. Brint's (2005) overall assessment is that Burawoy's vision of public sociology is leftist and liberal. According to him, whatever passions govern the sociologist, they must always put scientific truth first, even if it contradicts their personal convictions (Brint, 2005, pp. 48–50). Furthermore, he found it unlikely that public sociology would really want to engage *all kinds* of civil publics; after all, book-reading or gardening clubs do not need reflexive sociological knowledge. He opined that Burawoy was concentrating on community groups that challenged the power structure (Brint, 2005, pp. 51–52). While he accepted Burawoy's fourfold division of sociological labor, he wanted to see professional sociology as the unquestioned structural and moral center of the discipline (Brint, 2005, pp. 57–58).

Deflem (2013), writing in the American context, labeled public sociology "heavily politicized", and its stance toxically ideological. In his narrative, sociologists have fallen for "a radicalized sociology, under the seemingly benign heading of public sociology, simply because *they do not have the intellectual skills necessary to think critically about their own activities*" (Deflem, 2013, pp. 161–162, my emphasis). The marketization of

[4] Habermas's theories could also offer a strong foundation for a discussion on the role(s) of sociology. His model of *deliberative democracy* (Habermas, 1996) outlines an arrangement in which the *power center* is influenced by a *periphery* during the political decision-making process. Since the center cannot manufacture *legitimacy* for and by itself, it is provided through *public discourse*: the opinion- and will-formation of citizens. (Public) sociology looks very much compatible with this model, playing a part in public discourse.

higher education contributed to that decline. In a climate where universities need a high number of students to survive financially, other—mostly natural—sciences were able to maintain their standards, but sociology, being intellectually weak already, succumbed to these pressures and accepted students of mediocre ability. For Deflem, this amounts to a "total lack of morality" and his remedy is to "make sociology unpopular" and relaunch it on much stricter scientific standards (Deflem, 2013, pp. 162–165).

Hungarian reflections on Burawoy's public sociology, published in *Replika* back in the day, were in broad agreement on two accounts: first, that sociology should be wary of committing itself to the service of civil society, because that would risk losing some of its autonomy and credibility, second, that critical sociology should not merely be an internal matter for the field, rather, every branch of sociology, including the professional, should operate with a strong critical capacity (Fleck, 2006; Lengyel, 2006; Némedi, 2006; Tardos, 2007). Scheiring (2006) echoed Brint's (2005) admonition of sticking to scientific standards first and foremost, even if the sociologist engages in 'public' activities, because prejudicial blindness or methodological weakness (bad enough in themselves) ultimately 'hurt the cause' as well.

2.3.3 The role of sociology: The Central-Eastern European experience

While the philosophical debate about the value-free or value-involved nature of sociology largely takes place outside time and space, Burawoy's diagnosis of state and market encroachment claimed to pertain to large parts of the world at the beginning of the new millennium. By investigating the Central-Eastern European historical experience of sociology and its practitioners, this section draws attention to the importance that wider social conditions bear not only to the (contentious) society-shaping, but also to the knowledge-producing activities of sociology. The views of CEE authors also help to map out the similarities and differences between Western (European and American) and Central-Eastern European discourse on the topic.

20th-century history up to the democratic transition. Sociology's history as an institutionalized discipline does not span a full century in Central-Eastern Europe. However, almost every country has an early 20th-century tradition, in which social scientific thinking was linked to questions of social modernization (Némedi, 2009, pp. 152–154). Sociology was established as a science in the early to late 1960s throughout the socialist bloc. Even though the state exerted strong control over it, that could not fully quench the development of a methodologically rigorous, positivist social science—one

which, by uncovering 'unfavorable truths' about social reality, also provoked the anger of the authorities (Boyadijeva, 2009, pp. 163–165; Mucha & Keen, 2009, pp. 130–133; Némedi 2009, pp. 154–157; Zdravomyslova, 2009, pp. 142–143). Following the democratic transition, CEE sociologies intellectually renewed themselves by re-assessing their relationship to Marxist philosophy and by adopting new theoretical and methodological standards. That led to the pluralization and the fragmentation of the discipline (Zaslavskaia, 1997, p. 38; Zdravomyslova, 2009, p. 140).

Sociology's reputation in new democracies. Transitioning to a market economy led to the creation of the fields of market research, media analysis, and opinion polling, where sociological knowledge could be applied, but also created the possibility of conflating sociology with those activities which were often seen as inaccurate, arbitrary, or outright partisan (Boyadijeva, 2009, p. 167). In addition, the part that sociology played in the social transformation was riven with conflict. While sociologists found it a 'natural' role to participate in the democratic transition with the provision of scientific knowledge, they had to accept that they were ill-prepared for it. The fact that sociology failed to foresee the collapse of socialism weakened its status as a 'proper' science, one capable of making predictions. Moreover, the production of sociological knowledge could not keep up with the pace of the rapid social transformation and was often unable to provide information either for policy use or for the purpose of keeping the public informed, undermining sociology's status further (Boyadijeva, 2009:170–171; Némedi, 2009, p. 160).

Functions proposed for sociology post-transition. Zaslavskaia (1997), in her discussion of Russian sociology, proposed three functions for the field: the first one is *scientific-cognitive*, i.e. knowledge production, which already had its beginnings in socialist times. The possibility for the next two functions was opened up by the transition to a democratic society. The *political function* means the provision of feedback for government and assistance in "the effective management of social development". The *civil function* is the 'creation of a civil society' and 'social enlightenment' –words which imply activism; however, Zaslavskaia sees it fulfilled through the provision of reliable knowledge to the public sphere (Zaslavskaia, 1997, pp. 34, 37), arguably not going even so far as Burawoy does with his dialogic public sociology.

In general, CEE sociology looks cautious in its activism: the need for a strong civil society is spelled out (Boyadijeva, 2009, p. 172), but sociology's main role is seen in informing it, even by those who emphasize that the discipline should "engage with a civic position" (Zdravomyslova, 2009, p. 147). Lengyel (2006), not so much as making a

proposition but rather an observation, remarked that it was in the nature of Hungarian sociology to "look for answers to the burning social issues" (Lengyel, 2006, p. 106). In a similar vein, Tardos (2007, p. 179) posited that "Eastern European sociologies are characterized by a problem-sensitive approach". Misetics (2017) contended that sociologists can be 'natural allies of those at the bottom'. While he did not think that every sociologist needed to be an activist, he noted that each should play their part in the counter-hegemonic struggle, not lastly because 'many, many of us' were called to the profession by a sense of moral responsibility.

The 'language' of public discourse.[5] Another possible role of sociology, described in connection with the post-socialist transition but also applicable in general, is to provide a *vocabulary of public reasoning* which helps both professionals and members of society to understand social reality. In Hungary, sociology exercised such functions in the past (Kuczi & Becskeházi, 1992; Szabari, 2010). Sociology "became the language of transmission for various groups of intellectuals; physicians, teachers, engineers, public educators, editors, etc. who used the terminology of sociology in public discourse" (Kuczi, 1996). To this we might add that, while supplying vocabulary in itself can be a value-free exercise, in public discourse, uses and abuses of this vocabulary will deepen the public's confusion: is it sociology, the language of which we use, that is inherently value-involved?

The relationship with politics. CEE authors agree that direct, personal involvement in politics, or propagandistic misuse of scientific sociology is unacceptable (Zaslavskaia, 1997, p. 39; Boyadijeva, 2009, p. 172). As the Hungarian reactions to Burawoy indicated, along with the cautious approach taken by others as well, sociologists in the region are also wary of overtly committing themselves to the cause of 'civil society'. Nevertheless, many also hold the view that providing knowledge for policy use—in order to improve social conditions—is an acceptable and desirable role, or a natural part of sociological practice which goes without comment (Boyadijeva, 2009, p. 172). Overall, the picture is one of an idiosyncratic approach to value-involved activities: being critical as academics and working on policy are legitimate parts of the identity of the post-socialist sociologist, but more direct ways of subversion are highly discouraged.

A curious exception to the 'no politics please' approach is that of Szelényi (2016) who—writing in an unspecified but seemingly global geographical context—identified a

[5] The points made in this paragraph were contributed by Gábor Király.

'triple crisis' of sociology and proposed a decidedly value-involved remedy. According to him, sociology is losing ground to economics and political science which now claim authority to produce knowledge about what used to be the subject matter of the former. He suggested that the solution was to make sociology 'radical' again, for it to be left-leaning and critical, and an agent in working towards a better society. In his response, Harcsa (2017) took the moderate position and called for an ideologically more cautious approach, renouncing radicalism, while he seemed to agree that sociology is facing methodological challenges in coming up with empirically grounded accounts of society, and that a critical sociology needs a vision of a better world against which to measure existing social conditions.

Is sociology unavoidably political?[6] The 2010s brought about a change in social and especially political conditions compared to the first two decades of post-socialist transition in Hungary (and elsewhere). There are concerns about the hollowing out of democracy, meaning a decline in political involvement, as well as about backsliding into semi-authoritarian practices (Greskovits, 2015), and the emergence of 'strongman' leaders facilitated by the crisis of party democracy and mass social media (Körösényi, 2005; Pakulski & Körösényi, 2013). An emblematic example of how politics operates in this new climate is the practice of 'national consultations' repeatedly carried out in Hungary (Bocskor, 2018). Usually accompanied by media campaigns, these consultations have been criticized on methodological grounds for using leading questions and a self-selecting sample, indicating that their point was not seeking but shaping citizens' opinions (Batory & Svensson, 2019).

Seeing that the state as a political actor now engineers its own 'knowledge' and 'truth', we might ask the question: what chance does sociology stand in such a climate, not even of shaping society, but merely of operating as a truth-seeking enterprise? Even the most value-free and purely scientific observations—namely, pointing out the appalling methodological errors amounting to manipulation—will propel it to the center of political turmoil. It seems that sociology does not even have to allow itself to formulate *external value judgments* in order to become 'political'. Rather, the mere act of drawing attention to methodological standards—normally a matter of *internal value judgments* for the field—unavoidably makes it so.

[6] Several points made in this paragraph and the next were contributed by Gábor Király.

Some have argued about such an ‘inevitable’ political nature of sociology, even without the context of post-socialist illiberalism. In the words of C. W. Mills, “in a world of widely communicated nonsense, any statement of fact is of political and moral significance” (Mills 2000 [1959], p. 178). Misetics (2017) as well as Havas and Fáber (2020) claimed that in a society based on concealing the ways in which social inequality is reproduced, shedding light on those mechanisms made social science inevitably politically charged. These views echo Howard’s (2015) claim that the sociological imagination itself is inherently critical (more in Chapter 6).

2.3.4 Synthesis of theory and CEE experience

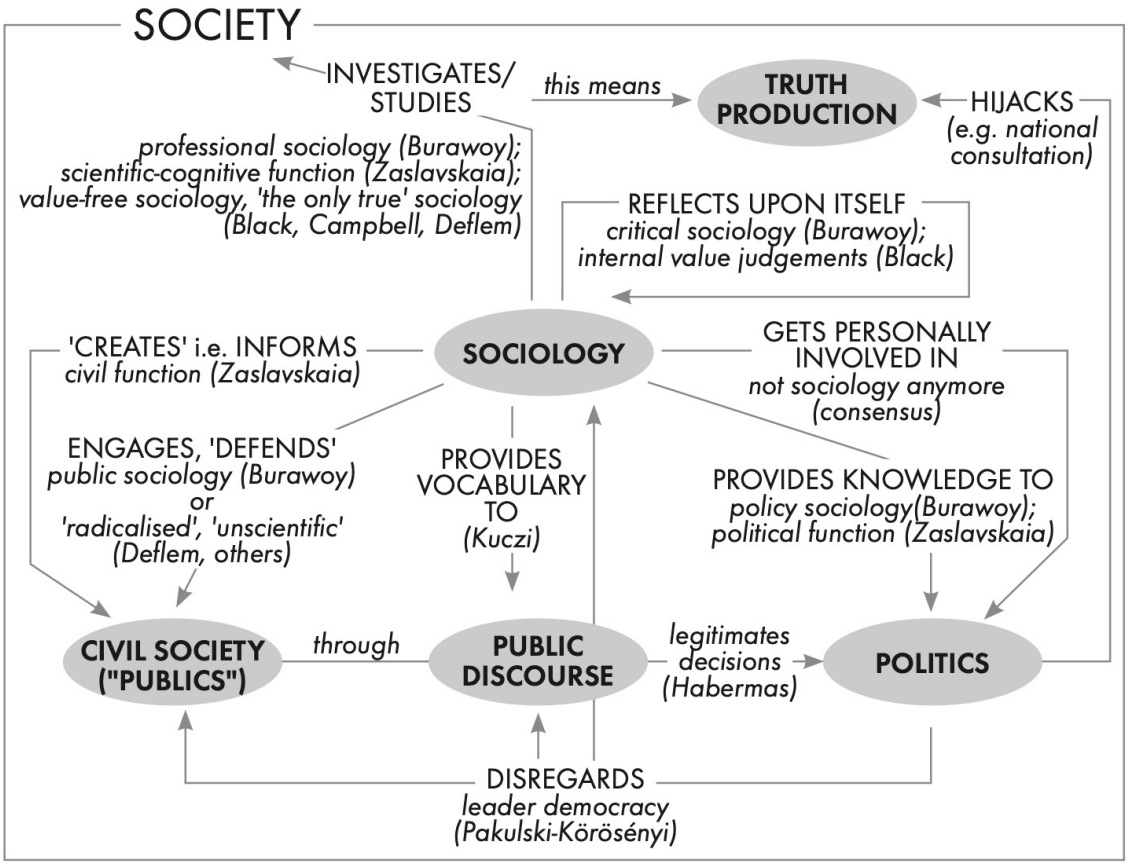
The inquiry into sociology’s role between producing knowledge and shaping society in the Central-Eastern European context is summarized in Figure 1. The ‘frame’ surrounding the whole chart is that of society, of which sociology and the other ‘spheres’ shown in grey ellipses are only a part or function. The arrows describe the relationships between these spheres, with references to the authors cited above. It is notable that several connections were identified by more than one author, even though they used different terms to explicate them.

The diagram aims to spell out that not all of the relationships are legitimate in everyone’s eyes, because some of them venture beyond *knowledge production* and aim at *shaping society*. However, there is a possibility for consensus between the views presented above. The *knowledge producing* function was not questioned by anyone, thus it looks to be a good starting point. Personal involvement in politics is basically also forbidden by all. However, the figure also shows that connections to politics will exist through other avenues, e.g. by providing vocabulary for public discourse, and sociological knowledge being adopted for policy use (which could actually happen without sociology explicitly ‘providing’ such information; after all, scientific results, once published, are free to be used by all). The possibility of politics hijacking the pivotal *truth-producing* activities of sociology were also noted.

The project of ‘defending civil society’ is contentious, and, as the figure shows, unacceptable for some. However, proponents of a value-free sociology, who find this connection suspicious and radical, did not discuss the type of *social organization* which allows scientific activity. The Hungarian experience especially strongly reminds us that even the most ‘disinterested’ science needs a wider social environment where freedom of scientific thinking, knowledge production and dissemination are possible, and truth

production is not monopolized by the market or the state (politics). When this basic freedom is at stake, all of the sciences might have to subscribe to a ‘minimal social program’ of its defense.

Figure 1. The possible roles of sociology in society, coupled with the CEE experience.



2.3.5 The reputation of sociology in the eyes of the public

It is one thing for sociology to ponder its role in producing knowledge and also, possibly, engaging with the public or shaping society in some way—but does the public want any of it? Being a self-appointed ‘savior’ is often not in the interest of those ‘being saved’ (Gagyi & Pulay, 2017, pp. 81–82). Table 6 offers a quick summary of studies that discussed the public image or reputation of sociology either as their main aim or in passing. Chapter 6 will present them in more detail.

Sociologists are generally convinced that their field has a bad reputation, but the empirical basis of such claims is often not clear. While some studies listed in Table 6 did investigate either representations of the field in various media (Bjorklund, 2001; Conklin, 2009; Siebel & Smith, 2009) or the opinions of a kind of ‘public’ (Hohm, 2008), several

indications about the reputation of the field come from essayistic/polemical articles or education research.

Table 6. The presence of various elements of sociology's reputation in relevant studies.

'x' signs indicate the presence of a given reputational element according to the article.

Study	**Empirical basis (the public or the media representation)**	**Positive image**	**Negative indications about sociology/sociologists**			
			sociology has dehumanizing tendencies	'opinion-ology'	social reformers, 'do-gooders'	unserious, impractical, low prestige
Bandini et al. 2016	students of sociology				x	
Berger 1963	essayistic/ polemical		x		x	
Best 2003	essayistic/ polemical				x	x
Bjorklund 2001	20th-century American novels	x	x			x
Conklin 2009	Hollywood films	x	x			x
Edgley et al. 2009	nursing students					x
Hohm 2008	survey of university deans	x				x
Howard 2015	essayistic/ polemical			x	x	
Kougioumoutzaki 2007	essayistic/ polemical			x		
McKinney & Naseri 2011	students of sociology				x	
Mitra & Sarabia 2005	students of an IntroSoc class	x				
Siebel & Smith 2009	News stories of the Associated Press			x		x
Spalter-Roth et al. 2010	students of sociology				x	

2.4 Chapter summary

Chapter 2 presented theoretical and empirical foundations for three strands of the research: the educational/learning aspect, the self-image of sociology as reflected in the introductory course, and the social role and public image/reputation of the field.

First, learning was approached in a qualitative way which concentrated on the personal nature of the process and the fact that it involved making connections between

pieces of information beyond their mere memorization. The importance of deep or surface student approaches to learning, as well as their dependence on teaching context, were highlighted. A circular relationship was argued for between learning and identity, and important research findings about long-term learning were presented.

There were gaps apparent in the empirical literature about learning in introductory sociology courses. Previous studies have typically not applied qualitative conceptions of learning in the operationalization of their dependent variables. It was also rare to find inputs in quantitative models which grasped the effects of peers or identity. Further, while there are qualitative studies on learning in sociology, and some are longitudinal, none of them investigate the long-term effects of an introductory course.

Second, the self-image of sociology was discussed by way of reviewing the literature on the quest for a 'sociological core' which is also supposed to underpin the introductory course. It was seen that discourse in the field recently moved on to defining IntroSoc in terms of learning goals which still contain both 'content' such as theories and concepts as well as 'skills' such as applying the sociological imagination. The importance of a well-defined core was argued for on the grounds that it provided a benchmark for measuring the outcomes of education, that it helped strengthen the identity of the field both internally and externally, and that it helped defend sociology against incursions and the danger of being sidelined or defunded. An empirical gap in this area is related to the relative lack of qualitative studies on learning in sociology: not much is known about the 'core of sociology' that students of an IntroSoc course form in their minds.

Third, concerning the social role and reputation of sociology, philosophical positions, ideal types, and professional standpoints were reviewed. Very few authors occupied firmly one of the theoretical endpoints of a completely value-free or an overtly value-involved sociology. Rather, practitioners from both the 'Western' world and Central-Eastern Europe emphasized the primacy of scientific sociology, the importance of the field's critical capacity, and advised care when it came to society-shaping activities, even though it was also suggested that sociology by its very nature has a hard time being apolitical.

While sociologists often seem convinced that their field has a bad reputation, few went to the trouble to underpin the claim with empirical evidence. That is another area where there is room for new contributions.

3 Data and method

The empirical findings of the dissertation rely on a dataset gathered over a little more than three years from students of an introductory sociology course held in the Fall semester of 2015. This chapter begins with a detailed description of the course, followed by an assessment of its pedagogical decisions. Subsequently, the process of data gathering, the type of data, and the sample will be presented in detail. Finally, the research questions will be formulated, along with the methods chosen to investigate them.

3.1 Description of the introductory course

Before the Fall semester 2014, the 'Foundations of sociology' course at Corvinus University of Budapest used to be taught by several different lecturers over the semester, while seminars were held by PhD students who largely prepared for their classes on their own. In the Fall semester 2014, Gábor Király was asked to take responsibility for the course as the sole lecturer, and he involved me in preparing a program for the seminars so that PhD students holding them had a teaching guide to rely on, and to make the education that students in different seminars received more standardized. The curriculum of the course evolved over time. Below, a description of its 2015 iteration is provided.

Students from five majors were registered to the course. Four belonged to the Faculty of Social Sciences: sociology, political science (also referred to as PS below), media and communication (MC), and international studies (IS). The fifth major was landscape architecture (LA), whose somewhat surprising presence is explained by the fact that the Faculty of Landscape Architecture still belonged to Corvinus University at the time. There were 427 students registered in total (more details later in Table 8).

Every week a 90-minute lecture was held (on Mondays at 13:40), where attendance was not compulsory, but every student could participate. Due to the schedule of their semester, landscape architecture students missed the first two lectures and joined on the third week (but were nevertheless provided with and tested on the material of the first two lectures as well). In addition to the lecture, social scientific students (but not landscape architects) also had weekly 90-minute seminars, where attendance was compulsory. Students could select their seminar group freely, which means that the most likely driving force behind who ended up in which group was students' ambition in creating a favorable timetable for their week. The class times which intuitively look the least preferable (19:10

on Mondays, and the two Friday timeslots) indeed had the smallest number of students. Out of nine seminar groups, those three groups had 14, 23 and 28 students, while all of the rest had between 37 and 40.

The overall structure of the course was a 'survey of the discipline'. That was not necessarily a conscious decision on our part, rather a continuation of a tradition we were familiar with. Also, the 'gravitational pull' of the Andorka (2006) textbook, one of only two major textbooks available in Hungarian besides Giddens (2008), was obviously a contributing factor. Even though the course material made considerable departures from the textbook, we were under the pressure of a (possibly imaginary) moral obligation that we should be able to direct students to a textbook source if they missed a class or did not understand the material on the basis of lecture slides alone. Students were warned to read the parts of Andorka (2006) that dealt with the 'newest' social trends[7] and the tests included questions on those parts.

Each week covered a topic, 12 in total, which were Introduction, Methodology, Demography, Family and groups, Social stratification, Social mobility and migration, Economy, Gender and sexuality, Culture and lifestyle, Deviance, Religion, and Ethnicity and minorities, in that order. All of the lectures were held by Gábor Király, but they were not of a monotonic 'sage on the stage' nature. Beyond presenting the conceptual foundations of each week's topic, current issues were brought into the picture, sometimes in the form of a short video material. The lecturer often provided time for students to discuss the topic at hand, and those participating in the discussion were given extra points (1 at each class).

Compulsory readings in the course comprised relatively short sections from books of the popular science genre, namely *Predictably Irrational* by Ariely (2011, *Kiszámíthatóan irracionális*), *Connected* by Christakis & Fowler (2010, *Kapcsolatok hálójában*), *Outliers* by Gladwell (2009, *Kivételesek*), *The Logic of Life* by Harford (2008, *Az élet rejtett logikája*), and *The Art of Choosing* by Iyengar (2013, *A választás művészete*)[8]. Based on the experience gained in the 2014 iteration of the course, the decision was made that students will be tested on those readings four times during the semester, unannounced in advance, in seminars. This was our way of motivating students to actually read the set texts (cf. Howard, 2004). Students could earn 5 points in the course

[7] Each chapter in the 2006 version of the textbook (published originally in 1997) contained an addendum under the heading 'changes at the turn of the new millennium' (*Változások az ezredfordulón*).

[8] All dates refer to the Hungarian editions, since those were the ones read by students.

in each of those tests. In addition to texts, there were 18 TED lecture videos specified in the syllabus which were required viewing.

Seminars were designed with the intention to involve students in discussion and reflection. In the weeks with set readings, discussions of the given text were held. Other times, the starting point for revisiting the week's sociological topic was a related TED video. Students were sometimes given interactive tasks such as conducting an impromptu observation, survey, or experiment (in the methodology week), assembling a news bulletin for the year 2050 (in the week covering demography), or playing the 'irrigation game' (Holtzman, 2005) which serves to foster the sociological perspective.

There were two tests during the semester, one written at halfway and the other at the end. Both comprised 25 questions of a multiple-choice nature. In both tests, 15 questions were devoted to the topics covered in the lectures, two to the 'newest developments' chapters of the textbook, and the rest to compulsory readings and TED videos. The latter mostly pertained to factual details of the readings and videos, to signal to students that they cannot get away with not reading and watching them. Questions related to the course material tested the knowledge and to some extent, the understanding of key concepts and theories. Very few questions pertained to numbers or names of authors.

In addition to compulsory elements of evaluation, students at the Faculty of Social Sciences had the opportunity to do project works alone or in groups of up to five. The individual project was a choice between an "Analysis of my family's history in light of social history" or the "Analysis of a socially critical song". The group project was about "creating a board game that simulates a social problem or life situation". Students were required to read and summarize sociological literature in each of the tasks. Out of 303 students who had the choice, 81 did a project individually and 61 in a group. Students had to report on their progress with the project three times during the semester, and providing feedback placed a high workload on PhD students holding the seminars.

Table 7 describes the system of evaluation for the course. Landscape architecture students, having no seminar, had a different structure of evaluation than other majors. In addition to the opportunities listed so far, students could also earn 6 extra points by participating in the present research. The 'normal' elements of assessment added up to 100 points, of which 61 had to be earned for a pass.

Table 7. The evaluation system of the introductory course

Evaluation element	Social scientific majors	Landscape architecture
Two multiple-choice tests, written at halfway and at the end of the semester	2 x 40 points	2 x 50 points
Four small tests covering set readings	4 x 5 points	–
Total points without extra	100 points	
Extra points available	for activity during lectures (1 point each time)	
	for participation in the research (6 points)	
	for individual (15 points) or group project work (20 points)	–

Student reception of the course was favorable. According to student feedback collected by the university, most of the seminar leaders received a better evaluation than Corvinus teachers on average, and Gábor Király's scores were outstanding.

3.1.1 Assessment of the introductory course's design

As it was seen, our course design was partly influenced by 'tradition' where we did not push the envelope: in going with a 'textbook survey' approach, whereas in other areas, we tried to innovate, e.g. by incorporating readings that we assumed were more accessible to a general audience than sociological classics, as well as games and discussions to the seminars, and also giving the opportunity for project work.

Overall, the design of the course reflected our 'teaching ethos' for the course outlined in Miskolczi & Király (2016, pp. 73–77). First, we did not consider it our duty to 'sift' students, therefore we did not make the course overly hard. We were aware that that decision came with an upside and a downside: it did not alienate students from sociology because of potential bad results, but it could also make it look easy. Second, we placed emphasis on dialogic teaching, both in the lectures and seminars. The aim was to relate sociological topics to students' lives and provide them the opportunity for reflection; the risk was that a conversational atmosphere made sociology look like a matter of opinion. Third, the project works required a mini-research, supposedly instigating a deeper engagement with certain sociological topics.

The description of our introductory course stated the following:

> *"The role of the course is to acquaint students with the fundamental concepts and theories that are essential to interpret social phenomena. The course pays*

special attention to the characteristics and problems of Hungarian society, most of all as it is in the present day, and the direction of ongoing changes.

Sociology as a science […] helps the student to recognize the essence of the relationship between individual and society. It is important for the student to be able to assess the results of sociological research, or at times contradictory theoretical and practical approaches, thereby developing their analytic and creative thinking."

Under "course goals and competencies", the following was written:

"The student should be able to formulate relevant sociological questions pertaining to the explanation of social phenomena, and should be able to recognize the sociological background and relationships of topics covered during the semester. They should become acquainted with the most important explanatory theories, be able to highlight their differences, and apply them on their own to simple phenomena."

We have to admit that our formal system of assessment was probably more successful in ensuring the attainment of some of the course goals than others. Because of the fact that we had hundreds of students, and seminar leaders were occupied enough with holding classes and supervising project works, we went with multiple-choice tests for assessment. The structure of the tests suggested that the most important thing was to remember sociological theories and concepts, as well as certain characteristics of Hungarian society, besides certain key points from readings and TED videos.

