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The psychological and linguistic shaping of our opinion: An empirical research using the concept of abortion



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Abstract: The psychological and linguistic shaping of opinion: An empirical study using the concept of abortion

Gegenstand dieser Seminararbeit ist der Zusammenhang von Sprache und Meinungsbildung, unter Berücksichtigung psychologischer Theorien aus dem Gebiet der Persuasionsforschung. Als Theoretische Grundlage dienen Modelle, wie das Heuristisch-Systematische Modell, das Elaboration-Likelihood Modell, sowie George Lakoffs Theorie bezüglich des Gebrauchs von Metaphern im Alltag. Ferner werden verschiedene sprachlicher Prozesse dargestellt, die gezielt oder unbewusst eingesetzt werden, um einer Botschaft Ausdruck zu verleihen oder den Zuhörer bzw. den Leser von einer bestimmten Meinung zu überzeugen. Da es zwar viele Theorien gibt, die sich mit der Entstehung von Einstellungen befassen, jedoch nur wenige Theorien, welche die Komponenten Sprache und Einstellung enthalten und darüber hinaus auf die Idee des empirischen Teils der Arbeit angewendet werden können, gestaltete sich die Auswahl dieser als schwierig.

Der empirische Teil der Arbeit versucht zu klären, ob eine Meinungsbeeinflussung bei Englisch Studenten mittels ausgewählter journalistischer Texte möglich ist.

Die generelle Annahme diesbezüglich war, dass eine Gruppe Studierender, welche einen Artikel lesen sollte, der Gegenargumente bezüglich „Abtreibung“ enthält, potentiell anders antwortet als eine Gruppe, welche einen Text liest, der Pro-Argumente enthält. In beiden Fällen wurden die gleichen Fragen zu dem Bereich Abtreibung gestellt.

Als Methode wurde eine Online-Befragung gewählt, die eine schnelle und reibungslose Datengewinnung ermöglichte und ferner die Anonymität der Probanden gewährleistete.

Ergebnisse dieser Studie sind unter anderem, dass in den meisten Fällen eine Meinungsbeeinflussung stattgefunden hat: Obwohl die Ergebnisse auch aus methodischen Gründen nicht exakt einem bestimmten sprachliches bzw. psychologischem Phänomen zuzuordnen sind, ließen sich jedoch brauchbare Rückschlüsse auf mögliche Gründe für Persuasionsprozesse ziehen, welche ihren Ursprung vor allem in den oben genannten theoretischen Grundannahmen fanden, insbesondere im Gebrauch von emotionaler Sprache. Ferner konnte auf Grund der vorhandenen Daten auf verschiedene Einstellungstärken der Probanden geschlossen werden die durch einen Zuwachs von Wissen durch den Text verändert wurden.

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Questionnaire 1

Questionnaire

Survey Data

Literature

I. Introduction

The following seminar paper, which is based on an empirical analysis, will be dealing with the linguistic and psychological shaping of opinion. For this purpose I used the concept of abortion to see whether and how people's attitudes towards this topic can be changed with the help of journalistic articles from the internet. Most people do not realize that their opinions are shaped or at least influenced almost everyday by reading newspapers, watching discussions, movies, films or promotion on TV. Even going to church, to school or to university or just to interact and communicate with people can lead to attitude changes on various levels. Therefore it seems almost impossible to evade this phenomenon: people who claim that they are not prone to persuasive messages of promotions sometimes avoid buying those products extolled on TV or on the radio. But also those people could not escape being shaped, as they were influenced in a rather opposite way. Opinions and attitudes are part of people's personality and although "shaping opinions" is often associated with terms like "manipulation" and has a rather negative connotation, attitude change is an important part of individual development and maturing, as it mostly happens hand in hand with the increase of knowledge and as a result with the transition from knowledge to consciousness. This paper tries to make aware of all these facts.

Therefore I assume that opinions will be shaped at least to a certain degree or that the first group of people who read a pro-abortion text tend to answer in a different way than those who read an anti-abortion text referring to the same questions.