Keeping in mind that students always adopt their learning approach to the way they are tested, based on our system of assessment, landscape architecture students and those who did not do project work were not motivated externally to engage with the material in a deep way. We were also aware that participation in discussions, which were rewarded with extra points in the lecture, might fit students with a certain type of personality more than others. When it comes to our stated goals of developing analytic and creative thinking, and application of theories to real-world phenomena, it was up to the project work or an engaging atmosphere in seminars to develop those.[9]

[9] As the course evolved, that changed somewhat. In the Fall 2016 semester, a new element was inserted into the program of the seminars. Students practiced a 'research plan' exercise almost every week and they were tested on it two times during the semester. The research plan required an ability to choose a theoretical frame, a data gathering method, a sample and an analysis method for the investigation of a research topic or question.

Knowing that the dissertation is concerned with the impact that the introductory course made on students, the points made above are important because they can inform what kinds of research aims are viable. Seeing that students were mostly tested on the 'material' content of the course and not really on skills, it was likely that they conceived of introductory sociology as the sum of those concepts and topics. It is also important to keep in mind that landscape architecture students received a different 'treatment' than others, having no seminars, no readings and no chance for project work.

3.2 Data gathering waves

This is a longitudinal research which had three data gathering waves, referred to as T1, T2 and T3. The point of T1 was to gather data from students at the very beginning of their studies, representing a state where they were still 'before' studying sociology. T2 happened at the end of the introductory course, representing a 'right after' state. T3 was done at the time the students of the original course graduated, creating a data point 'years later'.

T1 data gathering for social scientific majors was done in the first week of the Fall 2015 semester (14-18 September). Data gathering was delegated to seminar instructors, which means that several students had participated in the very first lecture of the semester before providing data[10]. Painstaking effort went into ensuring anonymity. Seminar instructors (all of them PhD students at the time; the present author was not one of them) prepared the paper-based questionnaires by writing a code on each. The code corresponded to a student, but only seminar leaders knew which code belonged to which student. During the seminar, the instructor called each student by name and gave them the questionnaire prepared exactly for them. Students were not obliged to give responses but were promised six extra points in the course if they did. Subsequently, seminar leaders handed over the questionnaires (identified only with the code) to second-year BA students who helped the research with data digitalization. The electronic database thus created did not contain information about respondents' identities.

T1 data gathering for landscape architecture students was done during the third week of the semester, at the very beginning of the first lecture these students could even attend (28 September). For the lack of a better solution, students were asked to code their

[10] Due to the fact that lecture attendance was not compulsory, an exact number cannot be given. Knowing that it was the very first lecture of the semester, it can be expected that the number was high.

questionnaires themselves by writing down the last five digits of their phone numbers. When handing in their questionnaires, their names were also marked on a list to make it possible that they receive the extra points in the course for participation, but names and phone numbers were never connected. Responses of LA students were digitalized by the present author.

T2 data gathering happened in a very similar way, during the last week of the Fall 2015 semester (14-18 December). Landscape architecture students were asked to give their responses at the lecture, which coincided with the time of the second multiple-choice test. Time was given for students to fill both the test and the questionnaire properly, but it is possible that in the given situation, giving a well-rounded response to the questionnaire was not their top priority. Once more, LA students coded their questionnaires with their phone numbers (so that T1 and T2 data could be matched), and there was no way of knowing their identity. That also meant that matching their responses to their performance in the course (i.e. multiple-choice tests) was not possible.

For social scientific majors, T2 data gathering was conducted by seminar instructors in the same way as in T1. Questionnaires were handed over to BA student helpers of the research who again digitalized responses. Additionally, seminar instructors were asked to add data about students' performance in the introductory course to this database: they were the only people who could identify students based on their codes. Thus, a database was created where the scores for various tasks in the semester (multiple-choice tests, tests on readings, class participation, project work) were also present, but only for social scientific students.

T3 data gathering was done at the time the original students of the course were set to graduate. Accessing the same respondents was hard. First of all, the majors had no course together by that time, and even within the majors, the option of going to a 'mass' class which theoretically involved every student in the year-group was not present for media and communication students. T3 data gathering was done solely by the present author. Wherever possible, I attended all exam dates of the aforementioned classes, and with the permission of the examiner, asked the students to stay a while after they finished their exams to give me their responses. I had no way of motivating students to participate, and some of them indeed did not, but my impression was that on each occasion, a sizeable majority of those present were eager to help me. As for media and communication students, some of them I could access at an exam, but most of them were only accessible at the very time of their thesis defense. Therefore I attended each such occasion, and with

permission, I asked students to take some time to fill my questionnaire after having finished their defense. At the end of the day, I went back and gathered the questionnaires. The earliest day of T3 data gathering among social science majors was May 14, 2018, and the last one was June 28.

For landscape architecture students, T3 data gathering was done at the time of their thesis defenses, much in the same way as described above, but these occasions happened between 10 and 14 December 2018.

T3 data gathering presented an issue due to the longitudinal nature of the research: the newly gathered data had to be matched to the existing T1-T2 database. In the case of landscape architecture students, this was relatively solvable, because I asked students once more to code their questionnaires with the last digits of their phone numbers. Out of 38 LA respondents at T3, only one could not be matched to data from previous waves.

Matching the identities of social science students to their earlier responses was much trickier, and was resolved by an appeal to a breach of anonymity. Respondents were kindly asked to give their Neptun codes[11] in the T3 questionnaire, with the promise that the information thus obtained will be kept confidential and that data analysis was going to focus on supra-individual levels anyway. Then I asked the original seminar instructors of the introductory class to give me their lists matching T1 and T2 questionnaire codes to student identities. Out of 149 social science students giving responses in T3, 131 could successfully be matched to earlier data.

3.3 The questionnaire and mind map data

The questionnaire given to students was almost identical in each wave, and rather short overall (specimens can be found in the Appendix). The T1 questionnaire included the biggest number of items which were the following:

- gender of the respondent,
- year of birth,
- university entry score: namely, the score that was calculated in the official Hungarian university entry procedure in 2015 for the respondent's application to the major they were eventually accepted to,
- mother's and father's level of education,
- the type of settlement the respondent lived in,

[11] Neptun is the electronic learning administration system used by Corvinus University.

- a 1-to-10-scale item on life satisfaction (‘happiness’),
- and finally, the questionnaire included six items intended to measure the learning approach of students. Five of those items were borrowed from Biggs’s revised two-factor study process questionnaire (Biggs et al., 2001), and a sixth one was added by the present author.

Notably, the major of the respondent was not asked directly, because that was indicated on the questionnaire by the seminar leaders.

In T2, only the ‘happiness’ item and the learning approach items were asked.

In T3, the following items were surveyed:

- major,
- gender,
- year of birth,
- mother’s and father’s level of education: but this time, worded differently from the way it had been done at T1 (T1 asked about the Hungarian *édesanya* and *édesapa*, taken to mean the biological parents; the T3 questionnaire explicitly asked students to think of the persons who, in the role of mother or father, ‘shaped their lives most significantly’),
- the life satisfaction item,
- the six items measuring learning approach.

The reason for asking items again such as gender, year of birth and parental education in T3 was twofold. One, it was done to ensure data quality (some items that might have been coded in the database years earlier had a chance to be amended; parental education was better measured in the updated wording), two, it helped with matching T3 responses to earlier ones.

The most important thing in data gathering, however, was the part where respondents were asked to draw a mind map around the central concept of ‘sociology’. The mind map is a diagram made up of portions of text (nodes) and lines that connect them, starting out from a core, branching out to several levels (Umoquit et al., 2013). Before doing their own, students were shown a simple example of a mind map, drawn around the concept of *university*, including associations such as *classes*, *campus* or *students*. The instruction given to students was worded as “What comes to your mind when hearing the word *sociology*?” Students were given roughly 20 minutes to work on

their mind maps. In every wave, respondents had an A3 size page to draw their mind maps on.

3.3.1 The mind map as data source

The mind map was invented by Tony Buzan in the 1960s "to be an active learning technique to aid with the process of learning, memorizing information and enhancing creative thinking" (Beckett, 2010). For decades it was indeed used mainly as a learning tool, thought to yield better results in memorization than traditional note-taking (Meier, 2007).

The use of mind maps, as well as other types of diagrams, as data sources in research emerged in the second half of the 2000s as a decade, first and foremost in the field of education and health sciences (Umoquit et al., 2011). The practice was not standardized to the level the use of interviews or focus groups are, and Umoquit et al. (2013) proposed the term *diagrammatic elicitation* for all uses of diagrams as data sources. Within their categorization, the present research falls into that of *participant-led diagrammatic elicitation*, because diagrams were provided directly by the respondents.

Proponents of diagrammatic elicitation have listed several virtuous qualities of mind maps as data sources. Mind maps are easy to learn and draw, they encourage creativity and self-expression (Eppler, 2006). Because of the instruction being minimal, there is no bias introduced by the researcher, and mind maps give "more uncensored and unique data [...] than more traditional qualitative data collection methods" (Umoquit et al., 2011, p. 3) as well as "forc[e] participants out of practiced scripts and narratives" (Wheeldon & Faubert, 2009, p. 79). Additionally, they might be able to touch at sensitive topics without direct questioning (Bravington & King, 2019). Via mind maps, mental content can be expressed freely, there is no pressure to use specialized vocabulary, and diagrams in general go beyond the "limitations built into language" (Wheeldon, 2010, p. 97). Mind maps are highly individualized, personal accounts of mental content (Eppler, 2006; Wheeldon, 2010). Respondents reported that drawing mind maps helped them "[find] focus", "organize their thoughts […] systematically" (Wheeldon, 2011, p. 518) and "remember events from years ago" (Wheeldon & Ahlberg, 2019, p. 1125).

There is no single, standardized way of analyzing mind map data. Various approaches include quantification along the number of concepts (Wheeldon & Faubert, 2009) or a more elaborate scoring system (Evrekli et al., 2010; Wheeldon, 2010), qualitative approaches such as content analysis and thematic analysis, as well as mixed

methods (Umoquit et al., 2011). Maps had been used before to show differences both in time and between groups of respondents (Umoquit et al., 2011, p. 3) – which is exactly how they are used in this dissertation.

There is no clear indication in the literature about how reliable mind maps are as data gathering tools (i.e. in the sense of them yielding the same results time and time again), but two interesting studies from the field of health sciences attest to their validity (i.e. the fact that they 'measure' mental content well). Tattersall et al. (2011) conducted a series of interviews with patients, which were then given out to several researchers to analyze: one of them was a novice who used mind mapping to 'transcribe' the interviews as they were listening to them; another was an experienced qualitative researcher who analyzed the interviews in the traditional way, involving their full transcription. It was found that in terms of the *thematic variety* of results, the mind mapping transcription of the novice researcher yielded almost as rich a picture as the full-on analysis of the expert. When it came to depth and detail, traditional analysis gave richer results (Tattersall et al., 2011). Similarly, Burgess-Allen and Owen-Smith (2009) conducted focus groups which were transcribed into mind maps by a researcher 'live' as the sessions went along, and in the end the respondents were also able to make comments and suggestions. Once again, the focus group transcripts were also analyzed by expert researchers, and the themes brought up by their analysis and the live mind mapping were broadly the same, with the former being richer in detail (Burgess-Allen & Owen-Smith, 2009).

Even though in the aforementioned studies, mind maps were not drawn by participants themselves, the finding that the mind maps gave almost as rich a picture of a source material as its full transcription is encouraging and suggests that mind mapping is indeed a valid way to tap into the thematic variety of topics associated with a central concept.

Besides the absent verdict on reliability, some other possible drawbacks of using mind maps as data sources are also mentioned in the literature, one of them being the fact that such diagrams are highly idiosyncratic and possibly hard to understand by people other than the creator (Eppler, 2006). Wheeldon & Ahlberg (2019, p. 1122) report that women find the mapping exercise to be easier than men do, which suggests the possibility that mind map data provided by women will be richer.

3.4 Description of the sample

It was true in every data gathering wave that while every respondent filled the questionnaire (with a very low, single-digit number of missing responses on only some of the items), not all of them provided a mind map. For example, the questionnaire was filled by 402 students in T1. This means that complete socio-demographic data is available for 402 students, and these 402 respondents will be considered the 'core sample' in subsequent descriptive statistics. However, the really worthy responses, called 'valid' responses now for want of a better term, were only those who gave a mind map as well. Out of the 402 students initially reached, only 397 provided a mind map at T1, and 373 at T2. (Those 373 included the five respondents out of the original 402 who did not give a T1 mind map.) Out of 187 respondents reached at T3, three did not provide a mind map and were excluded from the sample outright. Of the remaining 184 respondents, the identities of 167 could successfully be matched to one of the 402 respondents in the core sample. The remaining 17 respondents of T3 are a mystery: it is possible that they came from the 402 original respondents, but it is also possible that T3 was the first time they participated in the research. Because of that uncertainty, data of these 17 T3 respondents are typically not included in the descriptive statistics below (unless otherwise indicated).

Table 8 shows a breakdown of the introductory class's student body and the 'valid' responses (i.e. the ones with mind maps provided) in each wave.

Table 8. Description of the course and the samples by major.
Percentages are row percentages.

	Sociology	Political science	Media and communication	International studies	Landscape architecture	All
Registered to the course	74 (17.3%)	44 (10.3%)	79 (18.5%)	106 (24.8%)	124 (29.0%)	427 (100.0%)
Gave mind map at T1	67 (16.9%)	42 (10.6%)	75 (18.9%)	99 (24.9%)	114 (28.7%)	397 (100.0%)
Gave mind map at T2	61 (16.4%)	38 (10.2%)	70 (18.8%)	97 (26.0%)	107 (28.7%)	373 (100.0%)
Gave mind map at T3	40 (21.7%)	27 (14.7%)	36 (19.6%)	43 (23.4%)	38 (20.7%)	184 (100.0%)

While the T1 sample of valid responses achieved a 93 percent coverage of the whole student body, the same metric at T2 was still a respectable 87.4 percent, which dropped to 43.1 percent by T3. The figures in Table 8 also show that the internal composition of the T1 and T2 samples was very close to that of the population (by majors), while in the

T3 sample, sociology and political science students are over-, while landscape architecture students are underrepresented. From the viewpoint of the research, this means that the T3 sample was made up of proportionately more students with an affinity to social sciences, while the 'lay' audience of LA students was underrepresented.

As it has been said, not every respondent gave a mind map every time they filled the questionnaire. Consequently, some respondents are only part of the 'valid' sample in one wave, some in two, some in all three. Table 9 shows that breakdown.

Table 9. Description of the sample of 'valid' responses (i.e. ones with mind maps) by participation in combinations of waves.

Presence in the sample (with a mind map response)	Number of students
All three waves	161
Only T1 AND T2	207
Only T1 AND T3	5
Only T2 AND T3	1
Only T1	24
Only T2	4
Only T3	17
At any time (sum of the above)	419
Other groupings within the sample	
'Core' sample (present in either T1 OR T2)	402
'Dropouts' (present in either T1 OR T2 but NOT T3)	235
'Survivors' (present in T3 AND in at least one earlier wave)	167

The table also defines two broad categories of respondents: 'dropouts', meaning those students who provided a valid response in either T1 or T2 but were not reached in T3, and 'survivors', meaning those who provided a valid response in either T1 or T2 and were also reached in T3. The labels are obviously somewhat liberally given, because the fact that a student was not reached in T3 does not necessarily mean that they 'dropped out' of their studies or the university. Some of them might have, but in fact, a high level of student ambition (e.g. doing a semester abroad, starting another program) could also be the reason for not finishing one's studies in the pre-assigned timeframe.

3.4.1 Socio-demographic background and academic excellence

This section provides an overview of respondents' socio-demographic backgrounds and some indicators of their 'academic excellence' (attitude or performance). Because of the

fact that major area of study is taken to be the most meaningful attribute of students, the descriptive statistics will be given for the whole sample and separately by majors as well.

Table 10. The proportion of male and female students among valid respondents in each wave.

Percentages are row percentages, separately for each wave.

	T1		T2		T3	
Major	**male**	**female**	**male**	**female**	**male**	**female**
Sociology	37.3%	62.7%	36.1%	63.9%	25.0%	75.0%
Political science	61.9%	38.1%	65.8%	34.2%	63.0%	37.0%
Media and communication	20.0%	80.0%	20.0%	80.0%	11.1%	88.9%
International studies	39.4%	60.6%	39.2%	60.8%	32.6%	67.4%
Lansdcape architecture	28.9%	71.1%	28.0%	72.0%	18.4%	81.6%
Whole sample	34.8%	65.2%	34.6%	65.4%	28.3%	71.7%

Table 10 shows the proportion of male and female students among valid responses in all three waves. T1 and T2 values are unsurprisingly very close to each other; it can be seen that as in the whole sample, female students were a majority in every major except for political science. By T3, gender proportions became more polarized towards female students, again with the sole exception of PS students.

Table 11. Parental education of students (in the core sample of 402 respondents originally reached). Column percentages.

	Sociology	**Political science**	**Media and comm.**	**International studies**	**Landscape architecture**	**All**
No secondary school	3 (4.5%)	3 (6.8%)	2 (2.7%)	2 (2.0%)	7 (6.1%)	17 (4.2%)
Secondary school, one parent	10 (14.9%)	4 (9.1%)	5 (6.7%)	6 (5.9%)	12 (10.4%)	37 (9.2%)
Secondary school, both parents	11 (16.4%)	7 (15.9%)	9 (12.0%)	6 (5.9%)	19 (16.5%)	52 (12.9%)
University, one parent	12 (17.9%)	11 (25.0%)	22 (29.3%)	20 (19.8%)	30 (26.1%)	95 (23.6%)
University, both parents	31 (46.3%)	19 (43.2%)	37 (49.3%)	67 (66.3%)	47 (40.9%)	201 (50.0%)
Simplified categorization						
No university degree	24 (35.8%)	14 (31.8%)	16 (21.3%)	14 (13.9%)	38 (33.0%)	106 (26.4%)
University degree	43 (64.2%)	30 (68.2%)	59 (78.7%)	87 (86.1%)	77 (67.0%)	296 (73.6%)

Next, Table 11 shows the (needless to say, highest) level of parental education that students had. Responses about mother's and father's education were condensed into an ordinal variable with five levels: none of the student's parents finished secondary school; only one parent finished secondary school; both parents finished secondary school; one parent had a university degree; both parents had university degrees. The fact that the majority of students come from a university-educated parental background is not surprising in light of Corvinus University's prestige in Hungarian higher education.

The questionnaire also asked students about the type of settlement they lived in. This variable was not used in subsequent analyses but a quick overview of it is given in Table 12. Notably, respondents were not given objective criteria to differentiate between a village or small city, or indeed a small or an 'other major' city, but some overall picture should still be discernible.

Table 12. Type of settlement of students (in the core sample of 402). Column percentages. Data for one landscape architecture student missing.

Type of settlement	Sociology	Political science	Media and communication	International studies	Landscape architecture	All
Capital city	33 (49.3%)	21 (47.7%)	36 (48.0%)	45 (44.6%)	36 (31.6%)	171 (42.6%)
County seat city	4 (6.0%)	6 (13.6%)	18 (24.0%)	16 (15.8%)	24 (21.1%)	68 (17.0%)
Other major city	2 (3.0%)	2 (4.5%)	3 (4.0%)	4 (4.0%)	7 (6.1%)	18 (4.5%)
Small city	15 (22.4%)	3 (6.8%)	9 (12.0%)	24 (23.8%)	30 (26.3%)	81 (20.2%)
Village	13 (19.4%)	12 (27.3%)	9 (12.0%)	12 (11.9%)	17 (14.9%)	63 (15.7%)
Total	67 (100.0%)	44 (100.0%)	75 (100.0%)	101 (100.0%)	114 (100.0%)	401 (100.0%)

Another set of variables relate to the 'academic excellence' of students (shown in Table 13). The concept is approached in two ways. First there is performance: data about university entry score and scores achieved on multiple choice tests in the introductory course show how successful a student is in usual settings of academic testing. Second, responses to items from Biggs et al.'s (2001) study process questionnaire are indicative of a student's learning approach. 'Surface' and 'deep' approaches described in section 2.1.1 were taken to be 'endpoints' of a continuum. In each data gathering wave, six Likert-scale items measuring that approach were asked (three worded in a way so that agreement

was indicative of a deep approach, the other three of a surface approach). However, it was found in data analysis that item number 6 was not consistent with the rest, and consequently, it was dropped, along with the item number 2. Eventually, four items remained (two indicative of deep, two of surface approach), and a surface-to-deep learning approach score was calculated from them, the values of which could range from -8 (the surface end) to 8 (the deep end). Admittedly, this is an ad hoc measure, but at least it is available.

Table 13. A comparison of majors by academic variables (mean values in each cell).

Major	University entry score[a]	Multiple choice test score[b]	Learning approach score[c]		
			T1	T2	T3
Sociology	414.3	77.1	1.63	1.18	1.53
Political science	442.3	77.7	1.21	0.47	0.00
Media and communication	419.0	74.0	1.73	1.16	-0.53
International studies	458.1	80.1	2.43	1.62	1.84
Landscape architecture	385.4	68.6	1.19	0.75	1.16
All	421.6		1.68	1.10	0.90

[a] In the core sample of 402 students.

[b] Scores shown as 'percent of maximum'. For social scientific students, the values were calculated from data belonging to students in the core sample. For landscape architecture students, the score was calculated from the test results of all 124 students registered for the course, because data was not available separately only for students in the sample.

[c] Values calculated from 'valid' responses in each wave.

Socio-demographic and academic background data reinforce the notion that respondents hailed from advantageous (dare one say privileged) positions of Hungary's social structure, although there are a number of details worthy of commentary. First, it is interesting to note that sociology students seem to be recruited either from the capital city (they have the highest percentage coming from Budapest out of all majors) or distinctively smaller settlements (towns or villages), and virtually not at all from major cities of the countryside. It might also be somewhat surprising (at least, perhaps, in comparison with LA students) that sociology students had the lowest proportion of a university degree in their parents' education. When it comes to university entry score and the fact that both majors are female-dominated, sociology students as a group are closest to media and communication students, however, when it comes to parental background and type of settlement, sociology and political science students look most similar. Across the board, international studies students look to be the most privileged and academically best: over

86 percent of them have at least one parent with a university degree, and their performance and learning approach scores outshine those of the rest in each wave.

3.4.2 Comparisons of 'dropouts' and 'survivors'

As has been said, the research was longitudinal, and sampling was not random at any point. While the T1 and T2 waves of data gathering reached what was almost a complete sample, in T3, only 43 percent of students registered to the introductory course were reached. It can be known that at T3, only students who were finishing their BA (BSc) studies in the pre-assigned timeframe of three (in the case of LA students, three and a half) years were contacted, making it intuitively likely that the T3 sample consisted of academically better students than the T1 and T2 ones. Table 8 above showed that sociology and PS students were over-, while LA students were underrepresented in the T3 sample, and Table 10 showed a tilt towards even more female respondents.

Table 14 below compares two disjunct parts of the sample: 'dropouts' (students who were reached in either T1 or T2 but not T3) and 'survivors' (students who were reached in either T1 or T2 and also T3) along a number of observed characteristics. The dimensions shown fall into three broad categories: academic variables of performance (university entry score, multiple choice test score in the intro class, and a deep learning outcome, which will be explained in more detail in section 4.6.1.8), academic variables of learning approach (in the T1 and T2 waves), and socio-demographic background variables.

Table 14. Comparison of 'dropouts' and 'survivors' of the sample along the metrics named below.

	Dropouts	**Survivors**
University entry score, average		
All	419.5	424.8
Sociology	416.3	412.6
Political science	439.3	444.1
Media and communication	420.7	416.8
International studies	459.0	456.5
Landscape architecture*	379.8	397.0
Multiple choice test score (percent of maximum), average		
All[a]	77.3	77.7
Sociology	78.0	76.4
Political science	75.6	78.8
Media and communication	73.4	74.8

	Dropouts	Survivors
International studies	79.8	80.8
Proportion of deep learners (as in section 4.6.1.8)		
All[a]	39.6%	36.0%
Sociology	53.8%	40.0%
Political science	18.2%	16.0%
Media and communication	35.9%	38.7%
International studies	39.7%	44.1%
Learning approach score at T1, average		
All	1.70	1.75
Sociology	1.19	2.03
Political science	1.88	1.15
Media and communication	2.05	1.33
International studies	2.49	2.50
Landscape architecture	1.01	1.59
Learning approach score at T2, average		
All	1.04	1.19
Sociology	0.92	1.37
Political science	1.38	0.00
Media and communication	1.34	0.94
International studies	1.57	1.71
Landscape architecture*	0.30	1.56
Gender* (column percentages)		
Male	41.3%	27.5%
Female	58.7%	72.5%
Parental educational background (column percentages)		
No university degree	26.0%	26.9%
University degree	74.0%	73.1%

[a] The relevant data are not available for landscape architecture students, only social scientific majors are described.

* There was a significant difference between survivors and dropouts in this dimension ($p < 0.05$).

The data in Table 14 do not support a hard blanket statement that the students who 'survived' to the T3 sample were academically superior to the ones who did not. While overall it is true that university entry and multiple-choice test scores, and also the learning approach of survivors were better, the differences are substantively small. Also, when investigated separately by major, there are indications that some survivors were actually less academically inclined than dropouts (see e.g. the performance scores of sociology students or the approach scores of PS and MC ones). Furthermore, the proportion of 'deep

learners' was actually higher among dropouts than survivors (although the opposite is true among MC and IS students). When statistical significance was checked, there were only three instances where 'dropouts' and 'survivors' differed: there were significantly more female students among survivors, and only among LA students, survivors had a better university entry score and a deeper learning approach as measured in T2.

3.5 Research questions

As I have emphasized earlier, the dissertation investigates three aspects of the introductory course's impact. The first of those is the *learning outcome*. Chapter 2.1 indicated that there were gaps in the literature when it came to studying learning outcomes in sociology courses: previous studies typically did not apply a qualitative measure for the outcome, and the effects of peers or group identity have not been over-researched.

Is it prudent to apply a qualitative conception of learning, namely the theory of deep and surface learning approaches (and in turn, outcomes) to our introductory course? As I have noted above, our assessment system relied on multiple-choice testing which is generally thought to lead to a surface approach. However, students at the Faculty of Social Sciences were exposed to several teaching methods in the seminars and were given the opportunity for extra-curricular project work which all served to deepen their engagement with sociology. I believe that the course provided them with the right kind of stimuli to make them able to integrate the concepts and theories of the course into their existing knowledge, to relate sociological topics to their own experiences—which are the hallmarks of meaningful or deep learning. Hay (2007) used similar criteria to delineate a deep learning outcome in his study. Therefore I believe it is appropriate, *over the short term, and in the case of social scientific majors*, to investigate the first research question:

RQ1. What socio-demographic and academic variables are associated with successful (deep) learning in the introductory sociology course?

Based on the literature presented in Chapter 2.1 (and discussed further in some cases in Chapter 4), the following hypotheses were formulated in connection with RQ1:

- **Hypothesis 1.** Learning approach will have an effect on learning outcomes: the 'deeper' the student's approach, the 'deeper' their outcome will be.
- **Hypothesis 2.** Extra effort during the learning process, namely, doing extra-curricular project work, will deepen learning outcomes, since the point of the task was immersion of sociological material.

- **Hypothesis 3.** Female students will be deeper learners than males.
- **Hypothesis 4.** Students coming from higher educated families will be deeper learners than those whose parents are less educated.
- **Hypothesis 5.** Political Science students will end up with 'shallower' learning outcomes by virtue of not caring as much about Sociology.

Hypothesis 5 was not motivated by the literature but by anecdotal evidence and observations made by seminar leaders in both the Fall 2014 and 2015 semesters. However, it has to be noted that a sense of 'competition' between sociology and political science has also been suggested in the literature (Szelényi, 2016).

The second aspect of the present research pertains to the formation of a *'general image' or 'core' of sociology* in the wake of the introductory course. While some studies have investigated student learning in IntroSoc courses qualitatively, I have not found longitudinal studies in that area. The second research question addresses that gap.

RQ2. What topics do students associate with sociology before, right after, and years after taking the introductory course?