My results make no claim to be statistically representative in a general sense; however, my aim was to analyse the influence on attitudes in this certain context in order to see if opinions on abortion, which I assume to be very intransigent, can be shaped. The first part of the paper provides some theoretical background concerning the basic ideas and theoretical assumptions on attitudes as well as theories, which try to explain how and under what circumstances attitude change can take place. Therefore, I tried to find theoretical approaches which have both psychological as well as linguistic relevance, as these two sciences seem to mesh in this certain context. The theoretical basis is also used in the third part of

my work, the empirical analysis, which serves as an instrument to analyse the data and compare certain aspects with different theoretical concepts. In order to point out the main objectives of this work, I formulated a couple of research questions, which I have asked myself in this context. Finally the conclusion tries to sum up the most important results of this seminar paper.

II. Theoretical foundation

In the following, a theoretical basis is laid for this work by pointing out different aspects from the field of social psychology, as well as linguistic phenomena like, for instance, semantic slanting and name calling, which can be used as a tool to influence people in their opinion. These theoretical assumptions should, on the one hand, serve to discuss the findings of the survey and, on the other hand, explain reasons that may have influenced or changed the results of the survey unintentionally.

2.1 Language, thought and attitude

Language is not only used to communicate or to convey certain thoughts, but also to shape other thoughts and to convince people of certain viewpoints. Many psychologists assume that there is a basic connection between language and thought. Probably the most famous theory is the Sapir-Whorf hypothesis of linguistic relativism.

In his work Benjamin Whorf describes the hypothesis as “the principle of linguistic relativity, which states, at least as a hypothesis, that the structure of a human being’s language influences the manner in which he understands reality and behaves with respect to it “(Whorf; 1956: 23)

To underline the relationship between language and thought Miller formulated a kind of amusing question (Halpern, 1996: 91): “How do I know what I mean until I see what I say?” (Miller, 1972: 43).

Another theory in this context is called *linguistic universalism*. This theory states that all people generally think in the same way and as language is based on thought, languages are also very similar referring to their conceptual categories (Dirven, Vespoor, 1998: 138).

One of its advocates, George Lakoff will be dealt with more detailed in
2.3.7

2.2 Attitude

This section will try to define the term *attitude* as it will be used in this paper. Therefore, the different facets and components making up attitudes should be pointed out, as well as circumstances under which attitudes can differ in their intensity and availability.

2.2.1 What is an attitude?

As attitudes have been an important subject of investigation in psychological research for a very long time, there is also a big range of definitions of the term “attitude”.

In 1948 Kretch and Crutchfield defined an attitude as “[...] an enduring organisation of motivational, emotional, perceptual, and cognitive process with respect to some aspect of the individual’s world [...]” (Krech and Crutchfield, 1948: 152).

Later on, Allport tried to find out a central feature of all definitions, which was the “readiness for response”, meaning that an attitude is rather a preparation for behaviour and nothing a person really does (Oskamp, 1977: 8). This preparation is also called “predisposition to respond” and refers to an attitude object, like for instance “abortion”.

Generally, three components of attitudes or in some cases three types of attitudes can be distinguished, depending on how strong the prevailing component is revealed (Oskamp, 1977: 10): attitudes are based on affective components, if opinions are due to feelings, emotions or norms and individual or social values (Aronson/Wilson, 2004: 232), whereas attitudes are based on cognitive processes if people try to verify or falsify the relevant facts by searching for e.g. advantages and disadvantages and weigh up the different possibilities. Attitudes which deal with subjects like death penalty, abortion or pre-marital sexual intercourse are often due to attitudes which rather follow internal values. (Aronson/Wilson, 2004: 232). The third category consists of attitudes based on certain behaviour: this

refers to an attitude which is due to observations of our own behaviour towards an attitude object (Aronson/Wilson, 2004: 232).

2.2.2 Attitude intensity

Attitudes do not only differ from each other in the way they were generated, but also in their intensity. Attitude intensity depends on different things, like for instance how important the attitude actually is for people or how well people are informed in view of a certain aspect or topic. Therefore, the attitude intensity towards the price of beetroot is more likely to be lower as the intensity towards religious beliefs or moral convictions. A general rule in this connection is: the stronger the attitude the more resistant it is to changes or influences (Aronson/Wilson, 2004: 234).