RQ2 will be investigated in a qualitative way and hypothesis testing will not be a goal. However, based on the literature—mostly on long-term learning seen in section 2.1.3—, and in the case of number 3, on the 'current' topics at the time the course was held, the following 'expectations' were formulated:

- **Expectation 1.** Female students will show a richer mental image of sociology than males.
- **Expectation 2.** 'Exciting' or controversial topics such as gender, sexuality, deviance, or ethnicities will be recalled easier in the long term than 'drier' ones (e.g. functionalist theory).
- **Expectation 3.** The topic of migration will feature prominently on student mind maps, at least in the first two waves.
- **Expectation 4.** In the long term, most respondents will likely retain little of the course material, but sociology majors will have a rich mental representation of the field.

RQ2 is posed in terms of *topics* that supposedly make up the general image of sociology. While Chapter 2.2 indicated that practitioners in the field nowadays define the IntroSoc course in terms of learning goals which include skills, they still find a number of key concepts and theories important. Arguments were also made in favor of sociology

‘assuming authority’ over a proprietary subject matter. Knowing that the assessment system of our course, namely multiple-choice tests, suggested that it was concepts and topics which ‘mattered’ in sociology, it is only appropriate to investigate sociology’s image in the same framework.

The third leg of the research is the investigation of the *reputation of sociology*, especially with regards to its perceived *social roles*. Chapter 2.3 reviewed the relevant literature which suggested both social roles and recurring elements of sociology’s reputation but also highlighted that empirical studies about the subject were scarce. The third research question investigates the presence of those elements in the views that students of our introductory course form about the field.

RQ3. With regards to the ‘public image’ of sociology, to what extent are the following views or messages present in students’ minds?

a) That sociology deals with social problems;
b) That sociology goes beyond merely studying the world and acts upon it, mostly in a way that seeks to ‘help’ or to fight injustice;
c) The dimensions suggested by Burawoy (2005a): scientific, policy, critical, and public sociologies;
d) That sociology has low academic prestige and limited usefulness;
e) That sociology is not value-free.

Although I did not make it a central concern of the dissertation, the concept of *identity* recurs in the research. As discussed in section 2.1.2, identity is likely to influence the approach that students take towards their studies, while university education is an important area of professional socialization. RQ3 was partly about the social roles that students assign to sociology. The fourth research question tentatively investigates whether the views of sociology students undergo a change with regards to those perceived roles of their own discipline during their studies.

RQ4. Does the overall image of sociology in students’ minds – along the dimensions listed in RQ3 – change over time (i.e. is there a ‘socialization effect’ of university studies in that regard)?

3.5.1 Data analysis methods

The structure of RQ1, complete with hypotheses, already suggested that it would receive a quantitative treatment. Although the learning outcome investigated therein is conceptualized qualitatively as ‘deep’ and ‘surface’, that will be translated into a

dichotomous variable. Some of the independent variables under investigation—such as gender, the participation in project work, the major—are also dichotomous or categorical, but there will also be interval variables in the model. Logistic regression is an appropriate method to treat such a dataset, and it has been applied by others in the past when investigating learning outcomes in sociology courses (see Table 1). Thus the investigation of RQ1 fits into the established practice. Keeping in mind that landscape architecture students did not receive the same 'treatment' in the course as the other majors, and that over the long term, the outcomes of learning tend to fade, RQ1 will be investigated on a part of the dataset which only includes T1 and T2 data and social scientific majors. Indeed, the research paper on which Chapter 4 is based on was written before the T3 data gathering took place, but even in light of the availability of T3 data, I would make the same decision.

RQ2 is of a qualitative nature. While the main focus will be on the content of mind maps in terms of topics, numbers will be used to identify patterns and their changes over time (cf. Sandelowski, 2001). Content analysis, which aims to give a quantitative account of a large body of text (Neuendorf, 2017), is therefore an appropriate method. Because of the fact that a well-defined sociological core was seen as existentially important for the field, I believe that both the short-term impression that an introductory course gives and the long-term impact that is reflected in student ideas about sociology are important. That is why data from all students and all waves are included in the analysis of RQ2.

RQ3 is very similar to RQ2 in that it looks at qualitative phenomena, but its approach is not 'general', rather it is guided by the types of messages and roles encountered in the literature in connection with sociology's reputation and social role. The method will still be content analysis but of a 'directed' kind (Hsieh & Shannon, 2005). While it is important to see what kind of 'public image' the introductory course suggested to students in the short term, their views about the field years later are possibly even more important, therefore all data gathering waves and all students will be included in the investigation of RQ3.

RQ4 is a corollary to RQ3. The tentative 'socialization effect' will be investigated via the comparison of frequencies of certain messages on sociology students' mind maps, implying the statistical method of comparing means. In that comparison, the question focuses on sociology students and changes between the initial T1 state and the T3 data point at the time of BA graduation.

3.5.2 Summary of research questions and methods

Table 15 summarizes the research questions, their theoretical backgrounds, the empirical gaps in the literature they address, the data waves, respondents included, and the methods of data analysis.

Table 15. Summary of research questions and methods

	RQ1	RQ2	RQ3	RQ4
Question (concisely)	Correlates of success in learning.	The core of sociology in students' minds.	The reputation of sociology in students' minds.	The socialization effect of education upon sociology students.
Theoretical background	Deep and surface learning (Chapter 2.1)	The 'sociological core' (Chapter 2.2)	Ideal types proposed for the social roles of sociology (Chapter 2.3)	Higher education's transformational role and professional socialization function
Empirical gap	Lack of studies with qualitatively measured learning outcomes, few studies on group effects	Lack of studies about long-term views of students on sociology.	Relative lack of studies about sociology's 'real' reputation with the public.	Few studies about the socialization aspect of sociology education.
Waves included	T1 and T2	T1, T2, T3	T1, T2, T3	comparison of T1 and T3
Respondents included	social scientific majors	all students	all students	sociology students
Method of analysis	logistic regression	content analysis ('general')	content analysis (directed)	comparisons of means
Discussed in	Chapter 4	Chapter 5	Chapter 6	Chapter 6

3.6 The question of generalizability

In what sense can we consider the results of this research representative? Insofar as all the data come from students of one and the same introductory course, the dissertation can be considered a case study. It was also seen that sampling was not random: neither were students in the sample selected randomly from the 'population' of those registered for the course, nor was the course itself randomly selected out of a pool of introductory sociology courses taught in the country. (Near completeness of the T1 and T2 samples hopefully compensate for their nonrandom nature.) That points towards the conclusion that the results of the research should not be seen as generalizable to a larger population either of students or of sociology courses. However, that does not make the results worthless. Literature on education warns that lessons learned in one context should not be seen as applicable generally but rather inform a 'local instructional theory' (Schibeci, 1989, p. 16). The point of the *knowledge-creating school* as described by Hargreaves (1999) is to produce knowledge about our educational practices which can be channeled back into innovations.

Even if we think of the present research as a case study, the heterogeneity of the student body involved makes it capable of making meaningful comparisons. The fact that landscape architecture students were present in the course almost makes this a case of the same course being taught at different universities at the same time. Further, there are reasons to believe that even within the Faculty of Social Sciences, the four majors constituted different 'social worlds' which were meaningful with regards to the way students approached and processed the sociology course.

However, besides the usual statistical sense, there are a number of further ways in which we can think of the concept of 'generalization' as listed by Vicsek (2010). Out of the types she lists, *tentative incidence generalization* is most relevant to the dissertation. Tentative incidence generalization refers to the assumption that the results produced by a particular sample in qualitative research might also be true of other, similar groups of respondents (but the ability to assign a probability to that claim is absent). In the case of this dissertation, the concept can be applied on two levels. First, assuming that there exist *similar groups of respondents* to the ones in this study, the results produced herein might be indicative of those groups as well. Knowing that at least the T1 and T2 samples covered our student population almost completely, and supposing that Corvinus University attracts students from the same socioeconomic backgrounds each year, we can be confident that the results are indicative of at least neighboring year-groups at the same institution.

Stretching the imagination further, an argument can be put forward that our course itself, even though only one element of a 'sample', could be qualitatively representative of other introductory sociology courses, either in Hungary or even elsewhere. In view of the literature on what experts consider important topics and goals in an IntroSoc course, and knowing that a 'textbook survey' approach is very much alive (as stated by Ferguson & Carbonaro, 2016), we can consider our course to be fairly standard in a Western educational context. Inasmuch as that is the case, the results can be seen as indicative of the impact of a generic introductory sociology course.

Tests of statistical significance were run and reported alongside many results presented in Chapters 4, 5, and 6. The main reason for that was the respect of standard practice. It turned out that several of the substantively most important results were also statistically significant. That fact points towards the conclusion that, keeping in mind the limitations just described, the results can be seen as generalizable to some extent.

4 Deep and surface learning outcomes in the introductory course: A random effects logistic regression model[12]

Over the past decade, universities have faced increased scrutiny with regards to the effectiveness and the value of the education they provide. Some have warned that only "limited learning" took place on campuses in terms of critical thinking, complex reasoning and written communication skills of students (Arum & Roksa, 2011), while others even called universities' capability of providing knowledge and skills to students into question, arguing that higher education merely served a 'signaling' function to the labor market (Caplan, 2018). In contrast to those points, others have highlighted that universities contribute to the professional identity formation of students (Tomlinson & Jackson, 2021), as well as to their development as well-rounded individuals with fulfilling intellectual and social lives (Fűzi et al., 2022, p. 485).

Sociology is the study of human activities—and as such, it studies education among many other phenomena. The exercise becomes reflexive when as sociologists, we investigate our own educational activities, among them, the effectiveness of our own courses. The main motivation behind the present study was to gain insight into how effective our introductory course was. We believe that in order to think reflexively and critically of the social world, students have to master, besides concepts, the ability of relating them to each other and their pre-existing knowledge, notions, and opinions—if needed, questioning and de-constructing previous beliefs, convictions and linkages in the process. We were interested in the socio-demographic, individual and group-level characteristics that influence the success of that reflexive learning process. These considerations are reflected in the theoretical foundations and methodology of the study.

4.1 The qualitative conception of learning

Educational practice often makes the impression that the point of studying is to amass a large body of knowledge, and that, indeed, knowledge is something that is about quantity. Elementary and secondary education, along with standardized tests, in which there is only

[12] This chapter is an adjusted version of a published, co-authored article of mine (Miskolczi & Rakovics, 2018). It was noted in the original article that Márton Rakovics suggested the analysis method and oversaw its execution. The main alterations made to the article's text serve its integration into the dissertation by eliminating repetitions (mostly in the introductory passages and the description of the sample), clarifying certain points at the request of the reviewers of the draft dissertation, and simplifications in some places.

one correct answer, reinforce and entrench this quantitative conception of knowledge (Dahlgren, 2005, pp. 23–24). However, the stated goal of university professors was different already half a century ago: when asked, the things they named most important were critical thinking, creativity, and mastering of both the technicalities and ways of thinking of a given field (Entwistle, 2005, pp. 4–6).

Besides the quantitative conception, qualitative approaches to learning have also long existed. They are strongly related to the tradition of cognitive psychology. Their most important feature is that they emphasize aspects of learning other than merely storing information, such as making connections between parts of the material, constructing a personal interpretation, and an overall mental model (Dahlgren, 2005, p. 27). An early but still influential framework in this qualitative approach is the Bloom Taxonomy, an ordinal system of 6 categories starting from "Knowledge" meaning memorization, going up to "Evaluation", the ability to judge the value of newly acquired information (Bloom et al., 1956; Simkin & Kuechler, 2005).

While Bloom's taxonomy was an a priori classification, the one used in the present study is the empirically grounded framework of Marton and Saljö (1976; 2005). Measuring student responses to a reading exercise in a university context, they described the following two categories of learning outcomes:

- Deep learning. The student wants to grasp the essence of the material. Distilling rules and mechanisms is more important than remembering particularities of the given example.
- Surface learning. The student concentrates on the details of the material. Constructing a personal meaning or interpretation is not a priority (it does not happen).

Marton and Saljö believed that differences in learning outcome can be due to differences in prior knowledge and ability, but placed much more emphasis on the approach to the task and the process of learning. Thereby they distinguished deep and surface approaches as well: those with the former strive for a general understanding of a given problem, and those with the latter go only for memorization of details (Marton & Saljö, 2005, pp. 39–43). Learning approach has been empirically linked to the end result in several studies (Scouller, 1998). Additionally, educational research has highlighted that (preferably intrinsic) motivation is also a very important contributor to the learning process and its outcome (Marton & Saljö, 2005, pp. 53–54).

Furthermore, we would like to mention another important psychological aspect of knowledge, namely that it is *relational*: it is made up at least as much of the connections between pieces of information as of the pieces themselves. This is why meaningful, good learning depends largely on whether the student can form links between parts of the material, and, more importantly, between their prior knowledge and the new material. This 'forming of links' is a highly personal process, and also depends on whether the material holds any personal meaning for the student (Entwistle, 2005, pp. 10–11).

4.2 Economic and sociological approaches to learning

While learning is undoubtedly a personal process, taking place within one's brain, education has rightly been studied from economic and sociological viewpoints as well. Quantitative models in the latter vein can broadly be called education production functions (Monk, 1989). Naturally, both the theoretical framework and empirical evidence of such studies will differ from the one briefly presented above. They are not typically concerned with the qualitative conception of knowledge (Hanushek, 1986, pp. 1150–1154), and the majority of them focuses on primary and secondary education, and less on the university level.

Typically, the following inputs are considered in education production functions:

- family background of the student (family size, socio-demographic characteristics),
- peers or other students (socio-demographic characteristics thereof),
- school effects (class sizes, facilities),
- teacher effects (education level, experience, sex, race),
- educational expenditure,
- abilities of the student.

With the addition of the caveat that these also interact with each other, and that the educational process is cumulative, meaning that past 'treatment' (schooling) has a lasting effect (Hanushek, 1986, p. 1155). While Hanushek's review of 147 empirical estimations came to the conclusion that results of such studies often point to different directions (Hanushek, 1986, pp. 1159–1162), it should also be kept in mind that education production function models can suffer from specification problems as well (Dewey et al., 2000).

However, the goal of the present study is not to construct a 'generally applicable' education production function. The learning environment and outcomes of one particular introductory sociology course are investigated. Therefore, the specification of a model and function without over-reaching ambitions is defensible. Next, we discuss empirical evidence on the factors to be included in the model.

Class size traditionally received ample attention in education research. Data from the Tennessee STAR experiment suggests that smaller class sizes are beneficial for the chances of entering higher education (Krueger & Whitmore, 2001). Using STAR data, Nye et al. (2004) came to the conclusion that there were also considerable teacher effects in elementary education—a variance in outcomes between classes within the same school that can be explained neither by the educational attainment nor by the experience of the teacher, and therefore has to come from unobserved or unobservable teaching abilities and traits.

Basow (1995) found compelling evidence of teacher gender effects in a higher education setting. The study shows that the evaluation of teachers is conditional on both students' gender and teachers' gender, and in some cases, the interaction effect of the two is significant. Female teachers receive lower ratings overall in general and especially from male students. For the present study, this would suggest that students who value the instructor less will be less motivated to perform well. Consequently, students in groups with female instructors would be less likely to become deep learners. Compared to these results, a reverse association between teacher gender and student performance was found in a high school study by Duffy et al. (2001). They found evidence for the hypothesis that female teachers provide more feedback to students (mostly to male students), and this in turn facilitates better student performance. If these results are transferable to our higher education setting, then we can expect to see better learning outcomes for students in classes with female instructors.

The inclusion of family background as an explanatory variable in a sociologically oriented research is seemingly self-evident, since socioeconomic position is a primary influence on life chances in general. Ermisch and Francesconi (2001)—in an economically oriented study—found very strong association between parental education and child educational attainment. Davis-Kean (2005) focused on beliefs, expectations and behaviors of higher educated parents that create an atmosphere that helps the child to academic success. Buchmann and DiPrete (2006) also link family background to the fact that female students have become generally better performers in higher education, one

possible mechanism being that better educated parents favor the education of both sons and daughters, generating higher 'returns' for the latter. Finally, it should be added that 'waning coefficients' have been described in the literature with regards to the advantage that family background provides as children move forward in the education system, suggesting that at higher levels, family matters less and less (Lucas, 2001). However, this view has been contested by Holm and Jæger (2008) who argue that previous findings were largely due to selection and that the family effect is largely constant through all levels of education.

To return briefly to the influence of student gender on educational success, Duckworth and Seligman (2006) reiterate the fact that women outperform men in university grades in most colleges and most subjects. However, they find that one key trait leading to this result is their better self-discipline over an extended study period. In short and occasional "achievement tests" and "aptitude tests" (such as one measuring IQ) women's advantage is less and less apparent. Then, Vermunt (2005) explicitly tested the influence of gender on different learning styles, for different majors in higher education, controlling for a number of possible confounding factors. The only substantial difference between genders was in the preference for cooperative learning. Male students were more individualistic in their learning style, while female students were more social (Vermunt, 2005). Overall, these results indicate that gender is correlated with important determinants of educational success, although the existing evidence does not include qualitative measurements of knowledge.

The role of peers on individual achievement has received considerable attention in educational research, too. Epple and Romano (2011) provide an exhaustive summary of peer-based theoretical models, most of which concentrate on the distribution of ability in student groups—something we might call 'composition effects'—and their consequences on the information available to and on the effort made by the individual (Epple & Romano, 2011, pp. 1055–1069). They also discuss several empirical studies, most of which identified significant peer effects, either among randomly selected roommates or whole school classes which possibly result from, among others, the alteration of preferences and habits of the student, from the average level of ability in the group, or from the propensity of some individuals for disruptive behavior (Epple & Romano, 2011, pp. 1112–1156).

Another way to interpret 'group effects' is to look not at the composition, i.e., the characteristics of individuals making up a group, but at veritable group level attributes

such as norms that guide the individual's approach to education. An example for such a phenomenon is "the burden of «acting white»" described by Fordham and Ogbu (1986)—whereby black kids are held back from reaching academic success by a pressure from the group not to "betray" their social identity. This debated concept was reassessed by Horvat and Lewis (2003) who found that the purported burden did not play a central role in the academic life of black students, although they did not dismiss it entirely. Instead, they reported that black students had a repertoire of "managing their academic success" depending on the particular peer group they were in (Horvat & Lewis, 2003). Furthermore, group norms among students have received ample attention in the context of bullying (Salmivalli & Voeten, 2004) and drinking behavior (Perkins, 2002), and absenteeism in a workplace setting has been found to be linked to referent group norms (Bamberger & Biron, 2007)—we theorize that similar mechanisms operate with regard to studying as well.

4.3 Previous studies in the context of teaching sociology

A number of important quantitative studies have been done previously in the particular context of teaching sociology (see section 2.1.4). These studies—differing from the one presented herein—used quantitative indicators such as course grade to measure learning outcomes. Otherwise, their design was similar to the present one, involving a pretest at the beginning of the course then comparing it to learning outcomes at the end. Several of these studies have found that GPA scores were positively associated both with pretest scores and final learning outcomes (Szafran, 1986; Neuman, 1989; Kwenda, 2011; Driscoll et al., 2012), and many found no effect for gender (Szafran, 1986; Neuman, 1989; Kwenda, 2011; Howard et al., 2014) or previous high-school sociology studies (Szafran, 1986). Students with more college years did better both on pretests and final outcomes (Szafran, 1986; Kwenda, 2011; Howard et al., 2014). While it was found that a higher socio-economic background was associated with higher pretest scores (Szafran, 1986), it was not associated with gains made during the course (Neuman, 1989); and having studied a foreign language was correlated with higher gains (Neuman, 1989).

Notably, Neuman's (1989) study also compared two models of learning: "accumulated advantage" and "interest motivation". The former predicts that those with a good socio-economic and/or academic background—something we might call the social/economic element in the context of the present study—will make higher gains from

a course; the latter that interest in the subject matter compensates for disadvantages in other areas—which is clearly related to the cognitive psychological concept of study approach. Eventually, the accumulated advantage model received more support in Neuman's (1989) work, not so much in its socio-economic dimension but in the one of academic background.

In summary of the literature on learning and educational success, let us reiterate the most important points here: namely that (1) learning can and should be conceptualized in a qualitative way; (2) a student's approach will influence the end result of the studying process; (3) there is a place for socio-demographic variables in our research; (4) group effects, either in the sense of size, composition or norms, can be consequential for learning outcomes; (5) teacher characteristics might also be influential.

4.4 Context of the research

The context of the research is the introductory course held at Corvinus University of Budapest in the Fall of 2015, described in section 3.1. One point to stress once more here is that the program of the weekly seminars was largely the same regardless of the instructor, following a standardized script (meaning, in the context of this study, that seminars were 'materially' the same but differed when it comes to the teaching style of the instructor). Seminars offered the opportunity of discussion and reflection for students. The evaluation system of the course, complete with multiple-choice tests, small tests on set readings, and the opportunity to do project work (individually or in groups) were also described in detail in section 3.1.

4.5 Research question and hypotheses

The main aim of this study was to find out what influences the learning outcome of students in this introductory sociology course. The research question was formulated as such:

RQ1. What socio-demographic and academic variables are associated with successful (deep) learning in the introductory sociology course?

The question was motivated by the curiosity to simply gain a better understanding, and by the readiness to make adjustments to teaching practices based on the findings. On the basis of the literature reviewed above, the goal was to produce a synthesis of cognitive psychological and economic and sociological approaches to learning ('educational

outcome'). Learning was conceptualized in a qualitative way, and the assumed education production function includes many of the inputs mentioned beforehand:

- student ability,
- learning approach,
- learning process,
- student ambition,
- gender of student,
- family background,
- group effects,
- teacher effect.

Taking theoretical foundations and previous findings into account, the following hypotheses were formulated.

- H1. Learning approach will have an effect on learning outcomes: the 'deeper' the student's approach, the 'deeper' their outcome will be.
- H2. Extra effort during the learning process, namely, doing extra-curricular project work, will deepen learning outcomes, since the point of the task is immersion of sociological material.
- H3. Female students will be deeper learners than males.
- H4. Students coming from higher educated families will be deeper learners than those whose parents are less educated.

Anecdotal evidence from seminar leaders in the Fall 2014 and Fall 2015 semesters indicated that students majoring in Political Science approach our subject with a certain aloofness. We try to be careful about such impressions, as they might very well result from perception or confirmation bias, and this piece of research provided an opportunity to check if this was indeed the case. We took major area of study to be an instance of 'group effect' or group identity, and therefore made the final hypothesis that

- H5. Political Science students will end up with 'shallower' learning outcomes by virtue of not caring as much about Sociology.

Finally, we would like to note that the literature was not conclusive concerning the effect of teacher gender, therefore we did not form a hypothesis on that.

4.6 Materials and methods

This chapter uses data from the T1 and T2 waves described in section 3.2. Out of 303 first-year students at the Faculty of Social Sciences who registered to the course, a sample of 264 (87 percent) provided information in both waves. (Landscape architecture students were not included in this study.)

4.6.1 Specification of the model

The data had to correspond to the theoretical foundations and the model outlined above. Therefore, each of the inputs and the output had to be represented by a variable backed with empirical data. Some of the concepts were easily operationalized, some less so. Apart from gender of student, the way of measuring each concept is briefly outlined below.

4.6.1.1 Student ability

The so-called 'university entry score' was used as a proxy for student ability. Admittedly, this is far from being a perfect solution, since true ability might be unmeasurable, or would require a lengthy process of testing on its own. Therefore 'ability' might be rephrased as 'preparedness for academic pursuits', which this entry score might indeed indicate reliably, and is "brought" by students with themselves (i.e., not acquired during their university studies), which in turn is the point for its inclusion in the model. The predictive validity of entry scores on ensuing collegiate performance—at least for the first academic year—is well established (McWhorter, 2001; Alon & Tienda, 2007), but in general it is very hard to tell what the association is between student performance in higher education and the cognitive ability that fosters a deeper learning outcome.

In the Hungarian education system, all students finishing secondary school write a state sanctioned 'final exam'. Depending on their school grades in the final 2 years, and on the results of these final exams, as well as on some extra credentials (most importantly, language exams), a 'university entry score' is calculated for each student. Roughly a month after the centralized final exams, universities announce their thresholds for accepting students. Corvinus University of Budapest usually attracts students of excellent credentials, making average entry scores well above 400 in a system where 400 is the 'normally' attainable level and some extra effort is required in order to gain another 100 points at maximum.

4.6.1.2 Learning approach

The questionnaires in both waves (T1 and T2) included items pertaining to the learning approach of students. Eventually, 4 items from Biggs's Revised Study Process Questionnaire were used (Biggs et al., 2001). The original questionnaire was designed to measure 2 main dimensions: deep and surface, and 4 subscales: deep/surface motive and deep/surface strategy. We were only interested in the 2 main scales, and used items 1, 3, 5 and 19 from the original questionnaire. Two of these were worded in ways that agreement with the statement (measured with a 5-grade Likert scale) indicated a deep approach to studies, while agreement with the other two indicated a surface approach. We posed these questions 'free of context', that is, we did not ask students to think of the sociology course when indicating their approach to studying. Author instructions to the original questionnaire indicate that while students' answers and emerging 'approach profiles' cannot be taken as stable personality traits, they can serve to "describe how individuals differ within a given teaching context" (Biggs et al., 2001, p. 5)—which coincides with our aim.

The answers to these questions were condensed into a single variable that represented the learning approach of students. Answers to the questions measuring a deep approach were scored from 1 (never or only rarely true of me) to 5 (always or almost always true of me), those to the ones measuring a surface approach from −1 (never or only rarely) to −5 (almost/always). Eventually, the numbers corresponding to answers were simply added. Thus, the combined learning approach variable can range from −8 (a very surface approach) to +8 (a very deep approach).

It is well established in the literature that during their university studies, students generally slide towards a shallower approach than they begin with (Biggs et al., 2001, p. 6; Mogashana et al., 2012, p. 786). In our analysis, we assumed that the approach scores measured in T1, at the very beginning of the semester, reflected students' intentions. However, the scores in T2 should reflect their 'true' approach better: after having experienced how they pursue their university studies, they should evaluate themselves more correctly. Therefore, in the analysis, we included scores obtained from the T2 wave to represent learning approach.

4.6.1.3 Learning process

As a proxy of learning process (effort), participation in project work was used. This ended up being a categorical variable with 3 possible values: did not do a project; participated in a group project; did an individual project.

4.6.1.4 Family background

This variable was constructed from two basic items: highest educational attainment of mother, and of father. The eventual ordinal variable had 5 possible values, as described in section 3.4.1.

4.6.1.5 Group effects

Group effects were interpreted in two different ways. First, we hypothesized that major area of study is a source of group identity for students, shaping their approach towards the sociology class, therefore we included major as one of our variables.

Besides, the seminar group that students were part of could also be of consequence. During the Fall semester of 2015, there were nine seminar groups. We did not assume that these had the strength to develop group identities, because they existed only for 90 minutes during the week, whereas students belonging to the same major spend much more of their time together in specialized classes. Still, the groups did put students in a certain 'context', which should be grasped in analysis. Therefore, we included these nine groups not as an independent variable, but as a basis of clustering (see below).

4.6.1.6 Student ambition

There was no explicit measure for student ambition or motivation available (although, notably, it might overlap with learning approach), but there was one useful proxy related to seminar groups. Out of the aforementioned nine groups, six were very close to the size limit of 40 (the smallest of them was 37). The remaining three groups were below the size of 30. We firmly believe that small groups were results of selection: they were held in unattractive times of the week (two on Friday and one at a very late hour on Monday). Students who are generally serious and ambitious about their studies will typically register for their classes earlier, filling up the 'good' slots, while those who care a little less about their academic careers will end up in the 'fringe' (but also smaller) groups. Therefore, eventually this group size does not matter to us in the classical sense of class size, but as an indicator of students being ambitious in scheduling (members of large groups: yes, of small groups: no). Moreover, this variable is actually not only an indicator

of individual ambition—the selection process described above should lead to group compositions of similarly ambitious students (even creating a possibility of either virtuous or vicious circles in the motivational climate of these groups).

4.6.1.7 Teacher effect

Apart from the two Friday groups, each seminar had a different teacher. Thus, by adding the 'particular person of teacher' as an independent variable to the analysis, estimation of effects would not have been possible, because of perfect multicollinearity or perfect separation. However, in order to capture some of the teacher effects that result from unobservable characteristics of instructors, gender of teacher was included as an explanatory variable in the model. Out of nine groups, six had female teachers (164 total students in sample), and the remaining three had males (100 students in sample). All three of the 'unfavorable' time slots were led by female seminar instructors.