2.3 Theories of attitude change

Throughout the course of history no subject has been more fascinating and interesting to people than simply other people. Therefore researchers have been asking basic questions like “why do people act or think as they do?” or closer to this topic “what makes a good political speaker successful?” or in other words “what is the secret of people`s powers of persuasion?” Possible answers to those questions can already be found in early theories of human nature like the philosophic theories of Plato and Aristotle (Brembeck and Howel 1952: 46-47). Also between 1920 and 1950 social psychologists like Carl Hovland and Kelly turned their attention to the field of persuasion and carried out many experiments in the War Department in World War II trying to increase the morals of American soldiers.

The following chapter consists of a selection of theories of modern psychology and linguistics which firstly try to describe how attitudes are generated, under what circumstances persuasive messages can be successful and, furthermore, which answer the question: what are possible factors which are responsible for attitude changes?

2.3.2 The Yale Attitude Change Approach

In the fifties Carl Hovland and his collaborators tried to explain under what circumstances people tend to be more susceptible to persuasive messages. The centre of their research was the question:” Who said what to whom?” (Aronson/Wilson 2004: 238)

Who can be seen as the source of communication. In this connection Hovland found out that credible speaker or those who give the impression to be experts tend to be more convincing as those who appear rather incompetent. Also attractive speaker or those who seem to have interesting personality traits appear more professional and therefore convincing (Hovland and Weiss, 1951: 635-650)

What refers to the communication itself. Studies showed that people are more prone to persuasive messages which do not pretend to be used to persuade somebody (Aronson/Wilson, 2004: 239)

Moreover, messages which contain pro and contra arguments tend to be more persuasive as far as people are able to disprove the contra arguments of their standpoint (Allen, 1991: 390)

The last important part of the Yale Attitude Change Approach concerns the nature of the audience or the hearer: Firstly, people who were distracted while receiving the persuasive message can be shaped or convinced more easily than those who paid attention (Festinger and Maccoby, 1964: 68). Additionally, according to Krosnick, people aged 18 to 25 do not have as set opinions as older people do, which means that they are more likely to be influenced than others. This is also true for persons with a rather low intelligence quotient or a small amount of self-confidence. (Sears, 1981: 183)

2.3.3. The Elaboration-Likelihood Theory

This approach, which was worked out by Richard Petty and John Cacioppo is very similar to the Yale Attitude Change Approach; however, it differs in an important point:

This theory states that there are two different ways which can lead to attitude change: the central and the peripheral route of information processing. The first one refers to the possibility that communication is elaborated, that an

argument is paid attention to carefully and that information is thought over again. This is true when people are motivated to take notice of the information given and are able to pay attention and to concentrate (Aronson/Wilson 2004: 239). The latter one can be seen as the opposite of the central route. If people are not able or motivated to listen or to concentrate on the information, arguments will be less effective and people will tend to be influenced by peripheral stimuli like the competence of the speaker or the attractiveness of the source. People using the peripheral route of information processing are more prone to be persuaded by hypotactic syntax, containing nice expressions and idioms. Other example for peripherals stimuli are the length of the text or speech or superficial features of the message etc. (Aronson/Wilson, 2004: 240).

2.3.4 The Heuristic Model of Persuasion

Just as the Elaboration Likelihood Model the approach is part of the Two Process Models. However, this approach uses heuristics to explain the peripheral way of information processing (Aronson/Wilson, 2004: 247). Heuristics can be seen as mental abbreviations, schemata or stereotypes which function as rules to make a decision very quickly and efficiently (Bierhoff, 2006: 344). Therefore, they can structure and make everyday life easier; however, using heuristics in order to decide on something or to commit oneself to something can lead to distortions, prejudices or false opinions. Possible heuristics can be statements like “experts are always right”, “length equals strength”, “politicians are liars” or “abortion is murder”.

Even emotions can serve as heuristics: while making decisions or generating attitudes towards things, people often rely on their feelings. This can be seen as a “How-do-I-feel-while-doing-this-heuristic”. People simply take their feelings as the only criterion to decide on something (Aronson/Wilson, 2004: 247).