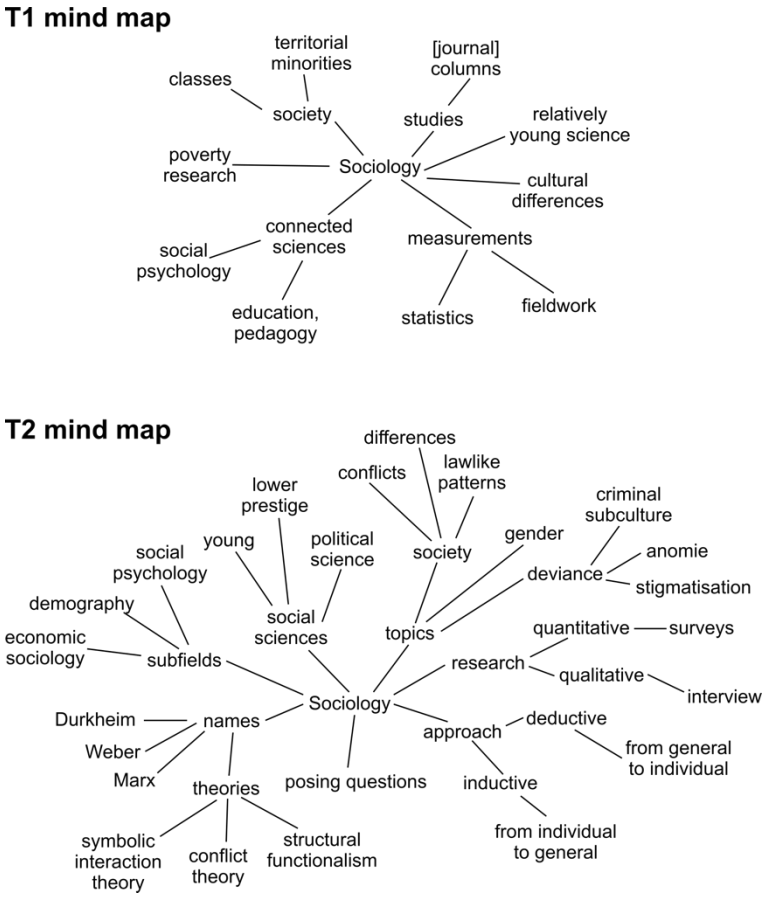
4.6.1.8 Learning outcome

Finally, we come to the operationalization of the dependent variable. As mentioned earlier, the evaluation system of the course relied heavily on multiple-choice (MCh[13]) tests. How do such tests relate to the qualitative conception of learning outlined above? The literature is not unequivocal in this matter. On the one hand, Simkin and Kuechler (2005), based on previous research, write that MCh items "can reliably measure the same knowledge levels as CR items for the first four of Bloom's levels" (CR meaning constructed response such as essays where deep understanding and analytical skills really show) (Simkin & Kuechler, 2005, p. 83); and Er et al. (2014) concur by stating that "well-constructed [multiple-choice questions] can be used to assess higher-order cognitive skills such as interpretation, synthesis and application" (Er et al., 2014, p. 9). On the other hand, Simkin and Kuechler (2005) also draw attention to the fact that while in MCh tests it is inevitable that the student's thinking must converge to a single "good" answer, true and able application of knowledge requires divergent production (Simkin & Kuechler, 2005, pp. 82–86). In our introductory course, we found it hard to construct MCh questions that could meaningfully measure application of sociological knowledge, and as such, could go beyond the second level (comprehension) of the Bloom taxonomy—which is not deep enough to indicate 'deep learning'.

[13] MCh was used to abbreviate "multiple-choice" in this section, while MC is used to refer to media and communication students throughout the dissertation.

Nevertheless, MCh tests might still seem useful as a proxy for measuring deep or surface learning outcomes. However, Simkin and Kuechler's (2005) review of the literature indicates that while in many studies, MCh test results correlated with CR measures of knowledge, this finding is not ubiquitous, and MCh tests are possibly an unreliable measure of deep understanding (Simkin & Kuechler, 2005, pp. 78–79).

Figure 2. Mind maps demonstrating a 'deep learning' outcome. T2 shows a broader, more hierarchized structure, with some elements of T1 enriched with new knowledge acquired during the semester.



Therefore, we had to find another way of measuring qualitative learning outcomes, and opted to use mind maps as a data source. The mind map as a genre and its advantages were described in section 3.3.1. The mind map as a diagram is highly compatible with the theoretical underpinnings of the study insofar as it reflects the ability of students to form a connection between parts, and especially between their existing knowledge and new information, based on a personal understanding of the material (Wheeldon and Ahlberg, 2011, pp. 25–27, 79–80). Opposed to MCh questions where the correct answer only has to be 'recognized', mind maps have to be constructed without cues and should therefore indicate whether a student merely memorized the material or 'understood' it as a whole,

organized unit. Figures 2 and 3 show actual examples for student mind maps from our sample.

In both T1 and T2, our respondents drew a mind map around the central concept of 'sociology'. Thus, the T1 mind map represents their initial knowledge and the T2 one their knowledge at the end—recalled freely and registered expressively, showing connections between key parts without having to adopt the subtleties of a social scientific language. By comparing these two diagrams, we sorted each to one category of the qualitative learning outcome variable: deep or surface learning. Our guidelines for this categorization resemble closely those of Hay (2007), who measured learning outcomes with a similar type of diagram (concept map). The basis of categorization was always the T2 diagram. The hallmarks of the two learning outcomes are as follows.

Deep learning:

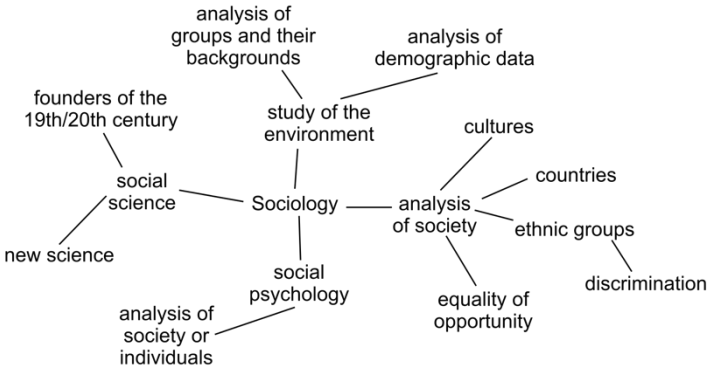
- the T2 mind map refers to several (more than half) of the topics discussed during the semester, to each with more than one concept,
- the map is hierarchized: concepts are linked not only to the central node (sociology) but are on several levels in chains,
- compared with the T1 map, good progress is made and/or new concepts learned during the semester are connected to pre-existing knowledge,
    - if the T2 mind map was very full and convincing on its own, no linking to concepts presented in T1 was required for a 'deep' categorization.

Surface learning:

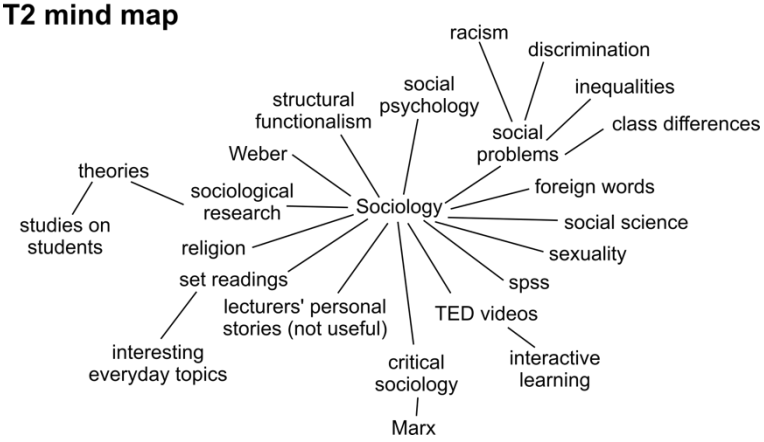
- the T2 mind map refers to less than half of the semester's topics,
- the structure of the map is simple: contains links mostly only to the central concept,
- no previous knowledge is brought back in T2, or no links are formed between that and newly learned information,
- the T2 mind map contains elements that are mostly irrelevant to sociology itself (overly 'free' associations, recalling of personal experiences of the first university semester, etc.),
- the T2 mind map shows no progress compared with T1.

Figure 3. Mind maps demonstrating a 'surface learning' outcome. Even though T2 contains much more information, the structure barely goes beyond one level, many aspects are half-baked.

T1 mind map



T2 mind map



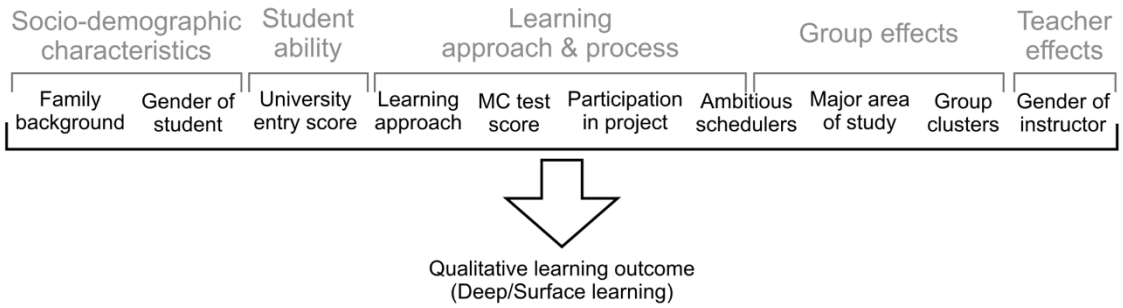
Based on their mind maps, each student was given a 'deep' or 'surface' verdict by two members of the research team separately. The interrater reliability measured with Cohen's kappa was 0.72 (confidence interval 0.60–0.84). In case of disagreement, a third member[14] assigned the final category. Figures 2 and 3 contain illustrative examples of mind maps that ended up receiving Deep and Surface labels.

4.6.1.9 Summary of the model

In the preceding sections, variables were presented one by one. Figure 4 provides a visual summary of the model, where each variable is shown as part of a theoretical concept specified above.

[14] The two coders were myself (Péter Miskolczi) and Yvette Lovas, a BA student helper in the early stages of the research. The third person was Gábor Király.

Figure 4. Variables of the research (in black). Corresponding concepts are indicated in gray.



What justifies the inclusion of multiple-choice test score as an independent variable? While it was fully expected to be correlated with qualitative learning outcome (in accordance with the relevant literature), we wanted to control for what the MCh score measured and see whether the effects of other variables still remained significant for deep learning.

4.6.2 Methods of analysis

Since the aim was to investigate the effects of the measured factors influencing individual qualitative learning outcomes, three appropriate statistical model variants were investigated that could quantify these relationships.

The outcomes of Deep and Surface learning were treated as realizations of a binary random variable, for which the measured values were determined through 'expert classification', as described above. This meant that we were facing a supervised statistical learning problem concerned with inferring the correct learning outcome classification for individuals, given their measurements for the independent variables. There are a number of models that were designed to tackle such classification problems (Hastie et al., 2009), but we had additional requirements from our candidate models. In these settings, there is a trade-off between the predictive performance and the interpretability of models (James et al., 2013, pp. 24–26). In our case, a model with high interpretability was a priority, since we wanted to be able to understand how different factors influenced the learning outcome, even at the expense of predictive performance, considering the fact that there may have been several influential omitted factors (i.e., unmeasurable in our study) that would hinder performance of less interpretable models. In connection with the latter consideration, we were looking for a classifier that derives its results from an underlying modelling of the probability of cases being in each group. Again, statements that pertain to changes in class probabilities with respect to changes in attribute values are preferred

for a classifier from an interpretation standpoint, as opposed to one that solely relies on the confusion matrix (James et al., 2013, pp. 127–168).

Based on our requirements and the above reasoning, we have chosen the binary logistic regression model to investigate the influence of measured attributes on the probability of attaining a 'deep learning' outcome class compared to 'surface learning'. Specifically, logistic regression implicitly models class probabilities through the logarithm of odds of the two levels of the dependent variable with a linear combination of the explanatory variables (see the next section also).

Since we have gathered data from nine seminar groups, we had to take into consideration this clustered structure of our sample. Three model variants were selected, all accounting for this clustering, but with a different approach, with increasing complexity in structure (Rabe-Hesketh & Skrondal, 2008). Explanatory variables were the same set, as motivated by theory, for all models.

The first variant was a simple logistic regression where the presence of clusters (i.e. seminar groups) was only taken into account in the way the standard errors were calculated. That resulted in increased coefficient estimate confidence intervals, as standard errors increase due to a smaller effective sample size if sample elements are not independent of each other. The other two variants—the fixed effects and the random effects versions—explicitly modelled the presence of clusters (i.e., seminar groups) in the dataset to separate within cluster and between cluster effects. Conceptually, fixed effects means that groups in the sample (with their respective mean outcomes) are treated as a given population of groups, which could be argued for, since all groups in the studied year-group were measured, while random effects treats groups as random draws from larger population of groups, which makes sense if we generalize from our surveyed year-group to at least other year-groups close in time. Table 16 shows the coefficients obtained from these three regression models.

4.6.2.1 Model selection

Let us define $\Pr(y = \text{deep learner}) = p$ as the probability of an individual achieving a 'deep learning' outcome (y) with some fixed values on the explanatory variables X. In its most simple form, the binary logistic regression model is expressed in a way where the dependent variable is the logarithm of the odds of being a deep learner, and is calculated as the linear function of the explanatory variables:

$$\ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta X$$

where β_0 is the intercept, and β is the regression coefficient for the explanatory variable X. Regression coefficients can thus be interpreted as the *change in log odds* (or the odds ratio if exponentiated). A regression coefficient (or log odds) of 0 would mean that a unit change in the explanatory variable would not affect the odds of 'deep learning' versus 'surface learning', while a positive value indicates an increase and a negative value a decrease in the log odds. An important characteristic of logistic regression models is that effects are linear and additive only on the log scale of odds, and not on the linear scale of odds ratios where the actual probabilities of outcomes are measured.

In the notation of the fixed and random effects models, indices are needed to denote individuals and groups, since each group can have its own intercept. The outcome of the i-th individual is y_i, and the corresponding log odds ratio is $\ln\left(\frac{p_i}{1-p_i}\right)$. The models take the following form:

$$\ln\left(\frac{p_i}{1-p_i}\right) = \alpha_k + \beta_1 x_{1i} + \beta_2 x_{2i} + \ldots + \beta_J x_{Ji}$$

where α_k is the intercept of the k-th group, and β_j is the regression coefficient corresponding to the individual's value on explanatory variable X_j, namely value x_{ji} where j ranges from 1 to J. Interpretation of β coefficients is the same as for simple logistic regression, since these are independent of group intercepts. The key difference between fixed and random effects models is that in the former, α_k intercepts are calculated for each group, whereas in the latter they are assumed to be realizations of a normally distributed random variable.

Selecting the best model from the three considered variants is not a straightforward procedure, since both statistical and theoretical considerations may motivate a choice. From a statistical standpoint, the likelihoods of the models were very close, the Durbin-Wu-Hausman test for the comparison of the coefficients of the fixed effects and random effects models was inconclusive (Gelman & Hill, 2007). That allowed us to choose a model mainly on theoretical grounds. Since we preferred to make statements that generalize to a larger population of groups from other year-groups (of at least neighboring years), and we were interested in certain group level effects, we have opted for the random effects binary logistic regression model (presented in more detail in Table 18).

Table 16. Regression coefficients for the three models: simple, fixed effects, and random effects logistic regression (LR).

		log Odds ratio		
Variable	Level	Simple LR	Fixed effects LR	Random effects LR
Major	Sociology	reference		
	Political science	-1.933**	-1.649*	-1.879**
	Media and communication	-0.816	-0.951	-0.843
	International studies	-0.605	-0.529	-0.591
Gender	Male	reference		
	Female	0.335*	0.428	0.361
Project work	Non	reference		
	Group	-0.772	-0.681’	-0.761’
	Individual	-0.004	-0.473	-0.088
Family background	neither parent finished high school	reference		
	one parent finished high school (the other did not)	-0.613	-0.731	-0.653
	both parents have high school degrees at most	-2.272*	-2.389*	-2.314*
	one parent has a university degree (the other does not)	-1.183	-1.246	-1.202
	both parents have university degrees	-1.673	-1.777*	-1.712*
Gender of instructor	Male	reference		
	Female	1.095*		1.083**
Entry score		-0.002	-0.004	-0.002
Learning approach		0.102’	0.130*	0.108’
Ambitious schedulers	No	reference		
	Yes	1.665**	0.056*	1.639**
Test score		0.055*		0.055*
Intercept		-3.086		-2.959
Group level std. dev.				0.249
’ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$.				

4.6.2.3 Missing values

The only type of missing values in the sample constituted of a missing mind map in either T1 or T2 for 39 students out of the total of 303 (hence the sample size of 264). This does not introduce added bias to the analysis, since our models used these as dependent variables.

4.7 Results

Results below are presented in two forms. First, a quick quantitative overview of the sample is given, which offers a comparison of students of the four major areas and offers some interesting insights in itself. Second, the main result is shown: coefficients obtained from the random effects logistic regression model.

4.7.1 Quantitative overview of the sample

Our sample consisted of 264 students. Table 17 shows an overview of some key variables of the research.

Some patterns are conspicuous. One is that female students are a majority in all major areas of study, except for Political Science. University entry scores are high across the board, but International Studies and Political Science students stand out, and basically the same can be seen in MCh test scores. Project participation is highest among Sociology students.

Table 17. Quantitative overview of the sample in this study.

Major	Gender[a]		University entry score[b]	Learning approach score[b]	MCh test score[b]	Project participation[a]		
	Male	Female				No	Group	Indivi-dual
Sociology	23 (37%)	39 (63%)	416.53 (26.15)	1.18 (2.59)	60.6 (10.73)	19 (31%)	22 (35%)	21 (34%)
Political Science	22 (63%)	13 (37%)	442.15 (15.92)	0.20 (2.78)	61.6 (6.38)	15 (43%)	8 (23%)	12 (34%)
Media and Communication	12 (18%)	54 (82%)	418.87 (28.96)	1.17 (2.81)	59.0 (8.41)	35 (53%)	11 (17%)	20 (30%)
International Studies	40 (40%)	61 (60%)	456.57 (19.87)	1.59 (2.74)	62.8 (8.70)	61 (60%)	16 (16%)	24 (24%)
Whole year-group	97 (37%)	167 (63%)	436.30 (29.59)	1.21 (2.75)	61.2 (8.99)	130 (49%)	57 (22%)	77 (29%)

[a] Row percentages are presented. [b] The display format for these items is: Mean, then (standard deviation).

4.7.2 Model results

The results for our chosen model variant are summarized in Table 18. For the qualitative learning outcome binary dependent variable, the reference category is ‘surface learning’, so interpreting log odds ratios always has the form of “How much does the log odds of getting to deep learning form surface learning change when we move one unit from the reference level on the explanatory variable, keeping all other explanatory variables constant?”.

First, we provide a brief textual overview of the regression output, then move on to connect the results to our hypotheses in the next section (Discussion).

Table 18. Results for the random effects logistic regression model.

Variable	Level	log Odds ratio	Std. Err.	z	P>|z|	95% Conf. Interval	
Major	Sociology	reference					
	Political science	-1.879**	0.666	-2.82	0.005	-3.18	-0.57
	Media and communication	-0.843	0.477	-1.77	0.077	-1.78	0.09
	International studies	-0.591	0.493	-1.20	0.231	-1.56	0.38
Gender	Male	reference					
	Female	0.361	0.347	1.04	0.298	-0.32	1.04
Project work	Non	reference					
	Group	-0.761	0.433	-1.76	0.079	-1.61	0.09
	Individual	-0.088	0.412	-0.21	0.832	-0.90	0.72
Family background	neither parent finished high school	reference					
	one parent finished high school (the other did not)	-0.653	0.954	-0.68	0.494	-2.52	1.22
	both parents have high school degrees at most	-2.314*	0.921	-2.51	0.012	-4.12	-0.51
	one parent has a university degree (the other does not)	-1.202	0.842	-1.43	0.153	-2.85	0.45
	both parents have university degrees	-1.712*	0.819	-2.09	0.037	-3.32	-0.11
Gender of instructor	Male	reference					
	Female	1.083**	0.420	2.58	0.010	0.26	1.91
Entry score		-0.002	0.007	-0.36	0.717	-0.02	0.01
Learning approach		0.108	0.063	1.72	0.085	-0.01	0.23
Ambitious schedulers	No	reference					
	Yes	1.639**	0.499	3.32	0.001	0.66	2.62
MC test score		0.055*	0.022	3.28	0.013	0.01	0.10
Intercept		-2.959	2.899	-1.02	0.307	-8.64	2.72
Std. dev. within groups		0.249	0.318			0.02	3.05
* $p < 0.05$; ** $p < 0.01$. Model Wald Chi-sq. = 34.89, with $p = 0.0026$.							

We can state that *ceteris paribus* (a remark always applicable but omitted for following statements) sociology major students are more likely to be deep learners than all other majors. Political science majors have a substantially and significantly lower chance of being deep learners than all other groups. Male and female students have statistically equal odds of being deep learners. Those levels of family background with

parents having the same education significantly decrease the odds of ending up with a deep learning outcome. Differences in entry score are not significant and neither are differences in learning approach (although the latter would have been with a 0.1 threshold). Multiple-choice test scores also had significant effects, but we only included this variable in the model to control for performance accounted for by this non-qualitative element of learning.

The group level explanatory variable of gender of seminar group instructor, and the partially group level "ambitious schedulers" variable both had significant effects on the dependent variable. Individuals in groups with a female instructor had higher odds of becoming deep learners than those in groups of male instructors. It is important to note, again, that this is true even when controlling for all other factors.

The rho coefficient (the estimated share of the between-groups variance) is just 1.8%, and the Likelihood-ratio test for its difference from zero is non-significant (p = 0.22), which confirms that the single-level and the multi-level models give very similar results.

4.8 Discussion

Let us start the discussion of results in the order of our hypotheses. Hypothesis 1, namely that learning approach will act positively on the outcome, did not gain unqualified support. Although its effect is positive, indicating that a deeper self-professed learning approach does 'lead' to a deeper outcome, it can only claim significance with a relaxed threshold of 0.1, and the effect size is moderate as well (a log odds ratio of 0.108). This might be due to the fact that learning approach was measured only with 4 items in our questionnaire, which might not produce a result reliable enough, or might fail to grasp the true variance within the sample.

Our second hypothesis, concerning the expected positive effects of project work, can be resoundingly rejected on the basis of the evidence. While the effect of an individual project is simply that of 'no improvement', participation in a group project ended up with a negative effect on learning outcome (log OR of −0.761, significant at a 0.1 level). This result contradicts the general assumption that such tasks improve student engagement with the material, but rhyme with earlier findings that students facing a high workload do not end up with deep learning approaches (Case & Marshall, 2009, pp. 16–17). We can hypothesize further that those who opted to do work in groups did so out of a motivation

to “socialize”, and not because they strived to do extra-curricular work. Also, the seemingly negative but absolutely not significant—basically *absent*—effect of the individual project on learning outcome is hard to swallow from a pedagogical standpoint. Besides the ‘high workload’ explanation, we can speculate that those students who were confident in their abilities did not opt for the safety of extra points that the project provided, but made their way to success without it, also ending up with deep learning outcomes in the process.

After controlling for several variables, female students are not significantly deeper learners than their male counterparts, contrary to our third hypothesis. This is not overly surprising, because the previous empirical evidence on which we based the assumption did not relate to a qualitative conception of knowledge. Also, since the university attracts students of the highest ability, there should be no big difference between them on the basis of gender. Female students are still a little ‘ahead’, which is in line with indications of their reputedly better self-discipline and also their possibly higher level of appreciation of female teachers.

Our hypothesis 4 on the effect of family background has also been practically refuted. Instead of providing an advantage in the ‘depth’ of learning, each category in the ordinal variable seems to do damage compared to the baseline (neither parent finished high school). What is more, the negative effect of both parents having high school (log OR of −2.314), and both parents having a university degree (log OR of −1.712) are statistically significant as well. This suggests to us a peculiar pattern in which children of families where the ‘educational horizon’ of parents is ‘symmetrical’ perhaps do not put as much effort into deep learning as others do. The fact that children of relatively lower (or ‘asymmetrically’) educated parents perform better could be explained by an ‘aspiration’ hypothesis: the asymmetry puts the importance of education into sharp relief for them. Overall, our results make the impression that among those students who reach university, family background no longer provides a considerable advantage, echoing the findings about ‘waning coefficients’ in the literature. Generally, it is also good news from a social mobility standpoint.

Hypothesis 5 pertained to political science students and is strongly supported by the data: compared to sociology students, their likelihood of ending up with a deep learning outcome is significantly and substantively smaller (log OR of −1.879). We believe that their relative indifference to our subject might result from the fact that out of the ‘other three’ majors, political science is the closest to sociology, and there might be a sense of

competition between the two fields. MC and IS students might not feel such pressures. The fact that sociology students are the 'deepest' learners is not a surprise and also comes as a relief.

Furthermore, it is notable in the results that university entry score—the proxy of ability and/or prior achievement—practically has zero effect on qualitative learning outcome in our course. This might suggest that the state-sanctioned exam does not reflect the ability for good understanding; indeed, it is generally assumed that it still concentrates on lexical knowledge to a great extent. Multiple-choice test score, a measure we do know to be based on lexical knowledge, has a significant effect on deep learning (log OR of 0.055)—a result we expected and is in line with existing literature; but again, the point of including MC scores in the regression was to control for it while measuring the effect of all other variables.

Lastly, we should discuss the effects of seminars. For one, we are not surprised to see that the "ambitious schedulers" variable is positively and significantly related to deep learning (log OR of 1.639). That seemingly lends credence to our assumption that it was both an individual level and a composition effect indicator: more ambitious students end up together, filling up preferable class hours. However, upon further reflection, it is also possible that more efficient learning took place in classes scheduled for preferable class times.[15]

The positive effect that female teachers had on deep learning (log OR of 1.083) suggest to us that there indeed were unmeasured (unmeasurable) teacher characteristics that resulted in different outcomes between the groups. We believe that teacher gender is a proxy of them; we are very cautious of accepting it at face value that teacher gender in itself would be the cause of this difference. Such an unmeasured effect—as in Duffy et al. (2001)—could be the higher level of student-teacher interaction that is characteristic of female teachers.

Our results describe one year-group at the university in question, 87 percent of which was included in the sample, making the sample almost complete. Personally, we are confident that our results are at least indicative of neighboring year-groups at the university. Some of the results are in line with what educational research in general, and our hypotheses in particular, suggested and foreshadowed. For example, teacher effects are apparent in the findings. Other results we found surprising. One of them is the fact

[15] I would like to thank Gábor Kovács for drawing my attention to that alternative explanation.

that in spite of their otherwise obvious academic excellence, political science students end up being ‘shallower’ learners in this course than students of other majors. Contrary to our expectations, the extra-curricular project work does not seem to have a ‘deepening’ effect on learning outcomes—something that could deserve further attention in future studies. Also curious was the pattern in which family background influenced learning outcomes—seemingly, parents with “both high school” or “both university” degrees are detrimental to deep learning. Otherwise, as teachers of sociology we are happy that family background or prior achievement (i.e., entry score) do not seem to be barriers to understanding our subject, and that sociology majors perform well generally.

5 Content analysis of student mind maps drawn in each data gathering wave: what do students think about sociology in general[16]

The introductory course to sociology—or IntroSoc, as it is customarily referred to in the literature—occupies a special place within the profession. Because it is supposed to relay the 'core' of sociology to students, it is a mirror in which the discipline sees the reflection of its multi-paradigmatic, perhaps fractured nature, spurring repeated attempts at self-definition. The course is supposed to impart in students the knowledge of key concepts, theories, and topics, as well as skills such as the sociological imagination or critical thinking. Furthermore, it is the only point of contact with sociology for large swaths of students, making it the 'public face' of our field (Schwartz & Smith, 2010; Zipp, 2012; Greenwood, 2013). IntroSoc therefore has the responsibility of shaping the image of the discipline as a whole in the eyes of the educated public. This chapter investigates the introductory course in a way that has not been over-researched so far: what topics do students relate to sociology before and right after studying the subject, and then two to three years later? A content analysis of mind map data will be presented to answer the question.