2.3.5. The Reactance Theory

The basic idea of this theory, which was worked out by Jack Brehm is that people tend to react with resistance when other persons try to restrict them in their personal freedom.

Brehm differentiates three situations which lead to serious reactance effects (Bierhoff, 2006: 211): this is when people try to influence other people, in order to change their attitudes or to control them. Furthermore, when people come up against limited factors or overstep barriers. Like for instance the more one partner wants to be divorced the less the other partner wants to agree to it. Also, if people can only choose between several possibilities and are not free to select another possibility, this will most probably lead to effects of reactance (Bierhoff, 2006: 212)

In this connection Brehm predicts some effects on people who are restricted in their personal freedom. The most important and in this context most relevant aspect is that people will tend to show the opposite of the intended behaviour, depending on the extent to which certain formulations may trigger reactance (Bierhoff, 2006: 212).

2.3.6. Semantic slanting and name calling

There is a wide range of possibilities that can be used to shape thinking deliberately, in order to make it conform to certain points of view. One way to do this is using emotional language or name calling (Halpern, 1996: 92).

As it does not determine but, in a way, direct thoughts and has a different effect on readers or listeners than formal or standard language it can therefore be seen as “a weaker version of the Sapir-Whorf hypothesis” (Halpern, 1996: 92).

In this context “the deliberate use of words designed to create a particular attitude or foster certain beliefs” is also known as *semantic slanting* (Halpern 1996: 116)

Anti-abortionists for instance use the term *pro-life* instead of *anti-abortion*, whereas pro-abortionist use the term *pro-choice*, which has a more positive connotation and underlines that it is a rather unproblematic decision.

Semantic slanting is very close to the term *euphemism*, a rhetorical

device which is also used to change the effect of words and as a result to the emotions triggered by a certain word. Additionally, it can also be seen as type of *connotation*.

Another way to mould thinking is *name-calling*, which can be described as a strategy of labelling people in order to shape their thoughts (Halpern, 1996: 93). For example if one claims that “only a fool would agree to this statement”, the person tries to shape the opinion of his readers by labelling people who would actually agree to that statement.

2.3.7 Ambiguity, Bureaucratese, Vagueness and Negation

Misusing words can also lead to influences on thinking. *Ambiguity* is a term which refers to the fact that words or sentences can have different meanings depending on their context and how they are used (Halpern, 1996: 94). Therefore, “I had an apple” can be interpreted as “a person once possessed an apple” but also “a person ate an apple”.

Furthermore, there is another term called *Vagueness*, which can be defined as being simply imprecise (Halpern, 1996: 94). This can be used to change or somehow cover the meaning of a statement.

People often use very formal and scientific language, in order to sound professional. If this style of language is unfamiliar to the reader or the audience, opinions can be shaped by giving the impression to be very professional. According to Halpern this type of strategy is called *bureaucratese* and has to be separated from “precise technical language” as it tries to confuse the reader, as rather to help him understand things better (Halpern, 1996: 94).

Thinking can also be influenced by *negations*. According to Halpern “the pragmatic function of negation is to deny something which is plausible” (Halpern, 1996: 98) If a writer negates something like for instance “Lisa is no drug addict”, which is definitely true, listeners could gain the impression that there was a discussion on that issue and therefore, infer the plausibility of which was denied, namely that Lisa may be a drug addict. (Halpern, 1996: 98)

2.3.8 Conceptual metaphors

This approach was developed by George Lakoff and Mark Johnson. Lakoff states that “our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature” (Lakoff and Johnson, 2003: 3). That means our conceptual system structures what we perceive, how we interpret things and how we define our reality. This happens most of the time unconsciously. What people think and what they do happens automatically or “along certain lines” (Lakoff and Johnson, 2003: 3). According to Lakoff these lines are also called *metaphors*. One prototypical example mentioned by Lakoff is the argument-is-war-metaphor. That means that aspects are comprehended or conceptualized in terms of another. In this case we talk about arguments in terms of war, like for instance “claims are indefensible” or “he attacked every weak point” (Lakoff and Johnson, 2003: 3). Therefore metaphors can be seen as a responsible factor why people think or argue in a certain way: they unconsciously follow metaphors, which are based on certain thought patterns.