5.1 Literature review

As discussed earlier in the dissertation (Chapter 2.2), the introductory sociology course has received ample scholarly attention before. Experts have been looking for an elusive 'sociological core' for decades, either relying on expert opinions and exchanges of ideas (Wagenaar, 2004; Persell et al., 2007) or empirical sources such as textbooks (Keith & Ender, 2004) or syllabi (Grauerholz & Gibson, 2006; Lowney et al., 2017). The American Sociological Association repeatedly updated and published policy documents on *'Liberal learning and the sociology major'* (Eberts et al., 1990; McKinney et al., 2004; Pike et al., 2017). By the second half of the 2010s, discourse has moved on from trying to define a 'sociological core' of particular concepts, topics, and skills to defining the IntroSoc course in terms of learning goals instead (Ferguson & Carbonaro, 2016). Scholars also

[16] This chapter is a substantially revised version of a manuscript submitted to a journal, under review. It was written by Péter Miskolczi alone. The main alterations made to the manuscript serve its integration into the dissertation by eliminating repetitions (in some parts of the literature review, and especially when it comes to the description of the introductory course, the sample, and data gathering waves).

argue that the course should be designed in a way that is 'responsive' both to current events in the 'outside world' (Greenwood, 2013, p. 233) and to students—their interests (Better, 2013; Howard et al., 2014), studying habits, and lived experience at university (Zipp, 2012).

While a lot of effort has been spent on trying to define what 'we' in the field want the core of sociology to be, less is known about what students learn from an introductory course. After all, what they take with themselves will constitute at least the core of sociology in their minds. Outcomes of sociology courses have been investigated before in the vein of education research, aiming to measure learning outcomes in general (Keesler et al., 2008), learning gains during a course (Neuman, 1989), or the effectiveness of a teaching innovation (Dietz, 2002; Howard, 2005; Wright & Lawson, 2005; Rickles et al., 2013; Howard et al., 2014; Killian & Bastas, 2015). Similarly, there is a variety of research designs including cross-sectional (Keesler et al., 2008), pre- and posttest (Szafran, 1986; Neuman, 1989; Howard et al., 2014), and quasi-experimental (Driscoll et al., 2012; Rickles et al., 2013). What unites these studies is that typically they are all able to demonstrate learning gains from an introductory sociology course in the short term, and often also name socio-demographic or other correlates of success. However, they typically measure learning outcomes in quantitative ways, and there are no longitudinal designs among them.

The literature that is most relevant to the present chapter therefore comprises studies that have either described learning outcomes of sociology courses (or sometimes programs) in *qualitative ways* or were *longitudinal*, or both. There is considerable variety in the research questions, sample sizes and data gathering/measurement methods among these studies, which makes it hard to integrate them into a single narrative thread.

McKinney and Naseri (2011) followed 18 sociology students as they were going through the major. Over time, students developed in their roles as learners, and also deepened their understanding of sociology and its way of studying the world, although the authors claim that such gains in understanding were modest.

Ashwin et al. (2014) conducted a longitudinal study of 32 sociology and criminology students over the course of their studies and performed a phenomenographic analysis of interview data. They found five different 'ways of accounting for sociology' which largely represented an ordinal scale of different levels of understanding. Those accounts ranged from seeing sociology as merely a way of informing personal opinions about various issues through defining it in simple terms such as 'the study of people or

society' to a nuanced account of how the discipline had different theoretical and empirical approaches at its disposal to offer partial pictures of social relations. Over the course of their studies, 25 students moved to a higher category of understanding.

While quantitative in its overall approach, the study by Howard et al. (2014) did report learning gains that students (N=280) made along four qualitatively different dimensions of sociological knowledge: theoretical perspectives, the sociological imagination, methodology, and key concepts. Out of those areas, students made the biggest gains in theories, and the smallest in methodology. The authors assume that those differences were due to 'base' levels of knowledge: while sociological theories were new to most students, research methods are somewhat more widely known.

Bandini et al. (2016) conducted interviews with 25 sociology students who were at various points in their studies (second-years, fourth-years, and alumni who graduated five years earlier). The purpose of the research was to find out what students thought they had learned in the sociology program. Answers most often mentioned the topics of inequality, gender, privilege, and media and macro-level studies. Students also thought they were able to apply the sociological way of thinking, they became more compassionate and understanding, and improved their research, analytical, writing, oral, and critical skills, while not being very confident about using quantitative methods or doing policy-oriented work.

Howard and Butler (2018) performed a content analysis of 461 reflective essays, collected over ten years, written by students (very few of whom were sociology majors) at the end of their introductory course about the most memorable things they had learned. Findings were organized in accordance with the Sociological Literacy Framework of Ferguson and Carbonaro (2016). Overall, the topic of socialization was mentioned by over two-thirds of students, followed by stratification, the sociological eye, and social structure (roughly half), while references to social change were minimal. The authors noted that these frequencies correlated with the amount of coverage the topics received in the introductory course. They theorized that socialization was probably mentioned most frequently because of its 'micro' nature which made it easier for students to relate to it as opposed to macro-level phenomena. When it came to varieties of inequality, class and gender were three times more frequently mentioned than race, and eight times more than global inequality. Once again, that finding is explained with reference to 'personal salience' by the authors, namely the fact that a globally rich and largely white American audience will not be as concerned about the latter forms of inequality.

Medley-Rath (2019) gave a visual sociology exercise to 165 students of an introductory course and conducted a content analysis of captions that respondents wrote to their pictures. Out of 448 concepts contained in the course material, students ended up using a "limited range", 144, and 77 percent of all submissions relied on 20 concepts which were typically broad ones (culture, norm, religion, family, and gender were the leading ones). Moreover, students often provided unclear captions to their photos, and if 'unclear' had been a category in the content analysis, it would have been more frequent in the data than any other concept. While students were able to make connections between sociology and their everyday lives which they photographed, most of them seemed unwilling or unable to gain a deep understanding of the material.

Schneickert et al. (2019) performed an online survey of 1245 sociology BA and MA students concerning their "theoretical and methodological preferences". The results demonstrated the existence of a "de facto sociological canon" defined in terms of preferred authors. They also demonstrated that gender and political values, as well as the university attended, had an influence on which authors and methods the students preferred.

5.2 Research aim and question

The aim of the chapter is to uncover the 'mental image' that students form about sociology before, right after, and years after taking the introductory course, and it is to be described in terms of its content, while the biggest attention will be paid to changes in time, from one data gathering wave to the next. In that sense, the aim is exploratory and open-ended. On the other hand, the 'mental image' will likely by shaped by the 'treatment' that students received in the form of the introductory class. Still, to assess or even to construe the findings as 'learning' in the sense of comparison to a standard is not a dedicated aim of the data analysis here.

There is no ambition to claim that the results are generalizable in the statistical sense, and therefore hypothesis testing is not a goal. Nevertheless, measures of statistical significance will be reported alongside quantitative indicators below in respect of standard practice. Eventually, the research question can be formulated as follows:

RQ2. What topics do students associate with sociology before, right after, and years after taking the introductory course?

Although there are no hypotheses, a few qualitative 'expectations' can be formulated on the basis of the literature, as discussed earlier (section 3.5).

- E1. Female students will show a richer mental image of sociology than males.
- E2. 'Exciting' or controversial topics such as gender, sexuality, deviance, or ethnicities will be recalled easier in the long term than 'drier' ones (e.g. functionalist theory).
- E3. The topic of migration will feature prominently on student mind maps, at least in the first two waves.
- E4. In the long term, most respondents will likely retain little of the course material, but sociology majors will have a rich mental representation of the field.

5.3 Data and method

Data were provided by the students of our 'Foundations of Sociology' course held during the Fall 2015 semester at Corvinus University of Budapest, Hungary. The student body coming from five majors was described in section 3.4. The course was a 'survey of the discipline'. Each week covered a topic, 12 in total, which were Introduction, Methodology, Demography, Family and groups, Social stratification, Social mobility and migration, Economy, Gender and sexuality, Culture and lifestyle, Deviance, Religion, and Ethnicity and minorities, in that order. The evaluation system of the course relied most heavily on two multiple-choice tests, written at halfway and at the end of the semester.

There were three data gathering waves, described in detail in section 3.2. Importantly, this chapter relies on data from all three waves and all students. The composition of the samples in each wave (by major and by gender) was given in Tables 8 and 10. The reader should be reminded that in the T3 sample, female, sociology, and PS students were overrepresented, while male and LA students were underrepresented, and that the majority of students came from a solid middle-class background.

The data come from mind maps that students drew around the central concept of 'sociology'. The advantages of using mind maps for data gathering were presented in section 3.3.1. For the present study, it has to be acknowledged that while mind map data is very amenable to answering a 'what do students think' question, it cannot show why they think that (Burgess-Allen & Owen-Smith, 2009), and it also cannot show whether

they gained procedural knowledge or skills. Data were treated and conclusions were drawn accordingly.

5.3.1 Dictionary building

The method applied was content analysis, because the goal was to give a quantitative summary of the message of a large body of text (Neuendorf, 2017). Mind maps were treated as texts, and everything contained in them was accepted as being connected to sociology in the respondent's mind. It has to be noted that the mind maps given by students typically contained concepts or things that could be named with one word. In every data gathering wave, out of all the nodes in all the mind maps, 72 to 76 percent was a single word.

First, a dictionary of search terms was built. The process of dictionary building was both deductive and inductive. Based on the presentation slides of the lectures, every author named therein, and every concept that was either set in bold, was given a definition, or was a slide heading, was included in the list. Further items for the dictionary were arrived at by looking at word counts from the data in every wave. In the next step, the tentative items of the dictionary were checked for their 'validity'. This was done by breaking up all the mind maps, in all waves, into nodes, and seeing what nodes were 'matched' by a tentative search term of the dictionary. In this way it was possible, for example, to see whether the term *vallás* (the Hungarian word for *religion*) was valid and safe to use in the sense that it only brought up the concept of *religion*, and not something of a totally different nature (e.g. *adóbevallás*, the Hungarian term for *tax returns*). After this 'validation', the majority of dictionary items were accepted as capturing true and conscious references to sociological concepts such as *demography*, *stratification*, *inequality*, *race*, or *deviance*.

However, some items of the dictionary, mostly brought up by word counts from the actual data, were not clear in their meaning at first sight. Words such as *conclusion*, *connection*, *difference*, *effect*, *phenomenon*, *process*, *relationship*, most often used in the plural, were abundant in student mind maps, often as nodes on their own. The meaning of such terms was checked in context manually. For example, in several cases the meaning of a 'process' was clarified in context on a mind map (e.g. *sociology – society – minorities – process of integration*), but in others it was still not (e.g. *sociology – qualitative – big processes*). After the manual check, the meaning of the aforementioned terms was either resolved or was assigned as 'vague'. Eventually, the dictionary contained

396 terms. Every term was treated as a variable with two possible values: whether it was present in the respondent's mind map (1) or not (0).

5.3.2 Theme creation

Next, the terms of the dictionary were sorted into themes, many of which are described briefly in Table 19. Themes were, once again, arrived at both inductively and deductively. First, the topic structure of the introductory course was taken into account, because it was likely to influence students' thinking, resulting in themes such as *Demography*, *Deviance & crime*, *Religion*, or *Social mobility*. Next, the literature about the sociological core also suggested some themes. For example, themes such as *Sociology as a way of thinking*, *Society as a higher order (structural) entity*, and *Social change* were inspired mostly by the Sociological Literacy Framework (Ferguson & Carbonaro, 2016). However, it has to be noted that such themes are not necessarily of the same kind as the ones previously mentioned. For example, a mere mention of 'family' on a mind map cannot readily be interpreted in the way that a student mentions it as an example for a structural element of society. Therefore, words of the dictionary were always taken at 'face value'. In that way, mentioning the family counted towards mentioning the theme *Family*, and for *Society as a higher order (structural) entity*, explicit references to *structure*, *macro*, or *network* were required. Similarly, one element of the dictionary only counted towards one theme, for example, mentioning *social mobility* was added to the theme of *Social mobility* and not grouped also to *Social change*.

Lastly, the data also influenced some decisions about theme creation. For example, the richness of concepts belonging to the general topic of inequality allowed for the creation of separate themes for *Inequality & stratification* and *Conflict & injustice*. The theme *Student experiences* was also established after its presence in mind maps became clear. The most significant inductive theme, however, is that of *Vague terms* which contains terms that occurred in high numbers but their exact meaning could not be established even after a manual check, as described in the previous section.

Eventually, 34 themes were created (a complete list is given in the Appendix). The number is high but is justifiable by the intention to grasp the thematic richness of the source material. In the same way as with terms of the dictionary, every theme was a variable either present (1) or not present (0) in a mind map. In order for a theme to earn the value 1, the presence of only one term of the dictionary belonging to it was sufficient.

5.4 Results

Table 19. An overview of the 21 most important themes. Ordered by T1 relative frequency.

Theme	Contains mentions of…[a]	Level of understanding
Human lifeworld	society, all things 'social', human(s), people, community, group	general/lay
Scientific/empirical endeavor	science, research, statistics, analysis, theory, knowledge, data	general/lay
Domain of psychology	psychology, social psychology, behavior, emotions, personality	general/lay
Vague terms	connection(s), effect(s), difference(s), phenomenon, influence, conclusion(s), process(es)	general/lay
Inequality & stratification	poverty, 'layer' (as in social stratification), inequality, (social) class, hierarchy, inequality	specific
Culture, values & norms	culture, norms, law, tradition, values, rules	specific
Conflict & injustice	conflict, antagonism, power, discrimination, prejudice, stereotype, segregation, exclusion	specific
Domain of politics	politics, political science, parties, democracy	general/lay
Welfare & world betterment	solution, help, empathy, equal opportunity, 'social sensitivity'	general/lay
Economy	economy, work, unemployment	specific
Ethnicity & minorities	ethnic(ity), minority, race, racism, Gypsy, Roma, Jew(ish), antisemitism, ethnocentrism	specific
Religion	religion, Christian(ity), church, atheism, cult, sect, fundamentalism, Islam, secular	specific
Family	family, marriage, couple	specific
Integration & cooperation	integration, acceptance, socialization, cooperation, communication	partly general/lay, partly specific
Methodology	methodology, methods, survey, (participant) observation, interview, focus group, qualitative, quantitative	specific
Gender	sex ('biological sex'), gender ('social sex'), men, women, feminism	specific
Student experiences	Corvinus, campus, studying, lecture, seminar, TED videos, Gábor Király	general/lay
Deviance & crime	deviance, crime, drug(s), illegal, alcohol, suicide, dependence	specific
Durkheim, Marx, Weber	Durkheim, Marx, Weber	specific
Lifestyle	lifestyle, quality of life	specific
Theoretical paradigms	(structuralist) functionalism, conflict theory, symbolic interactionism	specific

[a]: The lists given are not exhaustive but illustrate the most common terms and concepts that students mentioned within a given theme.

The first results to be presented are the 21 themes that were deemed most important because of their frequency in the data (shown in Table 19). Indicating the fact that not all themes reflect the same depth of knowledge or understanding about sociology, the table distinguishes between 'general/lay' themes and 'specific' ones. Themes of the latter type contain concepts and terms which go beyond a superficial understanding of what sociology is, and/or were explicitly covered in the introductory course as well.

5.4.1 Average mind maps and theme patterns

Knowing that 34 themes could be present (or not) on every mind map, theoretically 2^{34} different types of mind maps could exist. The number of actual types were 367, 359, and 179 in T1, T2 and T3, respectively, while the greatest number of the same type (i.e. containing the exact same themes) were six, five and three. In order to give an overview of such a diverse set of data, 'average mind maps' were constructed for each wave. First, the average number of themes was calculated (see Table 20 for the whole sample and subgroups in each wave). Next, a relative frequency was calculated for every theme (what proportion of respondents mentioned the given theme). Themes were then ranked by relative frequency, and the first *n* items of the ranking, *n* corresponding to the average (rounded in the normal way to the nearest integer), were included in the average mind map.

Table 20. Average number of themes on mind maps in each data gathering wave, by gender and by major area of study.

	T1	T2	T3
all	7.53[a]	9.15[b]	6.94[c]
male	7.3[a]	8.49[b,d]	6.54[c]
female	7.65[a]	9.49[b,d]	7.1
Sociology	11.4[d]	10.46	10.08[d]
Political science (PS)	7.71[a]	8.9[b,d]	7.07
Media and communication (MC)	8.00[a]	10.93[b]	6.14[c]
International studies (IS)	8.25[a]	10.74[b]	6.79[c]
Landscape architecture (LA)	4.24[a,d]	5.88[b,d]	4.47[d]

[a] Significantly different from the corresponding T2 value ($p < 0.05$).
[b] Significantly higher than the corresponding T3 value ($p < 0.05$).
[c] Significantly different from the corresponding T1 value ($p < 0.05$).
[d] Significantly different from all other values in comparison groups (i.e. the other gender or all other majors) within the given wave ($p < 0.05$).

Quantitative overview. The figures in Table 20 show that the whole sample, both genders, and almost all majors mentioned the greatest number of themes in T2, and the

lowest in T3. McNemar tests showed that the differences between the number of themes mentioned in separate waves were also statistically significant for the whole sample and almost all subgroups analyzed. In T1 and T3, the average mind maps of sociology students contained significantly more themes than those of all other majors, but in T2, they were fractionally overtaken by MC and IS students, although the difference was not statistically significant. The average number of themes for LA students was significantly lower than the rest in all three waves. Female students mentioned more themes on their mind maps than males in all waves, but the difference was only significant in T2. All the above claims about statistical significance are true at a $p < 0.05$ threshold.

Table 21. Themes on average mind maps at T1, T2 and T3.

Numbers are relative frequencies: what proportion of the mind maps in the given wave contained the given theme. Percentages in bold indicate the theme was part of the average mind map in the given wave, while percentages in (parentheses) indicate it was not.

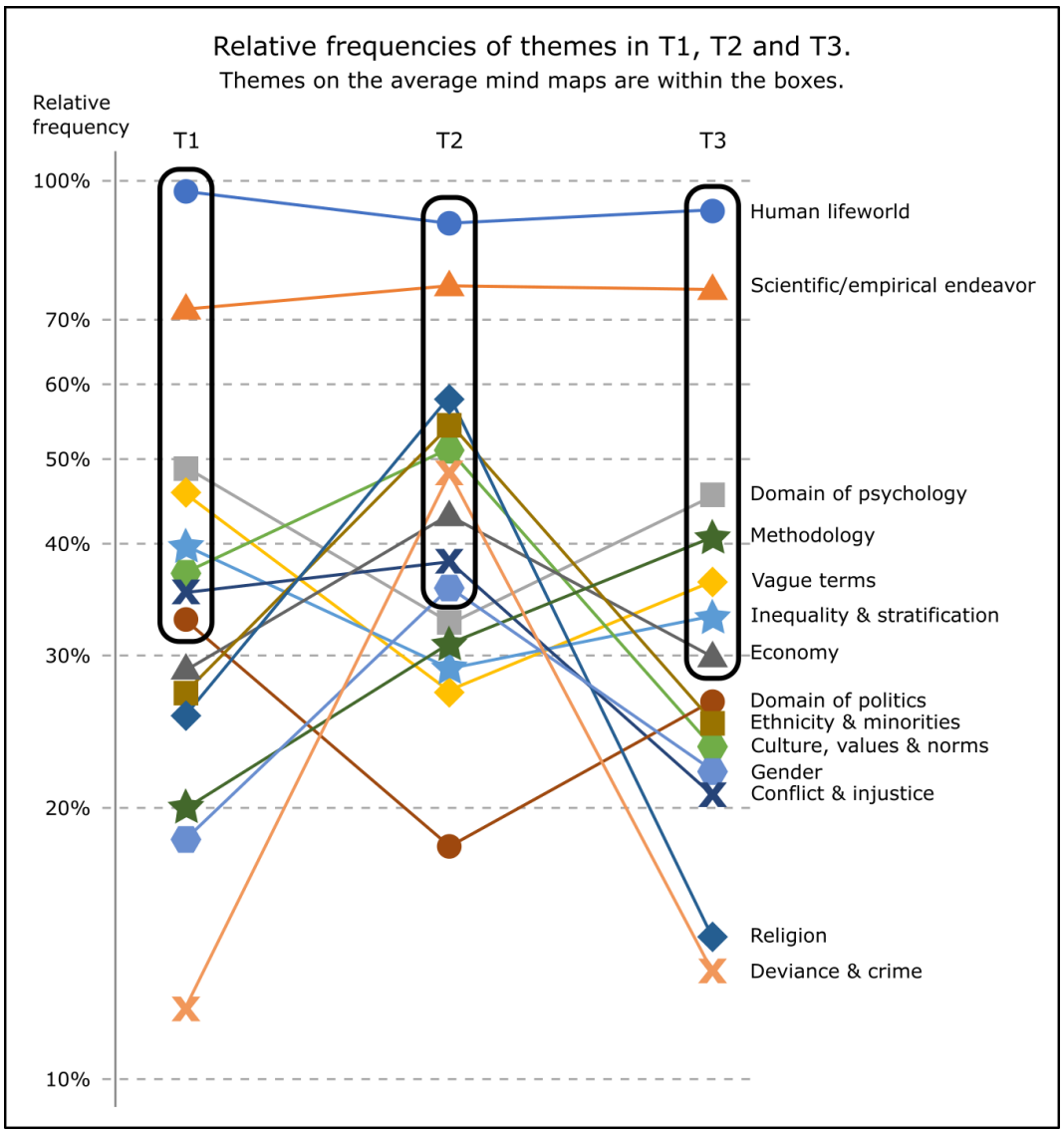
Theme	T1	T2	T3	Role
Human lifeworld	**97.0%**[a]	**89.8%**	**92.4%**	staple
Scientific/empirical endeavor	**72.0%**	**76.7%**	**75.5%**	staple
Domain of psychology	**46.1%**[a]	(31.6%[b])	**45.1%**	recurring
Vague terms	**45.6%**[a]	(27.9%)	**35.9%**[c]	recurring
Inequality & stratification	**38.3%**[a]	(29.8%)	**33.2%**[c]	recurring
Culture, values & norms	**37.5%**[a]	**50.7%**[b]	(23.9%[c])	eroded
Conflict & injustice	**35.5%**	**37.3%**[b]	(21.2%[c])	eroded
Domain of politics	**33.2%**[a]	(18.5%)	(26.6%)	dropped
Economy	(28.2%[a])	**42.9%**	**29.9%**	firm addition
Ethnicity & minorities	(28.0%[a])	**51.2%**[b]	(23.9%)	comet
Religion	(26.4%[a])	**57.4%**[b]	(14.7%[c])	comet
Methodology	(20.4%[a])	(30.3%)	**40.2%**[c]	late arrival
Gender	(18.9%[a])	**36.5%**	(23.4%)	comet
Deviance & crime	(12.3%[a])	**48.5%**[b]	(13.6%)	comet

On the basis of McNemar tests:
[a] Significantly different from the corresponding T2 value ($p < 0.05$).
[b] Significantly different from the corresponding T3 value ($p < 0.05$).
[c] Significantly different from the corresponding T1 value ($p < 0.05$).

The most frequent themes. Table 21 summarizes the average mind maps for each wave by showing which themes were present in them, providing relative frequency values as well. The main finding is that there were only two themes which appeared on the

average mind map in all three waves (called ‘staples’), both indicating basic and largely unspecified knowledge about sociology: that it studies the *Human lifeworld,* and that it is a *Scientific/empirical endeavor*. The relative frequencies attained by these two themes, at least 72 percent in each wave, overshadow the numbers of all others. Figure 5 represents the same data in graphical form.

Figure 5. Relative frequencies of themes which were part of the average mind map in at least one wave.



The diversity of student views about sociology. In all three waves, the above two themes were followed by a ‘long tail’ of others, never scoring above 60 percent relative frequency, and not even above 50 percent in T1 and T3. In T1, 13 themes had a relative frequency between 20 and 60 percent, in T2 there were 16 such themes, in T3 there were again 13. In all, there were 19 themes, more than half of the total 34, that scored a relative frequency between 20 and 60 percent in at least one wave, suggesting that students had

diverse thematic associations about sociology. (Those 19 themes and the two leading ones were shown in Table 19 above.) Out of those 19 themes, 12 made it to the average mind map in at least one wave. Out of those 12, six appeared on the average mind map in two waves, and six only once, and the relative frequency scores of the same theme in separate waves were significantly different in many cases (see Table 21), suggesting that over time, there was a level of volatility in the mental content of respondents about sociology. The 'roles' assigned to themes in Table 21 are intended to grasp that volatility in a meaningful way. The meanings of the labels are also explained on a Venn diagram in Figure 6. Overall, the average mind maps in T1 and T2 shared four topics, the ones in T2 and T3 shared three, while those in T1 and T3 shared five, suggesting that it was the T1 and T3 mind maps that were the most similar.

Figure 6. The 'roles' of themes explained in a Venn diagram.

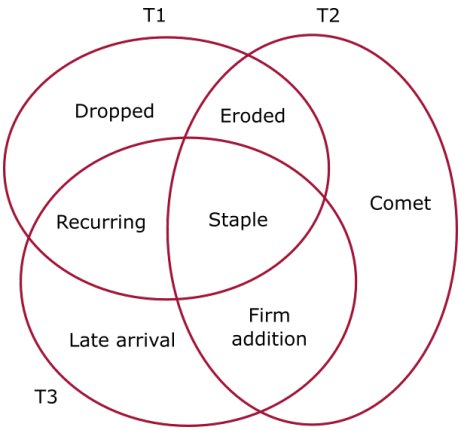
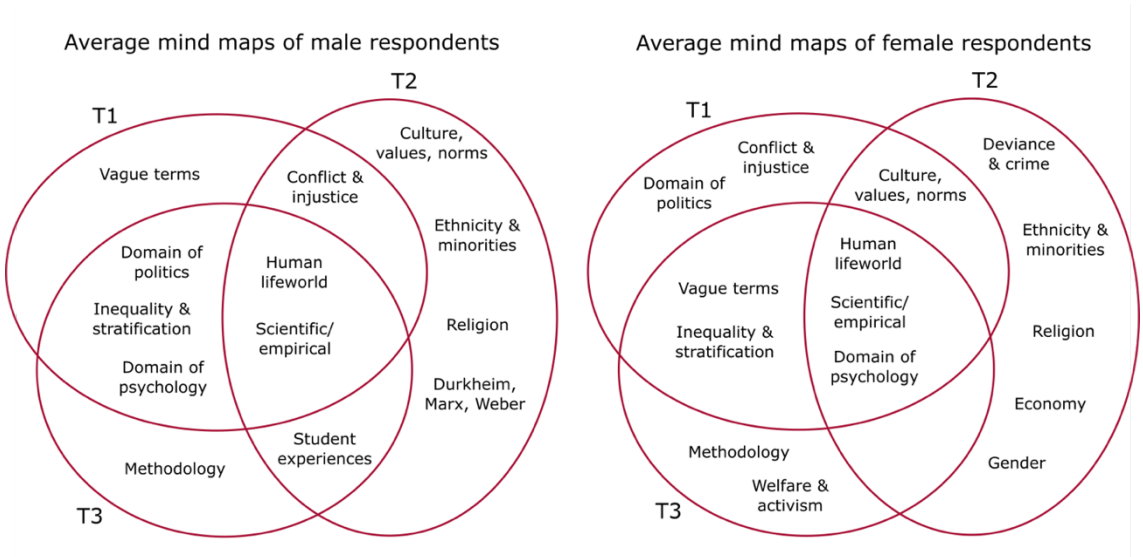


Figure 7. Average mind maps of male and female respondents shown as Venn diagrams.



5.4.2 Average mind maps by gender and major

Average mind maps were constructed separately for genders as well and are shown in Figure 7. When it comes to comparing genders, the differences were quantitatively small and only significant in T2 (as shown in Table 20). The themes mentioned by genders separately closely matched the ones on the average mind maps of the whole sample, and in each wave, at least five themes were identical between the average mind maps of both genders.

Table 22. The role of each theme appearing on any of the average mind maps constructed separately for each major and wave.

Ordered by T1 relative frequency in the whole sample. '–' indicates that the given theme did not appear on the average mind map of the given major at any time.

Theme	Major				
	Sociology	**Political science (PS)**	**Media and communication (MC)**	**International studies (IS)**	**Landscape architecture (LA)**
Human lifeworld	staple	staple	staple	staple	staple
Scientific/ empirical endeavor	staple	staple	staple	staple	staple
Domain of psychology	recurring	recurring	recurring	recurring	staple
Vague terms	–	dropped	recurring	recurring	recurring
Inequality & stratification	recurring	recurring	–	recurring	–
Culture, values & norms	eroded	eroded	eroded	eroded	comet
Conflict & injustice	eroded	eroded	eroded	eroded	–
Domain of politics	recurring	recurring	–	–	–
Welfare & world betterment	recurring	–	dropped	–	–
Economy	staple	comet	comet	firm addition	comet
Ethnicity & minorities	staple	comet	comet	comet	–
Religion	eroded	comet	comet	comet	comet
Family	–	–	–	dropped	–
Integration & cooperation	–	–	recurring	–	–
Methodology	firm addition	–	late arrival	late arrival	–
Gender	firm addition	–	comet	comet	–
Student experiences	–	firm addition	comet	comet	–
Deviance & crime	comet	–	comet	comet	–
Durkheim, Marx, Weber	–	firm addition	comet	comet	–

Table 22 provides an overview of average mind maps separately for each major by showing which themes appeared on them in which waves. The main takeaways are the following. First, in total, 19 themes appeared at least once on any major's average mind map, further suggesting that students had diverse views about sociology. Next, average mind maps of MC and IS students were extremely similar and showed great volatility: 16 themes showed up on them at some time, with a high number of topics only appearing in T2. Sociology students' view about the field was more stable over time than that of others: they had the greatest number of themes appearing in all waves, and their average mind maps, containing 11 themes at T1, and 10 later, were made up of only 14 themes overall. Finally, the average mind maps of landscape architecture students were both quantitatively and qualitatively meager.

5.4.3 Further notable results

Other notable results include the fact that *Social mobility*, which had a week of its own devoted to it in the introductory course, was virtually absent from mind maps in all waves, for all genders and majors (its best relative frequency score was 14.8 percent, in T2 among sociology students, but it registered below 10 percent in the whole sample at all times). Similarly, the topic of *Migration* was mentioned scarcely, only scoring above 10 percent in T1 overall, and below that in all further waves. *Social change* barely scored above 10 percent in T1 and below that later, the fact that sociology involved a special way of thinking never recorded a relative frequency above nine percent. The concept of socialization had its highest relative frequency in T2, at four percent. A possibly 'exciting' theme, *Sexuality*, scored 16.9 percent in T2, but below five percent in other waves.

5.5 Discussion

The present study was not a controlled experiment, which makes it unknowable why exactly students produced the mind maps they did in the separate data gathering waves. However, it can be assumed that at T1, they worked on their prior knowledge, whatever its source, and that at T2, their responses were heavily influenced by the education in sociology that they had freshly received and were tested on. In the long term, by T3, the mental image they formed around sociology must have come from multiple sources: first, their prior ideas which the course did not dislodge, second, memories remaining from the course, and third, further experiences, mostly studies in their respective fields. Theoretically, elements of those further experiences could have been linked to things

encountered in the course, thereby reinforcing some themes. The discussion below will start with the evaluation of the 'qualitative expectations' made earlier, and then will move on to assess other key results.

5.5.1 Evaluation of qualitative expectations

E1. The difference between male and female students. As shown above, the number of themes on the average mind maps of the two genders only differed in T2, by one, contradicting the expectation that females will provide richer mind maps. This is also consistent with the finding in Chapter 4 (where no significant difference was found between the genders). Qualitatively, it is hard to highlight very interesting differences. The themes *Durkheim, Marx & Weber* and *Student experiences* were exclusive to the average mind maps of male students, suggesting an approach that is reverential towards classical thinkers while easy-going in accommodating university life. On the other hand, *Gender* and *Welfare & activism* only showed up on the average mind maps of females, probably because of higher personal salience in the case of the former, and a bigger attention to humanistic-humanitarian motives in the latter.

E2. 'Exciting' and controversial topics. The results obtained do not support the assumption that such topics will be remembered more in the long term, contradicting the literature on long-term learning. Out of some viable candidate themes for an 'exciting' status, only *Deviance & crime* and *Gender* showed up on the average mind map of students, as 'comets' in T2, while *Sexuality* never made the cut. Knowing the country, the theme of *Ethnicity & minorities* can be considered controversial, but it only played a 'comet' role. While it has to be noted that several of these topics were more salient for sociology students when investigated separately, the results suggest that such topics either did not excite students after all, or that students were possibly afraid of mentioning them, or were simply reluctant to adopt new ideas beyond the ones they had already had, echoing the findings of Medley-Rath (2019).

E3. The topic of migration. Even though the T1 and T2 data gathering was conducted during the autumn of 2015, when discourse about the European 'migration crisis' was dominating Hungarian public life (Bocskor, 2018), it barely seemed to register with students, contrary to what was expected. In T1 *Migration* scored a relative frequency of 13.6 percent in the sample (largely due to 46 percent of sociology students mentioning it), but in T2, only 5.9.

E4. Long-term retention. The fact that quantitatively, the T3 mind maps were the least rich in content confirms the expectation that over the long term, students typically remember only a small portion of the material once learned. Sociology students, as expected, had a richer view of their own field at T3 than all others by quite a margin.

5.5.2 Discussion of further key results

What students do know. The fact that an overwhelming majority of students associated the themes *Human lifeworld* and *Scientific/empirical endeavor* with sociology is probably welcome, as is the fact that "the centrality of inequality" (Ferguson, 2016, p. 6) was reflected on average mind maps in all three waves, because these findings show that students have a sound basic idea of our field. The fact that in T3, respondents typically did not associate a wide variety of topics with sociology again rhymes with the findings of Medley-Rath (2019) about students relying on a limited range of broad sociological topics in their work, and it also allows for the same permissive evaluation that it being "an introductory course, this might be exactly where students are supposed to be" (Medley-Rath, 2019, p. 25).

Changes over time. Two things are especially noteworthy about how students' mental image of sociology changed over time. The first is that in T2, there were a high number of 'comet' topics, ones that only showed up in that wave and no other, on the average mind map of the whole sample and several majors separately as well. Those themes, *Deviance & crime*, *Ethnicity & minorities*, *Gender*, and *Religion*, correspond to topics that were covered in the second half of the semester in the course, and were part of the second multiple choice test written in the same week as the T2 data gathering. That supports the notion that student knowledge is often "an artefact of requirements" (Bandini et al., 2016, p. 415). For the majority of students in the sample, completing the course was likely just a step towards earning the degree and not conceived as a means to personal enrichment, leading to a short-term strategy of studying for the test. Nevertheless, T2 mind maps were the richest thematically, demonstrating short-term learning gains from the course that several other studies also documented (e.g. Keesler et al., 2008, Howard et al., 2014).

The second finding worthy of attention is that the smallest number of themes on average mind maps was found in T3, in line with Expectation 4 and consistent with research on long-term learning presented in section 2.1.3. Looking at the exact themes making up the average T3 mind map of students, however, reveals something more

intriguing. On the one hand, there are welcome new additions compared with the initial T1 state, namely the themes of *Economy* and *Methodology*, the latter probably due to further studies between T2 and T3 and the fresh experience of thesis writing. On the other hand, in T3 students relapse into mentioning the *Domain of psychology* more frequently than anything else beyond the two 'staple' themes, and *Vague terms* also recur. The recurrence of *Vague terms* in T3 is comparable to Medley-Rath's (2019) finding that students used 'unclear' captions in their visual sociology exercises.

Sociology students. The mental image of sociology students about their own field was relatively stable over time, with several themes appearing on their average mind maps in at least two waves. Superficially, the fact that the number of themes they mentioned decreased by one from the high mark of 11 in T1 might look contradictory to the findings of Ashwin et al. (2014) which indicated that sociology majors gained a more refined understanding of the field over time. However, it is very likely in the case of sociology students in the sample that majoring in the field furnished them with a depth of knowledge that the mind maps did not (and the present analysis did not intend to) capture. Notably, *Vague terms* never made an appearance on sociology students' average mind maps, which is good news. Of further interest is the recurrence of the themes *Domain of politics* and *Welfare & world betterment* in T1 and T3. This finding allows the interpretation that students of sociology are not only interested in scientific investigations of the human world but also in ways of acting upon it or changing it, and it rhymes with the finding of Bandini et al. (2016) of students reporting that they became more compassionate during their sociology studies. Such an inclination towards civic commitment is often encouraged among the learning goals of IntroSoc courses (as discussed in section 2.3), and while it was not an element of our introductory course, students might have been reinforced in it by their subsequent studies (e.g. they had a class covering the topic of equal opportunity).

Other social scientific majors. The qualitative similarities between average mind maps of MC and IS students were remarkable. The high number of themes on their T2 mind maps, as well as of 'comet' themes, suggest they were enthusiastic about the subject when studying it, but their T3 mind maps show they did not carry much with them in the long term. As for political science students, their average number of themes in T2 is one and a half smaller than that of other social scientific majors, suggesting a lack of enthusiasm on their part—similarly to their tendency for surface learning outcomes seen in Chapter 4. However, by T3, the number of themes on mind maps of PS students was

second only to that of sociology students. While qualitatively they still showed tendencies towards the superficial (mentioning *Student experiences*), the theme *Vague terms* was notably absent from their average mind map. The fact that they mentioned the classical authors *Durkheim, Marx and Weber* suggests that their studies overlapped with topics typically covered in sociology.

Landscape architecture students. In this study, LA students represented a 'lay audience' with no favorable disposition towards social sciences, and indeed their average mind maps show very little idea about sociology beyond the basic understanding of it being a social science. Presumably, these students encountered several issues during their studies which a sociologist would readily consider 'social'. The fact that they failed to connect those to the field of sociology suggests that the introductory course did not provide them with suitable foundations or 'hooks' on which to hang new pieces of knowledge. The practicable insight from this finding is that at least in this case, a single IntroSoc course was not suitable to serve diverse majors, and that different audiences might require separate introductory courses, as suggested by Greenwood (2013, p. 236).

The persistence of psychology. The fact that psychology's relation to sociology was so persistent in the minds of students overall is worthy of attention. It is true that the introductory course made references to psychology more often than to any other social science, however, that should logically have resulted in more frequent mentions of psychology in T2 than in other waves. In fact, the very opposite of that is the case: *Domain of psychology* scored its lowest relative frequency in T2. While it is also true that students of social scientific majors did have dedicated psychology courses during their studies between the T2 and T3 data gathering waves, they also had mandatory economics, political science, philosophy, and law, none of which came close to being mentioned as frequently in T3 as psychology. Moreover, LA students had no psychology in their curriculum, still they kept on associating it with sociology. This finding at the very least does not contradict the suspicion that students struggle to see the exact boundaries between sociology and psychology, and that IntroSoc courses should put extra emphasis on delineating the differences between the fields.

The topics that did not 'stick'. Out of the 12 topics covered in the introductory class, there were two which did not appear on the average mind map of either the whole sample or any major at any time: *Demography* and *Social mobility*. That is probably explicable by a lack of 'personal salience', similarly to what Howard & Butler (2018) observed in connection with the issue of race and global inequality. In the case of *Demography*, most

likely due to young age, and in that of *Social mobility,* due to the fact that they came from solid middle-class backgrounds and were admitted to one of the country's most prestigious universities, students might have felt that these topics were irrelevant to them personally.

5.6 Concluding remarks

The chapter aimed to describe the general 'mental image' that students of an introductory course formed about sociology at three points in time. Similar qualitative-longitudinal studies have been scarce.

Some of the findings were in line with what could be expected, for example, that students had the richest picture of sociology right after studying the course, and that years later, their views were simpler. The fact that at the end of their BA studies, sociology students had a richer view of their field than students of other majors is reassuring. However, the finding that years after taking the course, the mental image of students is most similar to the one they had had before even studying it provides reason for reflection. Even if expecting long-lasting effects from just one introductory course is not realistic, an almost total lack of change in initial ideas of students is still remarkable.

Practitioners in the field emphasize the importance of a good public image of sociology as a well-defined science with a proprietary subject matter. Results above indicate that while students do have a sound basic understanding that sociology is a science dealing with human life, and that they are aware of the importance it places on studying inequality, they probably also have a hard time differentiating it from psychology and think about it in vague terms. Those insights can inform decisions about course design.

6 The social role and reputation of sociology as represented in student mind maps[17]

Introductory sociology classes at university are the first and only 'point of contact' with the field of sociology for large swaths of students. Besides the learning these courses provide (Chapter 4) and the general image they project about what sociology deals with (Chapter 5), they can also shape the reputation of the field and perceptions about sociology's role in society.

Sociologists in general believe that their profession has a bad reputation, and there is some empirical basis to that, as the literature reviewed in this chapter will show. Some in the field believe that the unfavorable public image is a consequence of sociology having become overly political (Deflem, 2013) and too concerned with trying to shape society instead of sticking to high scientific standards. That stands in contrast to the fact that instigating some level of civic engagement or dedication to 'trying to improve the world' in students is often seen as a desirable element of even IntroSoc courses (see section 2.3), and that sociologists often confess their motivation for effecting social change (Collins, 1998, pp. 2–3; Brown et al., 2016).

Hungarian sociology and its practitioners have been wary of tying themselves to the cause of social change or politicized issues. Nevertheless, there is a strong critical tradition in the field in Hungary, which sets sociology up on a collision course with either market or state power. The 2010s have unfolded in a way where that collision could potentially have happened, if not in any other way, then only to the extent that social sciences or sociology could have been associated with issues which the government pushed back against—above all, migration and 'gender'. While findings presented in Chapter 5 indicated that students in our introductory course did not make those particular associations, what they think about sociology's social role and how they evaluate it deserves attention in more detail. That is what this chapter will deliver by analyzing relevant messages in student mind maps.

[17] This chapter is a reworked version of a manuscript submitted to a journal, under review. It was written by Péter Miskolczi alone. The changes serve the integration of the text into the dissertation by eliminating repetitions (in some parts of the literature review, and especially when it comes to the description of the sample and data).

6.1 Literature review

The literature review will map out directions for the content analysis that comes later. What kinds of concepts, terms, thoughts, and opinions make up the reputation of sociology? Ideas will come from mainly two sources: first, from empirical studies that investigated the public image or representations of sociology in various media and by various audiences. Second, the self-image of sociology as construed within the field by sociologists, and the social role(s) they want their discipline to play, will be revisited. Finally, a brief section will look into the worldview of social scientists and students.

6.1.1 The public image of sociology

Sociology has long been concerned with its reputation and was never upbeat about it. As far back as 1963, Peter Berger described the public image of sociologists in two broad ways: first, that they were seen as 'do-gooders', social reformers, supporters of social work, second, as soulless gatherers of statistics who do not even care about people, and use complicated jargon to tell things that are no surprise to anybody possessing a bit of common sense (Berger, 1963, quoted both by Bjorklund, 2001; and Conklin, 2009).

More recent empirical findings about the public image of sociology encompass a wide range of sources and audiences. Some studies have investigated sociology's representations in culture: Bjorklund (2001) in 20th-century American novels, Conklin (2009) in Hollywood films, Siebel and Smith (2009) in news stories by the Associated Press. Best (2003) reviewed all sorts of criticisms the field has received in an enjoyable essayistic way, Kougioumoutzaki (2007) traced the history of high school sociology in Greece to draw conclusions about the field's reputation. Hohm (2008) surveyed 345 US university deans about their opinions on various sciences, and there are several studies about the student experience of studying sociology (to be referred to below). The most frequently recurring elements of sociology's reputation are the following.

A practically useless science with low prestige. Although the empirical basis of his claims is not clear, Best (2003, p. 2) asserts that sociology is seen as a science that 'deals with the obvious' but uses unnecessarily complicated language to conceal its hollowness. That kind of image was indeed found in both literary (Bjorklund, 2001) and cinematic representations (Conklin, 2009), while Siebel and Smith (2009) came to the conclusion that the representation of the field in the news made sociology look like something trivial and not very serious. In Hohm's (2008) survey of US deans, sociology was ranked very low out of 23 sciences on the dimensions of academic rigor (rank 20), student success in

occupation and graduate achievement (rank 20), and overall prestige of the discipline on campus (rank 18). Out of fellow social sciences, political science and especially psychology were seen in a much more favorable light (Hohm, 2008). General claims about a bad reputation of sociology are repeatedly found in the literature across the decades (Stephan & Massey, 1982; Huber, 1995; Keith & Ender, 2004). As for the student experience, nursing students interviewed by Edgley et al. (2009) thought sociology did not provide them with a kind of knowledge they could translate to practical action.

'Opinionology'. According to Siebel and Smith (2009, pp. 304–5), sociology's representation in the news made it look like "a discipline in which conjecture and opinion supersede careful empirical research". Kougioumoutzaki (2007, pp. 198–9) claimed that the way sociology was taught in Greek secondary education "intensifie[d] the perception that sociology [was] nothing more than just well-articulated everyday opinions and beliefs". Howard (2015), discussing the issue of the sociological imagination, arrived at similar conclusions. He argued that adopting the sociological imagination inherently involved being critical towards the status quo, which often stands in opposition to the values and worldviews that students had internalized during their upbringing, especially in American society. Because of deficiencies in the way sociology is typically taught, the sociological imagination comes across as just "another ideological viewpoint or opinion available in the marketplace of opinion where [students], as consumers, are free to choose whichever opinion they prefer" (Howard, 2015).

Social reformers, people who want to help. Strengthening Berger's claim quoted above, both Best (2003) and Howard (2015) claimed that sociology was often conflated with socialism or social work, the former also adding that its practitioners were seen as irresponsible radicals. As seen earlier in the dissertation (Chapter 2.3), preparing students to play a part in social change or bringing about a more just society is often listed among the goals of sociology education by experts. Indeed, a motivation to 'help people' or effect social change was the professed reason of many sociology students for choosing the field (Spalter-Roth et al., 2010). For some, that kind of motivation receded as they progressed with their studies (McKinney & Naseri, 2011), but for others it was reinforced (Bandini et al., 2016). Further, almost half of the students of an introductory sociology course surveyed by Mitra and Sarabia (2005) thought that sociologists were liberal, while only four percent thought they were conservative.

Dehumanization. Some representations of sociologists in novels and films showed these characters as not caring about, taking advantage of, or even dehumanizing their research subjects or falling short of ethical standards (Bjorklund, 2001; Conklin, 2009).

Positive indications. Some findings of the literature point towards more positive elements of a public image of sociology. In novels and films, sociologists as characters were sometimes shown as being diligent and professional in their pursuits and well-meaning in general (Bjorklund, 2001; Conklin, 2009). The students surveyed by Mitra and Sarabia (2005) thought the subject was 'important' in general, and roughly half of them agreed that 'all students' should be required to study it. In Hohm's (2008) survey of deans, the dimensions on which sociology ranked favorably were: success in conducting research aimed at ameliorating community problems (rank 1), involvement in the surrounding community (rank 1), and ability to work in inter- and multidisciplinary teams (rank 2).

6.1.2 Sociology's self-image and social role revisited

As Bognár (2007) writes, there is perhaps no science more interested in itself than sociology, and the various positions reviewed in Chapter 2.3 attest to that. The main points that will be carried on in this chapter are the following.

Value-free versus value-involved sociology. Practitioners in the field are not in agreement over whether sociology can or should be allowed to make value statements, and by extension, whether it should or should not contribute directly to the realization of certain social goals or take sides in social struggles.

Burawoy's typology. Burawoy (2005a) proposed a four-way division of labor for the field, in which *professional sociology* is closest to a value-free science; *policy sociology* employs knowledge to reach a desired goal; *critical sociology* deals with internal issues of the field; and *public sociology* is 'in conversation' with extra-academic audiences, defending civil society against the encroachment of the market and the state. The proposal duly received its criticism, as discussed in Chapter 2.3.2.

The inherently subversive nature of sociology. As discussed in Chapter 2.3.3, several authors claimed that sociology, by its very nature of uncovering the truth about society's unequal power relations, was inescapably political. 'Siding with the disadvantaged' was seen as a motivation that brought many into the field. *The 'problem-based' tradition of Hungarian sociology*, i.e. being "sensitive" to (Tardos, 2007, p. 179)

or “looking for answers to the burning social issues” (Lengyel, 2006, p. 106), is in alignment with that.

6.1.3 The worldview of social scientists and social science students

While making the blanket statement that sociology as a field is ‘liberal’ or ‘leftist’ is obviously problematic, the general rule that academics are to the left of the general population of a country, and sociologists are to the left of academics, was supported by empirical data coming from Denmark (Andersen, 1999), Canada (Nakhaie & Brym, 2011), and the United States (Klein & Stern, 2004). Contradicting those results, Berggren et al. (2009) found Swedish academics to be more right-wing than the country at large, although they warned that the various meanings attached to the labels ‘left’ and ‘right’ might hinder international comparisons, and they still confirmed that sociologists were the most left-leaning of the professions they investigated. Left-leaning orientation of social science students were documented by Elchardus and Spruyt (2009) in Belgium, and Schneickert et al. (2019) in Germany.

Two explanatory mechanisms were put forward for that phenomenon: one about socialization, namely, that a (more) left-leaning worldview is the product of university studies (e.g. Nakhaie & Brym, 2011), and the other about selection, which claims that students with left-leaning values are more likely to choose academic and social scientific pursuits. According to Gross and Fosse (2012), those careers carry a political connotation similar to certain jobs being seen as ‘fit for females’, and it is mainly left-leaning and liberal students who find such a career congruous with their identity. Elchardus and Spruyt (2009) presented empirical data that underpinned the theory of selection, meaning that left-leaning students guided themselves towards social sciences right at the start of their university studies, and professional socialization made only a small effect on their worldview.

6.2 Research questions

The literature review provided a qualitatively rich picture of the variations on both the public image and the proposed self-images of sociology. The themes uncovered provide the guiding lights for the empirical analysis. The research questions investigated in this chapter are the following.

RQ3. With regards to the ‘public image’ of sociology, to what extent are the following views or messages present in students’ minds?

a) That sociology deals with social problems;
b) That sociology goes beyond merely studying the world and acts upon it, mostly in a way that seeks to 'help' or to fight injustice;
c) The dimensions suggested by Burawoy (2005a): scientific, policy, critical, and public sociologies;
d) That sociology has low academic prestige and limited usefulness;
e) That sociology is not value-free.

RQ4. Does the overall image of sociology in students' minds – along the dimensions listed above – change over time (i.e. is there a 'socialization effect' of university studies in that regard)?

6.3 Data and method

This chapter relies on all three waves of data gathering, as described in Chapter 3.2. If the reader wishes to remind themselves of details of the samples obtained in each wave, they should look into section 3.4. As it was the case in the content analysis presented in Chapter 5, hypothesis testing is not a goal here, but measures of statistical significance will be presented, for reasons discussed in section 3.6.

Mind maps were treated as texts. The method of data analysis was content analysis, the general goal of which is to provide a quantitative summary of the meaning of a large body of text (Neuendorf, 2017). In this case, however, the aim was not to give a general overview (as in Chapter 5), but to investigate the presence of certain types of meanings (listed in RQ3), which makes the method similar to what Hsieh & Shannon (2005) call a 'directed content analysis', where a qualitative content analysis is guided by theory or previous empirical data.

Extracting meaning from mind map data is not always straightforward. For example, we can imagine two different ways for a mind map to contain the word 'problem': one, along the line of association *'sociology – society – problems – homelessness'*, two, *'sociology – people – men and women – love – problems'*. On the one hand, it can be argued that both instances are part of the wider 'cloud of meaning' that surrounds sociology in the mind of the respondent, and both indicate that sociology, eventually, is associated with 'things to solve' or 'things that are difficult', and the general content analysis presented in Chapter 5 operated on that assumption. On the other hand, it is clear that only in the first example do we see an explicit reference to *social problems*.

In the content analysis presented in this chapter, the presence of messages was interpreted in the narrower sense, almost all of the messages investigated had to be clearly associated with sociology (and the role it played in the world) in the student's mind.

That required the manual checking of *meaning in context* on each student mind map. As has been stated, more than 70 percent of all nodes on student mind maps in all waves were single words, which meant that 'context' was often established only by the connections that students made between nodes. Section 6.4 contains several actual examples from the data about the various contexts in which certain messages, such as 'help', appeared on mind maps, and the criteria that were applied to decide whether the appearance was sufficiently strongly linked to sociology. Admittedly, the drawback of mind maps often being hard to interpret by someone other than the author (Eppler, 2006) made some decisions difficult.

6.4 Results

The presentation of results will be structured along the guidelines listed for RQ3. The quantitative measure applied throughout is relative frequency in percentages, the meaning of which is the following: what proportion of a given subsample (i.e. either sociology students, or all other students) in the given data gathering wave mentioned the type of message in question. The criterion for a message to be considered present on the mind map is always given in the table: in most cases, a direct association with sociology was investigated, but sometimes, the more lenient approach of a given message being 'present on the mind map' was allowed. Throughout, sociology students are compared with 'the rest', and there were two reasons for that decision. First, sociology students, by self-selecting themselves to the field at the outset, and then receiving a three-year education in the profession, were likely to regard sociology differently to other majors. Second, while there were some differences between the other majors with regards to the results below, the only clear pattern of those differences was that landscape architecture students were less likely to think anything at all about sociology than the others, but overall, these other majors looked more similar to each other than to sociology students. Table 23 presents the most important quantitative results which are explained and compounded with qualitative detail below.

Table 23. Relative frequencies of selected messages in student mind maps, separately among sociology students and all others, by data gathering wave.

Wave		T1		T2		T3	
Subsample		**sociology (n=67)**	**all others (n=330)**	**sociology (n=61)**	**all others (n=312)**	**sociology (n=40)**	**all others (n=144)**
SECTION I SOCIAL PROBLEMS							
(1) mind map referred to social problems		47.8%[a,d]	17.0%	27.9%	17.3%	30.0%[d]	11.8%
(2) mind map contained examples of social problems		40.3%[a,d]	8.2%	11.5%	6.1%	15.0%[c]	5.6%
(3) mind map contained something that was named as a 'problem' by others		91.0%[d]	46.4%[a]	90.2%[d]	66.3%[b]	85.0%[d]	42.4%
SECTION II SOCIOLOGY'S ENGAGEMENT WITH THE WORLD							
Sociology was linked in some way to...	(4) 'solutions'	11.9%[d]	3.6%	6.6%	2.6%	2.5%	0.0%
	(5) 'help'	6.0%	3.6%[a]	4.9%[d]	0.3%	12.5%[d]	2.8%
	(6) empathy	7.5%[d]	1.5%[a]	6.6%	6.7%	10.0%[d]	2.8%
	(7) changing the world	0.0%	0.0%	3.3%	1.6%	0.0%	0.0%
SECTION III BURAWOY'S DIMENSIONS							
(8) Sociology was directly linked to 'science', 'social science' or 'research'		64.2%[d]	47.9%	57.4%[b]	46.5%	40.0%[c]	53.5%
(9) mind map referenced the welfare state		10.4%[d]	2.7%	3.3%[b,d]	0.0%[b]	40.0%[c,d]	8.3%[c]
(10) mind map referenced civil society		14.9%[d]	4.5%[a]	4.9%[d]	0.0%[b]	15.0%[d]	4.9%
(11) mind map contained the term 'critic*'		0.0%	1.2%	1.6%	2.9%	5.0%	2.1%
SECTION IV FURTHER ELEMENTS OF THE REPUTATION OF SOCIOLOGY							
(12) sociology was seen as value-involved		0.0%	2.4%	0.0%	1.0%	2.5%	3.5%
(13) mind map contained commentary on sociology's prestige		4.5%[d]	0.9%	3.3%	2.6%	12.5%[d]	2.1%
(14) job market prospects were mentioned		9.0%[d]	0.3%	4.9%[d]	0.0%	2.5%	0.7%
(15) 'opinion' or 'debate' were connected to sociology		3.0%	1.5%[a]	1.6%	6.1%[b]	0.0%	1.4%
(16) mind map indicated an emotional stance towards sociology		0.0%	1.8%[a]	1.6%	8.0%	2.5%	6.3%

[a] Significantly different from the corresponding T2 value ($p < 0.05$).
[b] Significantly different from the corresponding T3 value ($p < 0.05$).
[c] Significantly different from the corresponding T1 value ($p < 0.05$).
[d] Significantly higher than the value of the other group within the given wave ($p < 0.05$).