III. Empirical Analysis

This second part of the seminar paper tries to give a description of the data, as well as an interpretation with respect to the theories of the first part of my work

3.1. Methodology

In the following a rough outline of the methodology used is provided. Additionally, the reasons that may have distorted the results are discussed and finally, I will carry out the depiction and analysis of the data.

3.1.1. Questionnaire

In order to receive data, two independent questionnaires were created, which were divided into three sections. The first part, which was a short instruction concerning the procedure and the sequence of tasks, as well as the

third part, namely questions on abortion, were identical in both questionnaires. Here I used scaled questions: The informants could choose between “no”, “rather no”, “yes”, “rather yes”, which made sure that the informants did not answer in a neutral way and that they had to commit themselves to a certain tendency.

The second part consisted of a text: in the first questionnaire (QA) informants had to read an article which contained pro-abortion arguments, while the second one (QB) contained anti-abortion arguments. These two questionnaires were answered by two different groups of people in order to get independent results.

The topic *abortion* was chosen because it is rather controversial and most probably based on attitudes which are due to emotional aspects and therefore easier to be influenced. On the other hand, there is a variety of opinions on abortion which means there are already existing attitudes and opinions are not generated by filling out the questionnaire.

In the introduction, a cover story was used, in order not to influence the informants.

Generally, the questionnaires contain a few aspects which support the process of opinion shaping, although the actual influence can not be proved statistically. According to Hovland, people who give the impressions to be experts are more convincing as those who appear rather unprofessional. Therefore, both texts contain authors who fulfil this requirement. The author of TA has a PhD which suggests that he is an expert in a certain area. The second one has a title (“President of the Probe Ministries International) which also suggests that this person is an academic and a specialist. Beyond that, both texts have clearly structured arguments, although they are not containing two-side arguments.

The general idea was to see if people who answered the first questionnaire tended to answer in a different way as those who received the second questionnaire.

3.1.1 Online survey

In order to reach enough informants in a relatively short time an online survey was used, which was posted on a server. Therefore, people just had to follow a link and fill out the questions after reading the text on abortion. The

answers were immediately sent back automatically to an email-address and could be analysed very quickly.

3.1.2. Description of the questioned population

The target group for the survey were students of English. On the one hand, this group was chosen to make sure that people could understand the meaning, as well as the main messages of the text and on the other hand as students were easily available at university.

The total number of informants was 47. 24 filled out the first questionnaire whereas 23 participants worked on the second one.

The informants are 23 years old on average, which seems to be convenient for the purpose of the survey, according to Krosnick (2.3.2). All of them are students of the English language. Two informants were American citizens, almost 90% were from Bavaria and the rest has grown up in other parts of Germany.

3.1.3. Problems and disruptive elements

There may have been some factors, which influenced the results of the seminar paper.

One of the most obvious influences that could have distorted the results of the work was that I actually had no control who answered the questionnaire and especially under what circumstances the questions were answered. The link was sent to the informants at the end of the semester, when students have to prepare for exams. This means that people could have filled out the questionnaire, although they had not read the text or just briefly skimmed over it. Additionally, people could have been influenced by other situational factors like distractions by other people, time pressure, etc.

According to the theory of reactance by Jack Brehm, elements of the texts could in some cases have lead to effects of reactance, which means that people could have felt forced to answer in a way, which corresponds to the messages of the prevailing text. Although there is no obvious evidence for it, some may have answered in a rather opposite way, in order to offer resistance to the shaping of their mind.

3.1.4 Research questions

In order to examine the influence of the texts on the attitude of the informants and to point out the main objectives of the work a couple of research questions were created:

1. Could opinions be shaped in this certain context?
2. Did people who read the first text tend to answer in a different way as those who answered the second one?
3. To which factors could the influence on the attitudes of the informants be traced back?
4. Are there typical answers which follow a certain pattern or metaphor?