6.4.1 Social problems

Section I of the table deals with the topic of sociology and social problems. Row (1) shows the proportion of mind maps clearly referring to social problems in some way: either by using the very words 'social problems' or by naming particular problems of a social nature along the line of association. The numbers show that in T1, 47.8 percent of sociology students mentioned social problems on their mind maps, while the same was true of only 17 percent of all other students. The number declines in T2 for sociology students and climbs back to 30 percent in T3, while for all others, it stagnates in T2 and falls below 12 percent in T3. Figure 8 represents these relative frequencies, along with those of other messages, visually.

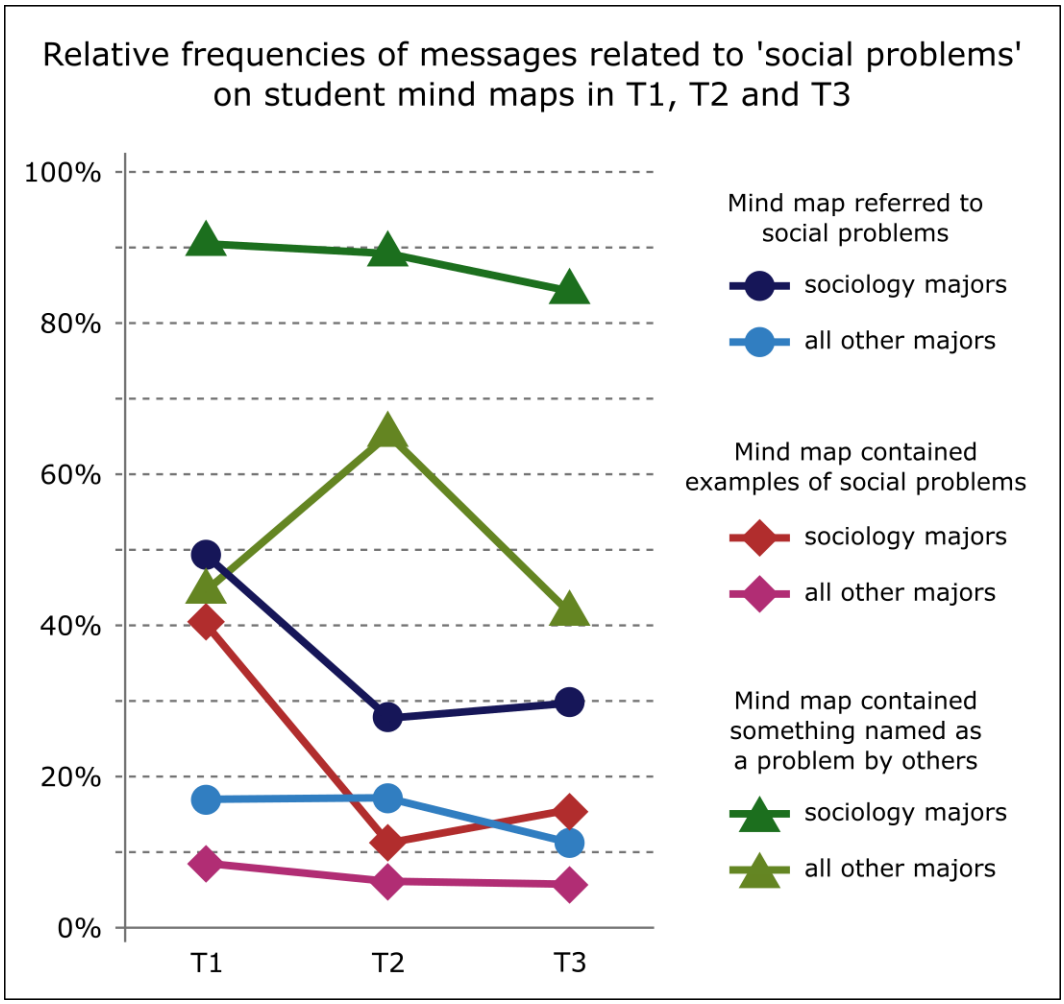
Row (2) shows what percentage of respondents gave at least one example for a social problem on their mind map. With the exception of sociology students in T1, the proportion of those providing examples to those referring to social problems is roughly half. Throughout the waves, respondents mentioned around 70 different things as social problems (specific wordings sometimes make it difficult to find a match or difference between two examples). In T1, the total number of examples given was 213 (0.54 on average for respondents in the sample), in T2, 85 (0.23), and in T3, 38 (0.21).

The variety of social problems mentioned. In T1, the most frequent type of example for a social problem fell into the category of inequalities, mostly of the economic-material type (poverty, unemployment, homelessness). Mentions of minorities and ethnic groups came second, in most cases, simply worded as 'minorities' or 'ethnicities', connected outright to 'social problems', and a few respondents used the word 'Gypsies' (which did not recur in any of the later waves). Third on the list of social problems were kinds of injustice (discrimination and exclusion, the basis of which was not specified; and also racism), fourth was migration (the word used was most often 'migration'[18], and rarely, 'refugees'), fifth were varieties of deviance (alcoholism being on top), and further, gender inequality, and physical and mental health issues were also mentioned. In T2, the picture changed in the way that varieties of deviance rose to the number one spot (denoted in most cases by the use of that very word, while alcoholism and crime also featured), followed by injustice (discrimination, racism, prejudice being the most frequent wordings), varieties of inequalities, and once again ethnicities/minorities. By T3, the

[18] 'Migráció' and 'vándorlás' were about equally frequent in the original Hungarian.

examples given by students became very fragmented thematically, and it is therefore hard to give a good overview of them, but it can be said that inequalities were most frequently mentioned (poverty being the item with the greatest number of mentions, seven, while inequality between genders received five mentions, as did the unspecified word 'inequality'). Other, less frequently mentioned examples over the three waves included drug use, demographic crisis, violence within the family, 'equal opportunities' (presumably: the lack thereof), geographic differences, environmental problems, 'politics' (worded like that *as a problem*), and cultural and religious conflict.

Figure 8. Relative frequencies of messages related to 'social problems' on student mind maps in T1, T2 and T3.



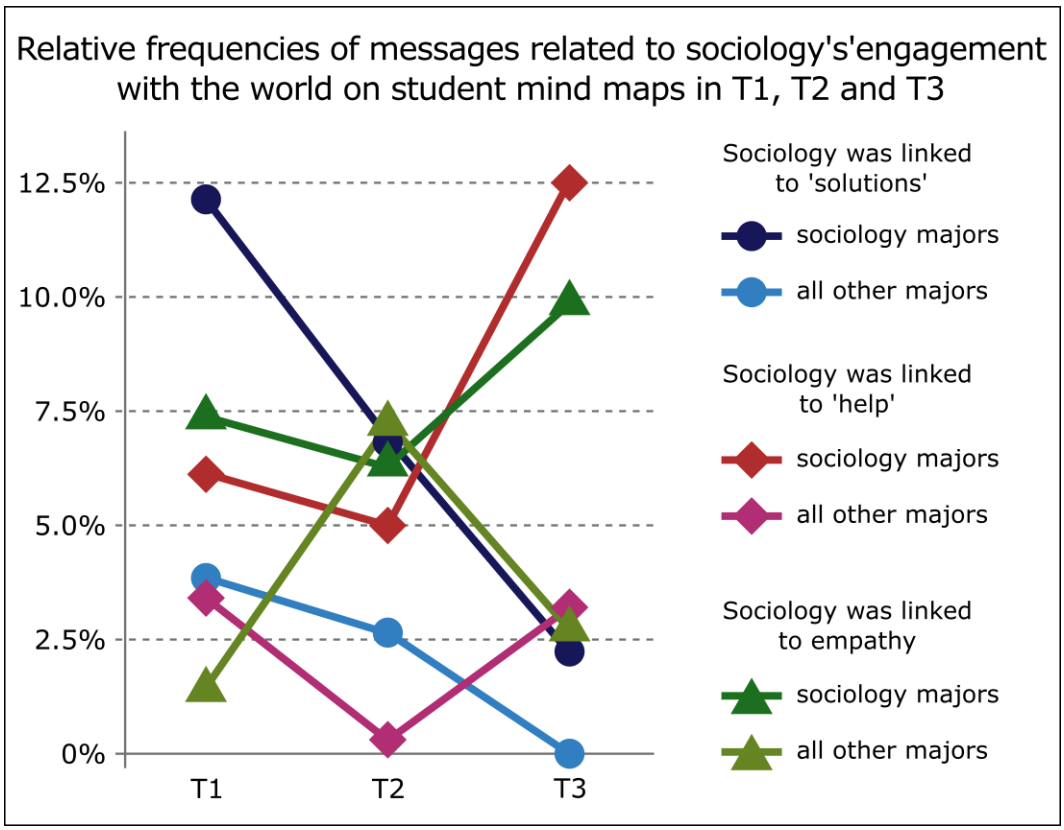
During data analysis, it became obvious that the things some students classified as social problems were also mentioned by several others – just not contextualized as such. Row (3) of Table 23 shows the proportion of mind maps which contained at least one item that was named as a social problem by any student at any time. Numbers indicate

that simple appearances of particular ‘problems’ vastly outnumbered explicit references to that heading, often by as much as six or eight to one, depending on the wave and major.

6.4.2 Sociology’s engagement with the world

Section II of Table 23 looks at certain ways in which students thought sociology was engaged with the world, and Figure 9 shows the changes in relative frequencies of the relevant messages. The most frequent wordings for that engagement can be placed along a continuum, ranging from providing ‘solutions’ via offering ‘help’ to being ‘empathetic’.

Figure 9. Relative frequencies of messages related to sociology’s engagement with the world on student mind maps in T1, T2 and T3.



Each of those messages, shown in rows (4) to (6), showed up in different contexts on student mind maps. For example, ‘solution’ was often found as a seemingly automatic association to ‘problem’, while ‘help’ and ‘empathy’ were often linked to ‘people’ or ‘family’, but the table contains only those instances where these concepts were clearly related to sociology. One way for the association to be clear was if the term in question was linked directly to the central concept on the mind map. Other notable instances were elaborated messages about sociology being involved in “solving conflicts” or providing “solutions for inequalities”, it being a “practical activity dealing with and helping people”, the points that it “can help improve the world” or “help the marginalized”, or that it was

about ‘learning’ or ‘fostering’ empathy. As was the case with social problems, such messages were more likely to show up on the mind maps of sociology students, but the relative frequencies are below 10 percent for almost every message, and the differences between relative frequencies among sociology students and all other majors are not always statistically significant.

Other than the three ways identified above, there were very, very few cases where students made it explicit how they believed sociology was, or at least ‘was about’ changing the world, and those all came from the T2 wave (see row (7) in Table 23). Particular wordings included “social amelioration”, “seeking a perfect society”, “reducing social inequalities”, “crushing stereotypes”, and “working towards a better world”.

6.4.3 Burawoy’s typology

Section III of Table 23 looks at the four roles Burawoy (2005a) suggested for sociology. When looking for the presence of a *scientific sociology* in student views, the strict criterion of a direct association from sociology to ‘science’, ‘social science’ or ‘research’ was applied, while for all others, meeting loose conditions sufficed. When looking for *policy sociology*, any reference to social policy or the welfare state was accepted (the most frequent terms students used were *benefits*, the healthcare system, the state in general, and, above all, *social policy*, especially in T3). As for *critical sociology*, the mere presence of the term ‘critic*’ was used as the benchmark, and even that returned very few hits (which anyway occurred more in the context of some ‘critical thinking’ than sociology itself being critical). In the case of *public sociology*, references to civil society (e.g. non-governmental organizations, volunteering) or any kind of ‘public’ activity (e.g. journalism) were all accepted as valid. Even so, the numbers make it clear that out of the four, students overwhelmingly saw sociology in its scientific function, and only sociology students, mainly only by the end of their BA studies, mentioned other aspects (especially policy) in considerable proportions.

6.4.4 Further elements of sociology’s reputation

Section IV of Table 23 deals with further aspects that belong to the reputation of sociology with students. The types of messages investigated in rows (12) to (16) occurred in very small numbers throughout, therefore the commentary will focus on their qualitative variety.

As for the *value involvement of sociology*, a small number of students explicitly stated that they thought it was 'independent of politics', 'unbiased', 'objective' or 'rational'. Row (12) counts only those instances where a non-neutral value was assigned to sociology. Where that happened, 'political correctness', 'liberal' and to a lesser extent 'left(ist)' values were most often mentioned. In a number of cases, a hostile stance was detectable in the way the labels were handed out, for example where sociologists were called 'ultra libs', or where sociology was seen as 'overly' PC, liberal or Western. In one case (a male political science student from the T3 wave), however, a seemingly honest and open call was made for sociology "to be left-wing, and [for] its practitioners to be committed to the cause of social justice". Notably, the value labels predominantly came from students not majoring in sociology.

That was not the case, however, when it came to comments about the *prestige of sociology* (row (13) in Table 23), which seemed to occupy the students of the field, and especially by the end of their BA program. The discipline was seen in broadly three ways. First, there were comments berating it, more than one acknowledging that social sciences had a 'lower prestige' or that sociology had 'zero', and others even calling its rightful existence into question, one saying it was "in fact, social psychology", another that called it "a branch of history which would be better to be kept as such", adding that there was "no need for a separate institute" for it, presumably at the university. The second general view that emerged was that of a 'fuzzy' science which was 'not clear enough' or did not offer 'practicable knowledge'. Thirdly, some students thought that sociology was 'important', both for people and for other sciences, that 'everybody should study it', or that it actually did provide 'knowledge that is useful in life'. The evaluation that sociology students gave of their own field at T3 was mixed: they were not hostile towards it, but some of them acknowledged its low prestige, expressed their confusion about it, while some were of a good opinion.

The practical usefulness of sociology in the context of the job market was almost exclusively mentioned by sociology students (row (14) of Table 23), and even they seemed to be interested in the topic only at T1. Job market prospects mentioned were research institutes (including public opinion research), NGOs and foundations, and the public sphere, and some students acknowledged only low pay could be expected.

As for the suggestion that sociology was seen as *'opinionology'*, row (15) of Table 23 shows the proportion of mind maps which clearly related either 'opinion(s)' or 'debate(s)' to sociology. Overall, students did not seem to be of the conviction that

sociology was a matter of opinions. While the aforementioned terms were sometimes directly related to the central concept of sociology, in several cases, it was made clear that it was the classes, particularly the seminars, where opinions and debates featured in students' experience of sociology.

The final element of a reputation of sociology is the *emotional reaction* it provoked in students (row (16) of Table 23). Non-sociology students were more likely to make that type of remark. The attitude was overwhelmingly positive, the most frequent reaction being that sociology was 'interesting', that the lecture was good or indeed 'the best in the semester', that it was a 'positive surprise', that it was exciting or 'kinda fun' (worded like that, in English, already in the original), and that it made them see the world differently.

6.4.5 Various face(t)s of sociology

To finish the presentation of results, Table 24 contains some further findings from the content analysis which help put the above results in perspective. Chapter 5 indicated that in all three waves, there were only two big themes that a majority of students associated with sociology: that it was dealing with human life in general, and that it was related to scientific/empirical activities. Further, the fields of psychology and politics cropped up frequently on student mind maps.

Table 24. Relative frequencies of selected messages in student mind maps, separately among sociology students and all others, by data gathering wave.

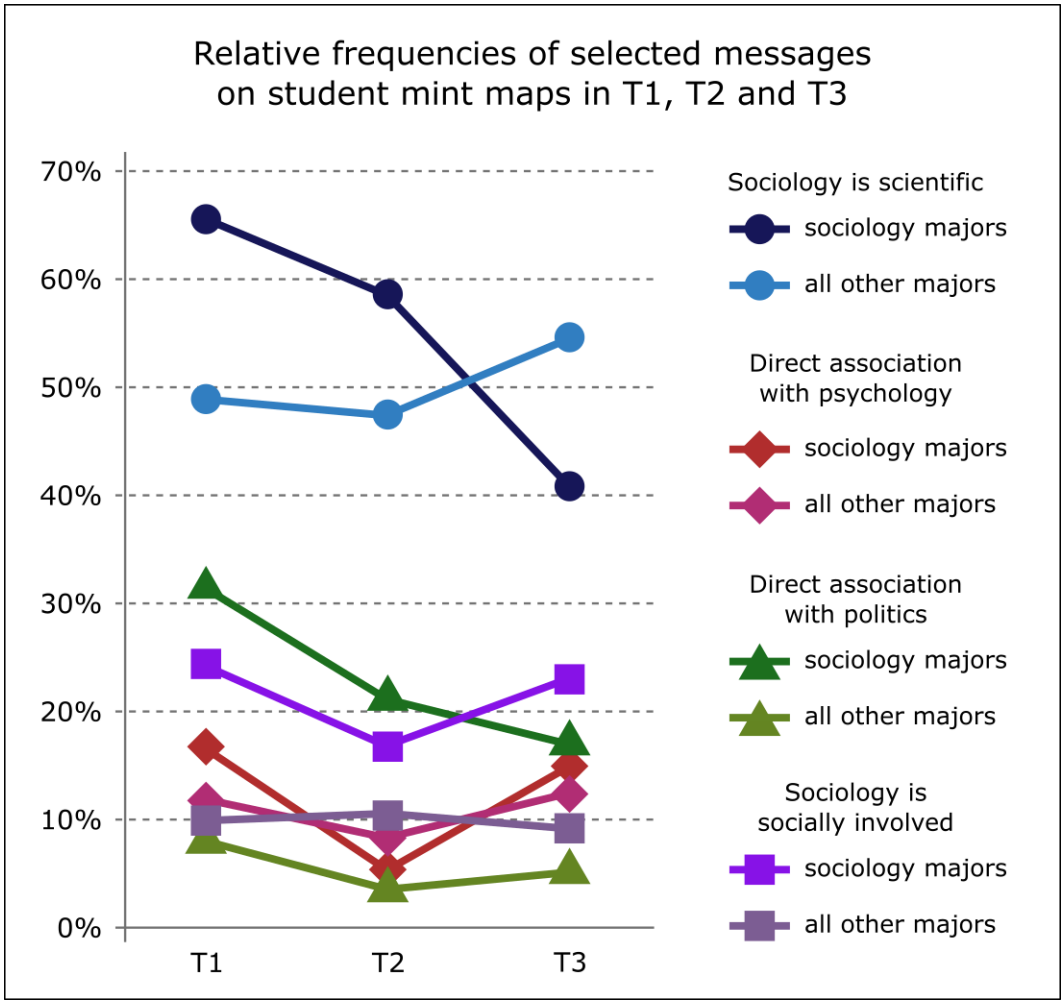
Wave		**T1**		**T2**		**T3**	
Subsample		**sociology (n=67)**	**all others (n=330)**	**sociology (n=61)**	**all others (n=312)**	**sociology (n=40)**	**all others (n=144)**
Sociology was…	(1) seen as scientific	64.2%[d]	47.9%	57.4%[b]	46.5%	40.0%[c]	53.5%
	(2) directly associated with psychology	16.4%[a]	9.7%	4.9%	7.4%	15.0%	13.2%
	(3) directly associated with politics	31.3%[d]	10.0%[a]	21.3%[d]	5.4%	15.0%[d]	5.6%
	(4) seen as socially involved	23.9%[d]	9.7%	16.4%	9.9%	22.5%[d]	9.0%

[a] Significantly different from the corresponding T2 value ($p < 0.05$).
[b] Significantly different from the corresponding T3 value ($p < 0.05$).
[c] Significantly different from the corresponding T1 value ($p < 0.05$).
[d] Significantly higher than the value of the other group within the given wave ($p < 0.05$).

Table 24 contains four rows. Row (1) is a repeat of row (8) from Table 23, while rows (2) and (3) show the frequency of *direct associations* from the central concept of

sociology to psychology and politics. Row (4) is a union of rows (4) to (7) plus (12) from Table 23, meaning that all students who associated sociology with either solutions, help, empathy, changing the world, or a value commitment, were classified as having an image of a 'socially involved' sociology. Figure 10 represents the same data as a line graph. The numbers indicate that in all waves, among all students, a direct association of sociology with scientific activity was much more common than an image of social involvement.

Figure 10. Relative frequencies of selected messages on student mind maps in T1, T2 and T3.



It is instructive to observe that the proportion of non-sociology students who saw the field as socially involved was very stable between 9 and 10 percent throughout all waves, and at T1, it was almost exactly matched by the proportion of those who made direct associations with psychology or with politics. By T3, the latter topic faded somewhat, while associations to psychology outnumbered those of a socially involved sociology.

The trajectory of those two topics among sociology students is equally interesting: at T1, politics seemed to loom large on their minds, but steadily declined towards the end of their studies, while psychology, a direct association for 16 percent of them at the outset, declined sharply by the end of the introductory course at T2, and then resurfaced by the end of the BA program at T3. Curiously, even some seemingly large differences in relative frequencies, e.g. between 15 percent associating sociology directly to politics at T3 versus 31 percent at T1, turned out not to be statistically significant according to McNemar tests, which is probably due in part to the small sample size.

6.5 Discussion

The results above included several noteworthy patterns, both with regards to differences between the views of sociology students and others, and changes over time.

The richness of the image of sociology. Sociology students were found to be much more likely to mention almost all of the messages investigated than students of other majors. The difference was often statistically significant too, most notably in the case of messages listed in Sections I to III in Table 23. That might be due to two reasons. First, that sociology students simply associated more things with their own field on their mind maps, either because they knew more about it or were more motivated. This explanation is congruent with the data: as discussed in Chapter 5, the mind maps of sociology students were the richest thematically throughout the waves (with some caveats). Another explanation is that sociology students were much more likely to mention aspects of a 'public image' and social roles of their own field than others. Knowing that the university major chosen is likely to be an important part of students' identities, such a heightened level of awareness would not be a surprise.

The relative dearth of 'reputational' views on mind maps. Another important pattern is that out of the messages investigated, very few were present on an outright majority of student mind maps. Among students of 'all other' majors, only the association of sociology with scientific activity (in T3) and mentions of things considered social problems (in T2) achieved a relative frequency above 50 percent. Among sociology students, we find a few instances where a message can be claimed to be a 'majority view', but overall the aspects of a public image of sociology were found only on a minority of mind maps (ranging from a few to around 20 percent at most). That points towards the

general conclusion that students did not possess or did not want to express the (generally negative) public image of sociology that was suggested by previous empirical literature.

6.5.1 Aspects of Research Question 3

Social problems. Results above indicated that while students who explicitly referred to 'social problems' were always a minority, much more of them referred to things that were *seen as problems* in general. Overall, it can be claimed that an overwhelming majority of sociology students did have a mental image of a 'problem-based' sociology, corresponding to the Hungarian tradition described by Lengyel (2006, p. 106), while the same was true of a little less than half of all other students.

Engagement with the world. Among non-sociology students, the messages of *solutions*, *help*, *empathy*, and *changing the world* were negligible. Only *empathy* achieved a relative frequency above 5 percent, at T2, and that is likely a result of course requirements: a TED lecture titled *A radical experiment in empathy* (Richards, n.d.) was compulsory viewing in the introductory course. Among sociology students, it is instructive to see that while in T1, the most frequent key term out of the above was *solution*, something concrete or definite that involves action, by T3, *empathy* and *help*, suggesting perhaps more of an attitude or habitus, were four and five times more frequently mentioned than solutions.

Burawoy's typology. Out of the four roles of sociology suggested by Burawoy (2005a), the scientific one was by far the dominant in the minds of non-sociology students, and the other three barely registered. Among sociology students, the proportion of those directly linking 'science', 'social science' or 'research' to sociology did decline from each wave to the next, but that likely happened because they gained a more refined understanding of their field, and did not have to resort to such simplistic associations (e.g. they mentioned various terms related to methodology instead, as argued in Chapter 5). 15 percent of sociology students also made associations to civil society both in T1 and T3, while the topic of the welfare state (representing policy sociology) became much more salient for them over time, rising from 10 to 40 percent from T1 to T3.

Was sociology seen as socially involved? Eventually, the image of a 'socially involved' sociology (Table 24, row (4)) was held by a remarkably steady 9 to 10 percent of non-sociology students. Whether that proportion is big or small is hard to argue, but it is instructive to see that it is much lower than that scored by a 'scientific' sociology, and is similar to the percentage of students who made a direct association from sociology to

psychology. That suggests that in the eyes of a 'lay' audience, sociology is not a practice- or change-oriented activity, and not something that is partisan when it comes to social issues. It does deal with people, and while doing so, probably acts upon the world a bit, perhaps similarly to psychology which, besides being a science, also offers therapy.

The view of a socially involved sociology, however, was roughly twice as frequent among sociology students, scoring above 20 percent both in the initial expectations (T1) and at the end of BA studies (T3). These scores suggest that ways of improving or changing the world, or being committed to social amelioration, were much more salient already at the outset for students who chose the sociology major, and that three years of studies did not change that view. It is also instructive to see that while at the beginning of their studies, sociology students were keen to associate the field directly with politics (31 percent of them did so), that proportion halved by the end of the three years. That suggests that initially, students probably thought that the way in which they should engage with the world was political, but their experiences during the BA program eroded that idea to some extent.

Further, the fact that sociology students were more likely to make a direct association from their own field to psychology than all others might look puzzling (Table 24, row (3)). One would suppose that making that association will be much more 'automatic' for people who do not know the difference between the two fields, only that their names sound similar, that both deal with people, and that psychology is better known. The propensity of sociology students to make the association with psychology both at T1 and T3 could tentatively be explained by their habitus which is likely more inclined towards 'helping people' than that of the rest. Such results are in line with earlier findings in the literature that 'helping' or 'changing the world' are among the motivations of sociology students for choosing the field (Spalter-Roth et al., 2010, p. 315; McKinney & Naseri, 2011; Bandini et al., 2016).

The 'bad reputation' of sociology suggested by the literature does not seem to be held by students. While references to value involvement, low scientific prestige, practical uselessness, or opinions playing a part did exist, none of those views were held by even a sizeable minority of students, and in fact, sociologists were once again more interested in (presumably: a bit anxious about) such aspects. If anything, 'lay' students reacted to the introductory course with positive emotions, which were strong enough so that six percent of them made an effort to write them down even two and a half years later.

Summarizing the answer the data provide to RQ3, we can say that insofar as they have a mental image of it, non-sociology students seem to view sociology as a 'science of social problems' more than anything else (a view held by a good 40 percent). Years after having studied the course, they are more likely to associate the field with psychology than with politics, and 9 percent of them see it as being socially involved. They liked it as a subject and generally do not hold a negative view about it. Sociology students, on the other hand, are much more aware of the social problems sociology typically deals with, are more interested in its prestige, and more than one fifth of them see it as involved with society in some way.

6.5.2 Discussing Research Question 4

RQ4 took a tentative look at the 'socialization effect' of the sociology program, if there was any. Such an effect would likely manifest itself in differences between initial expectations of sociology students at T1 and their views formed by the end of BA studies at T3. There were three instances where the relative frequencies of messages in those two waves differed to a statistically significant extent: direct associations of sociology with science and listing examples for social problems declined, while references to the welfare state increased. The decline in the first two messages is probably due to the fact that both are relatively simplistic ways of giving an account of sociology, and majors gained a more refined understanding of the field over their studies, not needing to resort to them at T3. The rise in references to the welfare state suggests that their studies successfully furnished students with knowledge about social policy.

Other changes of note include the decline in direct associations to politics and 'solutions' from T1 to T3, along with the rise in direct associations to 'help' and the steady state of 'psychology'. Those give some indications about the way in which sociology students see their field's involvement with the world: starting out with what is roughly an 'activist' perspective, they might have become more cautious and adopted what was more of a 'habitus' or an 'ethos'. Still, the proportion of students mentioning those messages at all was small.