3.2. Depiction and analysis of the data

The following data analysis should give a detailed description of the results of the two questionnaires. In this section abbreviations will be used, in order to have a clear structure and not to confuse data. (TA= Text A: “Abortion rights are pro life”; TB= Text B: “Arguments against abortion”; QA= Questionnaire A containing Text A; QB= Questionnaire B containing Text B)

The following table contains the percentage frequency of the answers given to Question One and Two:

QA			QB		
Question 1	Votes	%	Question 1	Votes	%
yes	5	20,8%	yes	6	26,1%
rather yes	10	41,7%	rather yes	10	43,5%
rather no	5	20,8%	rather no	2	8,7%
no	3	12,5%	no	5	21,7%
no answer	1	4,2%	no answer	0	0,0%
Question 2	Votes	%	Question 2	Votes	%
yes	4	16,7%	yes	4	17,4%
rather yes	6	25,0%	rather yes	4	17,4%
rather no	7	29,2%	rather no	9	39,1%
no	7	29,2%	no	5	21,7%
no answer	0	0,0%	no answer	1	4,3%

Although TB contains substantial arguments which try to convince the reader that abortion is morally doubtful and could be compared to infanticide, both groups answered almost completely in the same way. The first question was also created to get an idea of the general attitude of the two groups towards abortion. As a result 62.5% of QA participants and 69.6% of QB participants think that abortion is rather or is morally doubtful. In this connection the difference is too small to attribute it to influences from the text. This is also true for Question Two.

QA			QB		
Question 3	Votes	%	Question 3	Votes	%
yes	2	8,3%	yes	5	21,7%
Rather yes	4	16,7%	rather yes	8	34,8%
Rather no	6	25,0%	rather no	7	30,4%
No	12	50,0%	no	3	13,0%
no answer	0	0,0%	no answer	0	0,0%

Question 4	Votes	%	Question 4	Votes	%
yes	10	41,7%	yes	10	43,5%
Rather yes	8	33,3%	rather yes	9	39,1%
Rather no	3	12,5%	rather no	1	4,3%
No	3	12,5%	no	3	13,0%
no answer	0	0,0%	no answer	0	0,0%

Referring to question three, 57.5% of the participants of QB answered with *yes or rather yes*, whereas only 25% of QA participants thought that a twenty day old foetus can be called *infant*.

The difference, which could be seen as significant, can be due to the following aspects: First of all, TB uses strong arguments that try to make clear that a baby develops very quickly within the first twenty days in the womb. This is a fact which may be rather unknown to a lot of people especially to those who do not have any personal experiences with pregnancy. That means that the differences in opinions could somehow be related to the increase of knowledge, as the informants of QA were not confronted with information on the prenatal development of children to the same extent. According to Aronson and Wilson, the attitude intensity could have been lower as in other questions, meaning that people were not well-informed on that topic.

Additionally, Anderson uses emotional language to underline that a baby is not “a piece of protoplasm”(1.15) but “this is a baby inside the womb” (1. 15).

On the other side, Peikoff also uses *semantic slanting* and additional *name-calling* to emphasize his opposite point of view by stating that “only the mystic notions of religious dogma treat this clump of cells as constituting a person” (1.5). Peikoff calls a foetus a “clump of cells” (1.4) or a “mass of relatively undifferentiated cells” (1.8) within the first three month of pregnancy and additionally calls those who do not agree to this fact rather old fashioned and states that comparing a foetus to an infant is “ludicrous” (1.9). The first two quotations are types of *semantic slanting*, as he deliberately uses a term which emphasis that it is not a baby at all. The second two are examples for *name-calling*.

The usage of emotional language in both texts could therefore also have led to the shaping of opinions and the different results.

Answers given to Question Four do not differ significantly from each other, although one could have expected that informants of QB are more likely to agree to the opinion that one can call a foetus *infant* as soon as a heartbeat can be detected, because Anderson tries to convince the reader in that point with the help of plausible arguments. Peikoff does not make any statement on that particular issue but argues that it is “ludicrous” to call a foetus infant within the first three month of pregnancy. One possible reason why both groups tend to answer with *yes* or *rather yes* may be that the word *heartbeat* has a certain connotation and therefore lets one immediately think of terms like *life* or *aliveness*: Something that has a heartbeat must be alive, must be a human and therefore be called infant. This could have led to the fact that the participants of QA were influenced in their opinion by the connotation of the word *heartbeat* and therefore answered almost in the same way as group B, which, apart from the text, could have also been influenced by the word *heartbeat*.