It is also notable that direct references to psychology (interpreted here as an indicator of the idea of helping people), as well as references to a socially involved sociology, were scarcest at T2. That finding points towards the conclusion that the introductory course itself emphasized the scientific or problem-based facet of sociology more than its solution- or help-oriented aspects. Overall, results indicate that a sizeable

minority of sociology students chose the major with the expectation that it was a socially involved field, and that studies did not alter those expectations in a big way—which is in line with the claim of Elchardus and Spruyt (2009) that it is not university education that shapes values but rather values that guide the choice of university major.

6.6 Concluding remarks

The chapter set out to investigate whether the assumed bad reputation of sociology, along with certain dimensions of its suggested social roles, were present in the views of students taking part in the introductory course. It was noted that Hungarian sociology is typically cautious in involving itself with contentious issues, but at the same time its critical capacities might make it look political.

Results suggested that the image of a socially involved or social change-oriented sociology were not at all frequent among students who only took the introductory course, neither were negative opinions about the field's prestige or usefulness. Among students of the sociology major, the notion of social involvement, along the lines of 'helping' and being empathetic, was more common. Also, the image of sociology being the science that deals with social problems was much more widely held by both groups. Overall, results suggest that sociology, at least among students present in the sample, does not have a 'public image problem'; its situation looks much closer to Némedi's (2006, p. 101) diagnosis that "in Hungary, sociology is an especially isolated field, barely reaching beyond the immediate disciplinary education". The news brought by the chapter is not necessarily bad, rather it is closer to no news, the interpretation of which is up to the reader.

7 Summary and conclusion

The role of this chapter is to revisit and summarize the most important points of the dissertation, to briefly discuss the limitations of the research, and offer reflections on practical implications and future research directions.

7.1 Research aims, questions, and methods

The dissertation aimed to grasp the overall 'impact' that an introductory sociology course made on students, both in the short and the long term. That impact was conceptualized along three aspects: first, the short-term learning gains that the course provided and correlates of success, second, a general mental image that students formed about sociology and what they retained of it years later, third, students' views about sociology's social role and reputation. The relevance of the study was argued for on several accounts. The learning aspect ties into the discourse surrounding the added value of higher education. The general image of sociology is related to the discipline's identity, whether it can define its boundaries and proprietary subject matter and communicate them effectively to the public. The social role and reputation of the discipline relates to larger ongoing trends in connection with public trust in science and the role of social science in an illiberal state.

The research was longitudinal and involved 419 students in total who came from five university majors: sociology, political science, media and communication, international studies, and landscape architecture. While the sample was rather homogenous when it comes to the socio-economic background of students, major area of study was assumed to be a source of meaningful diversity, knowing that the choice of major often reflects the values, including the political views, as well as the personality of students (Porter & Umbach, 2006), and holds the potential for the emergence of a group identity. In data gathering, participant-led diagrammatic elicitation was used, respondents drew mind maps on minimal instruction around the word 'sociology' in each wave. The mind map as a genre allows respondents to express their mental content freely, without researcher influence and the pressure of having to use specialized language.

The research question pertaining to learning outcomes was answered in a quantitative way, a random effects logistic regression model was presented. That is well aligned with the practice of education research and also facilitated insight into what kinds

of factors were correlated with success. The research questions about the general image and reputation of sociology were answered in a mostly qualitative manner, via content analysis, where numbers helped in identifying the most important patterns and trends.

7.2 Scientific contribution

Some of the findings that emerged from the dissertation are direct answers to the research questions as formally posed, while in other cases, there were tentative insights gained into areas which were not investigated in a 'targeted' way. Findings that emerged from RQ1 and discussed in Chapter 4 are mostly contributions to the scholarship of teaching and learning, while answers for RQs 2–4 pertain more to introductory sociology, the sociology major and by extension, to the whole discipline.

With regards to the first research question about correlates of successful learning, the main finding was that *variables relating to the process and context of learning and possibly identity were more important in predicting deep learning than socio-demographic characteristics*. Student gender was not significantly associated with deep learning, and the pattern uncovered in the case of parental education in Chapter 4 interestingly suggested that *the higher the education of the student's parents, the less likely the student is to become a 'deep' learner*. That result contradicts repeated assertions in the literature that a favorable socio-economic background is indeed associated with educational success even at high levels (Holm & Jæeger, 2008). A tentative explanation for it might be that students from a background of disadvantage are more motivated to perform well, or that they are more likely to engage deeply with sociology in particular, being more aware of social/structural forces than those coming from more privileged families (cf. Howard & Butler, 2018, p. 8).

The two variables relating to the context of learning that were significantly associated with deep learning were gender of instructor and preferable class time (standing in as a proxy for student ambition). Admittedly, none of them can be accepted at face value on the basis of our study alone. It is likely that the instructor's gender encapsulates some unobserved or unobservable characteristics that influence the way students approach and become engaged with a subject. Also, while personally—based on years of experience as a teacher—I find it eminently believable that students 'selecting themselves' to preferable class times are indeed more ambitious than the rest, it is still possible that some other mechanism is at play.

Of further interest is the finding that *extra-curricular activity, namely project work, was not associated with deep learning outcomes*. That adds further credence to the literature indicating that students cannot be motivated to become 'deeper' learners if the exercises designed for such a goal also add to their workload (Case & Marshall, 2019, pp. 16–17).

Although no such question was posed directly, the dissertation found signs of a conflict-ridden relationship between political science students and sociology, suggesting that *identity influenced the way in which students approached the course.* In the study about learning outcomes, political science majors were much less likely to become deep learners than all others, and significantly less likely than sociology majors. That stands in contrast to the fact that PS students did not perform worse in the multiple-choice tests than others, suggesting that it was not ability which was lacking on their part. The possible explanation for the finding can lie in the lack of a deep approach to sociology or a lack of effort in mind map drawing. Although learning approach score was measured 'out of context' (i.e. not relating to the sociology course) and was not found to be a significant influence on learning outcomes, it can be noted that PS students had lower approach scores than other majors both at T1 and T2. Further, it is also notable that the qualitative richness of the mind maps of PS students lagged behind all other social scientific majors right after the course, in T2, but in a reversal, was only second to that of sociologists by T3. Those findings are congruent with the notion that sociology and political science are competing fields (Szelényi 2016). At the beginning of their studies, PS students might have been motivated to strengthen their identity by renouncing sociology, but by the end, the overlap between the two fields made them capable of seeing sociology in a qualitatively richer way than other majors did.

With regards to the second research question, the main finding is that *over the long term, students retain only a basic and vague understanding of sociology*. While they know that it is a (social) science that investigates human life, and seem to be aware that inequality is one of its central concerns, they still see it associated with psychology and often describe their associations with it in vague terms. On the one hand, the finding that not much stayed in the memory of students years after studying the course is in line with the literature (Conway et al., 1992; Landrum & Gurung, 2013). However, the fact that qualitatively, T1 and T3 mind maps were very similar points to the conclusion that the introductory course did not manage to provide students with a clearer idea about sociology than the one they had initially had. That points towards the worrying conclusion

that even in the eyes of its only 'captive public', sociology retains a weakly defined, 'fuzzy' image that professionals in the field find existentially threatening (Greenwood, 2013, p. 237; Ballantine et al., 2016, p. 3), and does not inspire confidence in the hope that students were 'won over' as a friendly audience for sociology for the long term (cf. Gans, 2016).

Otherwise, there were indications in the analysis of research questions number two and three that *in the short term, several students approached the course with dedication and positive emotions*. That claim is partly based on the facts that, first, some students explicitly expressed positive emotions in connection with the subject, and second, media and communication and international studies students produced qualitatively rich mind maps in T2. Knowing that students were rewarded for participation in the research in the form of extra points but the quality of their mind maps was not taken into account, what is more, their responses were anonymous, it is probably safe to assume that mind map richness was not solely a result of knowledge but also of intrinsic motivation.

Another notable finding is that *the lay audience of landscape architecture students largely failed, even in the short term, to acquire a meaningful mental image of sociology*. Their mind maps reflect only the most basic ideas. As discussed earlier, this is probably due to the fact that social science holds little personal salience for them, and in the absence of that kind of relevance, learning cannot happen (Entwistle, 2005, p. 11). That points towards the conclusion that introductory courses should be tailored to the professional inclinations of the audience for better effectiveness (Greenwood, 2013, p. 236).

As for research question three, the overall answer is that *students see sociology's social role in the way that it is the science that deals with social problems, but they do not see it as value-involved, political, or activist.* That kind of reputation is largely in line with how Hungarian sociology and its practitioners want the field to be: problem-based but keeping its distance from ongoing everyday social struggles and politicized debates. Findings in connection with RQs 2–3 showed that even though it could have happened easily, students did not associate sociology with contentious issues of the day such as migration or gender. In light of general trends pointing to the 'death of expertise' and declining credibility of science in Western societies (Nichols, 2017), and keeping in mind that in Hungary and elsewhere, seemingly neutral issues can quickly become politicized (Farkas et al., 2022), that news is probably welcome from sociology's viewpoint.

During the investigation of research questions two and three, and in answer to research question four, *tentative elements of a 'habitus' of sociology students were*

uncovered: a tendency towards social involvement on the part of a sizeable minority. It was instructive to see that while the proportion of sociology students who saw the field as 'socially involved'—around 20 percent—was stable throughout the data gathering waves, there were considerable changes in other associations. For example, the proportion connecting the field outright to 'politics' or 'solutions' declined by the end of the major, while associations with 'help' or the welfare state increased. Overall, it is apparent that some sociology students choose the major with a motivation to effect social change at the outset (in line with international findings). What majoring in the field seems to do—the "socialization effect"—is that it reorients those motivations from decisive political action towards a milder disposition and the avenue of social policy.

Lastly, although not an answer to any research question in itself, I believe *the dissertation overall demonstrated the versatility of the mind map as a data source*. While they can be rather effortlessly created by respondents (who might even find the exercise interesting, contrary to a usual survey), mind maps contain a wealth of information which lends itself to both quantitative and qualitative analyses. While mind maps can be treated as 'bags of words' if the goal is a general content analysis (as it was in Chapter 5), the connections indicated on them help put messages in context (taken into account in Chapter 6), and the mind map as a whole can be assessed as well, where structural and verbal elements make up the meaning together (as they were treated in the classification in Chapter 4).

7.3 Limitations

One of the limitations of the research is that sampling was not random which hinders generalizability, as addressed in section 3.6. Another limitation is that the T3 sample was of a substantially smaller size than earlier ones, and obviously skewed towards female respondents and also sociology majors. However, as indicated in Table 14, almost none of the observable characteristics of 'dropouts' differed significantly from those of 'survivors', which means that even though the mechanism of 'surviving' into the T3 sample is not known, it cannot statistically be distinguished from a mechanism of random selection.

A further limitation pertains to the way data were obtained from respondents. While I am confident that the mind map genre helped students express their mental content associated with sociology freely and is a valid representation of it, we cannot be sure how

students approached the task of mind map drawing. In the T2 data gathering wave, which occurred exactly during the week of the second multiple-choice test in the class, they might have treated the mind maps as just another way of showcasing their knowledge, thereby suppressing associations which went beyond course content. In T3, circumstances of data gathering were far from ideal, and I had no means of motivating students extrinsically to participate. While at that time, at the end of their BA studies, they might have felt free to write down whatever they thought about sociology, unfortunately I also had to ask for their identity in the form of Neptun codes to be able to complete the longitudinal database. That might have held some students back from expressing things they thought were contentious or in some way 'undesirable' by the researcher.

In some of the questions investigated, what is a virtue of mind map data could be regarded as a drawback and vice versa. To be more concrete, dimensions of the reputation of sociology (RQ3) could have been investigated with direct questions (presumably closed-ended ones with Likert scales). It is easy to imagine that in that way, a firmer image of sociology could have been obtained and we would now know whether students see sociology as, for example, left-wing *when asked*. By leaving respondents to write down what came to their minds on their own, it emerged that very few of them made evaluative comments or documented a view about the discipline's social role, but that lack of thoughts might also be closer to their 'natural' state of thinking about sociology.

Learning approach scores were eventually calculated on the basis of only four items from Biggs's questionnaire (Biggs et al., 2001), which in hindsight looks like a mistake, more items should have been used. However, the scores obtained seem to be reliable because of two reasons. First, they display the trend described in the literature, namely that students become 'shallower' in their learning approach as they progress with their university studies. Second, even though the association was only significant at the 0.1 level, logistic regression showed that the deeper the student's learning approach, the more likely they were to end up as deep learners.

7.4 Practical implications

The motivation behind this research was to gain an understanding of the impact that our introductory course made on students, with the intention to channel the insights back into educational practice. What do the results suggest with regards to course design?

To begin from the widest context, it seems to be the case that people in Hungary find politics so toxic that they consciously exclude it even from activities which carry political overtones in other countries (Bársony, 2020), and in light of that, the fact that sociology was not overwhelmingly seen as value-involved or partisan is an asset to cherish and a good foundation to build on. However, that also complicates the challenge of imparting the sociological imagination in students, knowing that by its very essence, it goes against everyday thinking by connecting "personal troubles to social issues". There is a fine line to be trodden between what is social and what is political.

I believe that the balance to tread that line can be found in the appeal to sociology's scientific nature. The fact that science was one of the few things that an overwhelming majority of students associated with sociology throughout means that it is another foundation on which we can build. By showing students that 'going social' and thinking beyond the individual perspective is part of sociology's nature *as a science*, the criticism of partisanship might be defused. Also, seeing that students *expect* sociology to be scientific, an introductory course should strengthen that view. With an eye on the age of 'post-truth', sociology is in a position to highlight the ways in which reality is constructed and help students navigate the world of abundant information of dubious quality.

Although the recurrence of the association with psychology is not exactly something to 'build on', it seems obvious that it needs addressing in an IntroSoc course by putting more emphasis on the differentiation between the two fields. One possible way to do that might be to show how different disciplines approach the 'problems' that so many of our students listed in connection with sociology. By building on what students associate with—to put it differently: what they think they know about—sociology, we give them the chance to see the field's relevance in 'real life' and their own lives, and also to connect newly acquired information to what they already know, which is a prerequisite to meaningful learning.

Once again, the point that students majoring in different fields will be best served by an introductory sociology course that takes their interests into account can be repeated.

As for practical pedagogical decisions, the findings of the dissertation indicated that extra-curricular project work might not be as effective a tool for student engagement as one would probably think. Teaching methods and assessment should be chosen in accordance with learning goals, but for a deep engagement the workload placed on students must be kept relatively light. That might actually be even finer a line than being social but not political in our perspective.

7.5 Directions for future research

The dissertation uncovered a number of tentative findings that were typically not in the focus of research questions but cropped up ‘along the way’. Those deserve further attention.

For one, when it comes to the context of teaching and learning, the issue of class times might merit a study on its own: do classes held in preferable timeslots seem to perform better because ambitious students congregate in them, or rather because the timeslots are more amenable to good learning?

Further, the dissertation paid attention to the way *identity* shaped approaches to learning and the way it was shaped in education, but those issues could not be fully investigated in qualitative detail. The apparent competition between political science and sociology could be investigated with regards to the socio-demographic composition, values, norms, and attitudes towards the ‘other’ field of students of both majors.

As for the ‘habitus’ of sociology students and the professional socialization they go through: their motivations for choosing the major, their outlook on public issues and the ways they believe sociology (or a sociologist) should engage with them also deserve further, more focused and detailed attention. After all, our current students are the future practitioners of the field who will inevitably shape its course—and not just the introductory one. (Pun intended.)

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9 Appendix

Table A1. All 34 themes identified in the content analysis (section 5.4). Numbers are relative frequencies in the whole sample, in percentages, in data gathering waves. Ordered by T1 relative frequency.

Theme	T1	T2	T3
Human lifeworld	97.0%	89.8%	92.4%
Scientific/empirical endeavor	72.0%	76.7%	75.5%
Domain of psychology	46.1%	31.6%	45.1%
Vague terms	45.6%	27.9%	35.9%
Inequality & stratification	38.3%	29.8%	33.2%
Culture, values, & norms	37.5%	50.7%	23.9%
Conflict & injustice	35.5%	37.3%	21.2%
Domain of politics	33.2%	18.5%	26.6%
Welfare & world betterment	30.2%	18.8%	28.8%
Economy	28.2%	42.9%	29.9%
Ethnicity & minorities	28.0%	51.2%	23.9%
Religion	26.4%	57.4%	14.7%
Family	21.7%	28.4%	20.7%
Integration & cooperation	21.7%	13.7%	20.7%
Methodology	20.4%	30.3%	40.2%
Gender	18.9%	36.5%	23.4%
Student experiences	16.4%	36.5%	19.0%
Education	14.4%	9.4%	12.0%
Demography	14.1%	13.7%	10.3%
Migration	13.6%	5.9%	2.2%
Deviance & crime	12.3%	48.5%	13.6%
Society as a higher order (structural) entity	12.1%	8.8%	10.3%
Durkheim, Marx, Weber	11.1%	35.4%	14.1%
Social change	10.1%	4.0%	6.0%
Space & environment	9.3%	1.9%	9.2%
Research methods: vaguely worded	8.6%	6.7%	3.3%
Sociology as a way of thinking	7.6%	8.3%	6.5%
International aspects	6.8%	2.1%	3.8%
Organizations	4.8%	0.5%	6.0%
Sexuality	3.0%	16.9%	4.9%
Authors	2.8%	18.8%	8.7%
Lifestyle	2.8%	20.1%	2.2%
Theoretical paradigms	1.5%	28.2%	4.3%
Social mobility	1.0%	7.8%	1.6%

On the following pages, two versions of the questionnaire given to students are reproduced. First, the one received by social science students at T1, and second, the one received by social science students at T3. The versions received by landscape architecture students were only marginally different. The T2 questionnaires were also very similar but contained fewer items (as described in Section 3.3). The questionnaire of two A4 pages was printed on an A3 page in the version given to students.

Kód: _____

Kedves Hallgató!

Az itt következő rövid kérdőív a szociológia oktatásával és tanulásával kapcsolatos. Kitöltésével sokat segítesz nekünk kutatásunkban. A kérdőív kitöltése és elemzése névtelenül történik. Az azonosító kód azt szolgálja, hogy ellenőrizhessük, ki volt az, aki a félév elején is és végén is részt vett a kutatásban, és ezért 6 pluszpontot kaphat. Az azonosító kódot a személynevekhez csak a szemináriumvezetők tudják társítani, de ők nem vesznek részt az adatok elemzésében.

Az első néhány kérdés általános jellemzőkre vonatkozik.

1. Nemed:
   a. nő
   b. férfi

2. Születési éved:

   _____

3. Ha emlékszel, kérjük, add meg, hány pontot szereztél az idei felvételi során (azaz hány ponttal vettek föl):

   _____

4. Mi édesanyád legmagasabb (befejezett) iskolai végzettsége?
   a. 8 általános iskolánál kevesebb
   b. 8 általános iskola
   c. szakiskola, szakmunkásképző
   d. érettségi
   e. főiskola vagy egyetem
   f. tudományos fokozat (pl. PhD, Csc, DLA stb.)

5. Mi édesapád legmagasabb (befejezett) iskolai végzettsége?
   a. 8 általános iskolánál kevesebb
   b. 8 általános iskola
   c. szakiskola, szakmunkásképző
   d. érettségi
   e. főiskola vagy egyetem
   f. tudományos fokozat (pl. PhD, Csc, DLA stb.)

6. Milyen településtípusba sorolnád a lakóhelyedet?
   a. főváros
   b. megyei jogú város
   c. egyéb nagyváros
   d. kisváros
   e. község, falu
   f. tanya

7. Mindent egybevetve mennyire érzed magad boldognak? Értékeld egy 10-es skálán:

1 – nagyon boldogtalan	2	3	4	5	6	7	8	9	10 – nagyon boldog

A további kérdések általában véve a tanulással kapcsolatosak. Kérjük, aszerint válaszolj rájuk, hogy mennyire tartod magadra igaznak az állításokat. A skála értelmezése:

1 – egyáltalán nem (vagy csak nagyon ritkán) igaz rám
2 – olykor igaz rám
3 – nagyjából annyira igaz rám, mint amennyire nem
4 – gyakran igaz rám
5 – teljesen (vagy majdnem teljesen) igaz rám

8. A tanulás sokszor mély belső elégedettséggel tölt el.	1	2	3	4	5
9. Ahhoz, hogy egy témáról kellően megalapozott véleményem lehessen, sokat kell foglalkoznom vele.	1	2	3	4	5
10. Az a célom, hogy a tantárgyakat a lehető legkevesebb munkabefektetéssel teljesítsem.	1	2	3	4	5
11. Bármilyen téma érdekes lehet, ha mélyen beleásom magam.	1	2	3	4	5
12. Nincs értelme megtanulni olyan anyagot, ami nem fog szerepelni a számonkérésben.	1	2	3	4	5
13. Minél többet foglalkozom egy témával, annál unalmasabbá válik számomra.	1	2	3	4	5

Köszönjük válaszaid!

A papír hátoldalát használd a gondolattérkép megrajzolására (a szemináriumvezető útmutatása szerint).

Ha bármilyen kérdésed van a kutatással kapcsolatosan, e-mailben megkereshetsz bennünket.

Király Gábor
[personal e-mail address]

Miskolczi Péter
[personal e-mail address]

Kedves Hallgató!

2015 őszén a Király Gábor vezette *A szociológia alapjai* tantárgy keretében kérdőívet vettünk fel, amely a szociológia tanulásával volt kapcsolatos. Most ennek a kutatásnak a követő fázisában kérlek a részvételre. Válaszaid nagyon sokat segítenek nekem a doktori tanulmányaimhoz tartozó kutatásban.

1. Milyen szakra jársz?
   a. Szociológia
   b. Politológia
   c. Kommunikáció és Médiatudomány
   d. Nemzetközi Tanulmányok

2. Nemed:
   c. nő
   d. férfi

3. Születési éved: _____

Mi szüleid legmagasabb iskolai végzettsége? Nem muszáj a szigorú értelemben vett édesanyára és –apára gondolnod, hanem lehet azokra a személyekre, akik anya-, illetve apaszerepben a leginkább formálták az életed.

4. Anya legmagasabb iskolai végzettsége:	5. Apa legmagasabb iskolai végzettsége:
g. 8 általános iskolánál kevesebb h. 8 általános iskola i. szakiskola, szakmunkásképző j. érettségi k. főiskola vagy egyetem l. tudományos fokozat (pl. PhD, Csc, DLA stb.)	a. 8 általános iskolánál kevesebb b. 8 általános iskola c. szakiskola, szakmunkásképző d. érettségi e. főiskola vagy egyetem f. tudományos fokozat (pl. PhD, Csc, DLA stb.)

6. Mindent egybevetve mennyire érzed magad boldognak? Értékeld egy 10-es skálán:

1 – nagyon boldogtalan	2	3	4	5	6	7	8	9	10 – nagyon boldog

A további kérdések általában véve a tanulással kapcsolatosak. Kérlek, aszerint válaszolj rájuk, hogy mennyire tartod magadra igaznak az állításokat. A skála értelmezése:

1 – egyáltalán nem (vagy csak nagyon ritkán) igaz rám
2 – olykor igaz rám
3 – nagyjából annyira igaz rám, mint amennyire nem
4 – gyakran igaz rám
5 – teljesen (vagy majdnem teljesen) igaz rám

7. A tanulás sokszor mély belső elégedettséggel tölt el.	1	2	3	4	5
8. Ahhoz, hogy egy témáról kellően megalapozott véleményem lehessen, sokat kell foglalkoznom vele.	1	2	3	4	5
9. Az a célom, hogy a tantárgyakat a lehető legkevesebb munkabefektetéssel teljesítsem.	1	2	3	4	5
10. Bármilyen téma érdekes lehet, ha mélyen beleásom magam.	1	2	3	4	5
11. Nincs értelme megtanulni olyan anyagot, ami nem fog szerepelni a számonkérésben.	1	2	3	4	5
12. Minél többet foglalkozom egy témával, annál unalmasabbá válik számomra.	1	2	3	4	5

A papír hátoldalát, kérlek, használd egy *gondolattérkép* megrajzolására (ahogy az eredeti felmérésben is), melynek középponti, kiinduló fogalma: Szociológia. A gondolattérképen a központi fogalomból kiindulva (a központhoz vonalakkal hozzákapcsolva) rögzíthető mindaz, ami erről az eszedbe jut. A hozzákapcsolt fogalmakhoz is kapcsolhatók továbbiak, tehát a központból kiinduló „láncok” vagy „faágak” fognak megjelenni. (Az ágak közt is jelezhető kapcsolat.)

A kérdőívvel felvett adatokat olyan adatbázisban tárolom el, amelyben az egyes válaszadók már nem lesznek azonosíthatók (azaz anonimak lesznek). Ugyanakkor ha a mostani felmérésben hajlandó vagy megadni a Neptun kódodat, akkor lehetséges, hogy a most felvett adatokat össze tudom majd kapcsolni a 2015-ben felvett adatokkal. Ez az összekapcsolás *rendkívül nagymértékben* megnövelné a mostani adatfelvétel hozzáadott értékét a kutatásomhoz, ezért nagyon hálás lennék, ha hozzájárulnál a Neptun kódod megadásához. Természetesen a válaszokat a digitális feldolgozás előtt és után is bizalmasan kezelem, senkinek sem adom ki.

☐ Megadom Neptun kódomat: _____

☐ Nem szeretném megadni a Neptun kódomat.

Ha bármilyen kérdésed van a kutatással vagy annak eredményeivel kapcsolatban, e-mailben megkereshetsz.

Köszönöm a segítséged!

Miskolczi Péter
[personal e-mail address]

10 The author's publications on the topic

Király, G., & Miskolczi, P. (2017). Elméleti útvonalak. Oksági térképek használata a szociológiatörténet oktatásában. *Educatio*, *26*(3), 457–466.

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Miskolczi, P., & Rakovics, M. (2018). Learning outcomes in an introductory Sociology course: The role of learning approach, socio-demographic characteristics, group and teacher effects. *Societies*, *8*(1), 4.

They told me not to go personal but I also promised that at the end I will thank you.

Babarczy Balázs
Bársony Fanni
Bartke Peti
Bartus Tamás
Berki Norbi
Bocskor Ákos
Borsi Andris
Borsi Dávid
Borsós Imi
Csongrádi Gyöngyi
Fodor Gábor
Gábriel Dóri
Gedó Kriszta
Géring Zsuzsa
Gerlai Tibi
Gulya Fruzsi
Hack-Handa Józsi
Hauber Gyuri
Holler Zsuzsi
Honvári János
Honvári Patrícia
Király Dóra
Király Gábor
Király Marci
Kolnhofer-Derecskei Anita
Kovács Kinga
Kovács Máté
Kovács Zsuzsa
Lengyel György
Lovas Yvette
Lukács Rita
Megyeri Andi
Miskolczi Nóri
Miskolczi Péter
Pálóczi Bence
Papp Eszter
Rakovics Marci
Sasvári Zsolt
Siegler Balázs
Sz. Kis Zoli
Szász Anikó
Szczuka Borcsa
Takács Lili
Tamássy Réka
Tuboly Csaba
Valker Ádi
Zaheri Kriszti

I wrote down your names in the way my heart knows them. I know you were all there next to me, with me, for me. You took care of me. You gave me company. You encouraged me. You made my way easier by small acts of goodwill. Some of you are colleagues. Some of you are friends. Some of you are family. Some of you did a little, some of you did more than I will ever deserve. My dear parents, how could I ever repay you? You never wavered, and you stood so firmly by me to this day, often being the only reason I did not fall.

I am grateful to all of you. But I cannot feel gratitude for the experience. The burden this doctoral process placed on me was more than I could bear. It cut me off from the living world where things happened, starts were made, ends were reached, where rivers flowed, water turned into vapor, rained down on the soil and made trees grow. And as I was going through a barren parallel world, I also, undoubtedly, lost some of you, partially or perhaps entirely, because I was too drained to be attentive to you, too bruised to be kind, too exhausted to nurture our relationships in the way they deserved, even though each of you were deeply important to me. I have no reasonable hope of getting back what is now lost, and what did I win?