Comparing answers from Question Three to those of Question Four could lead to the assumption that some informants did not take a close look to the information given in the text or did not elaborate the information in a sufficient way: Although TB does not explicitly inform the reader that a twenty-day old foetus already has a heartbeat, the text contains information that can be used to infer the fact that there already must be a heartbeat at a twenty-day-old foetus.

This means that informants of QB who had a close look at the text and answered with *no* or *rather no* to question three should, as a consequence, also have answered with *no* or *rather no* to question four or should have answered with *yes* or *rather yes*. This phenomenon can again be seen as a hint that people actually were influenced by the connotation of the word *heartbeat*. According to the *Elaboration-Likelihood-Theory*, these people were rather subjected to the peripheral way of information processing, as their opinion was moulded by peripheral stimuli.

This can also lead to the assumption that people could have used mental heuristics to decide on that question or even followed a certain metaphor according to Lakoff, as the word *heart* is used to express various aspects which refer to human moral, emotions, to goodness or even evilness, which is all typically human. Therefore goodness, evilness or just humanity is often expressed in terms of heart. Examples for that would be idioms like “To have one’s heart in the right place”, “to be close to somebody’s heart”, “to have a cold/soft heart”, “to have a heart”, “somebody’s heart leaps” or “somebody hardens his heart”.

QA			QB		
Question 5	Votes	%	Question 5	Votes	%
yes	17	70,8%	yes	10	43,5%
rather yes	2	8,3%	rather yes	9	39,1%
rather no	3	12,5%	rather no	3	13,0%
no	2	8,3%	no	1	4,3%
no answer	0	0,0%	no answer	0	0,0%

Question 6	Votes	%	Question 6	Votes	%
yes	7	29,2%	yes	9	39,1%
rather yes	6	25,0%	rather yes	9	39,1%
rather no	7	29,2%	rather no	3	13,0%
no	3	12,5%	No	1	4,3%
no answer	1	4,2%	no answer	1	4,3%

Although the diagram for question five shows that both groups answered in the same way, if one summons *yes* and *rather yes* (79.1%) or *no* and *rather no* answers (82.6%). Nevertheless it is noticeable that 70.8 % of the informants who read TA, which contains “legitimate reasons for abortion”, answered with a definite *yes* and those who read TB, which argues against abortion and does not discuss reasons which could be seen as “legitimate”, answered to the same extent with *yes* as with *rather yes*. This can be seen as a hint that people of TA were

probably somehow shaped or at least influenced by Peikoff’s argumentation: again he uses some type of *semantic slanting*, as one sentence before Peikoff mentions expressions like “personal freedom” and “women’s personal right” (1.15-17) in order to make clear that a emancipate women can do what she want to do and must not be restricted by somebody.

Furthermore Question Six provides significant results, as there is a difference of 24% referring to *yes* and *rather yes* answers. Although TA mentions that there are serious health risks and TB does not give any information on that, people who read TB seemed to be influenced somehow by the general statement of the text, namely that abortion is rather problematic, which they may have applied to that questions: This could be seen as a kind of *overgeneralization*.

Additionally the results could also be due to the usage of heuristics like for instance, “operations are always dangerous” etc , as TB does not give any explicit information which can lead to this assumption.

QA			QB		
Question 7	Votes	%	Question 7	Votes	%
yes	6	25,0%	yes	5	21,7%
rather yes	8	33,3%	rather yes	9	39,1%
rather no	5	20,8%	rather no	5	21,7%
no	4	16,7%	No	4	17,4%
no answer	1	4,2%	no answer	0	0,0%
Question 8	Votes	%	Question 8	Votes	%
yes	5	20,8%	yes	3	13,0%
rather yes	1	4,2%	rather yes	4	17,4%
rather no	10	41,7%	rather no	3	13,0%
no	8	33,3%	no	13	56,5%
no answer	0	0,0%	no answer	0	0,0%

The results of question 7 do not allow a conclusion to be drawn about opinion shaping, as both groups answered in the same way. This may be due to the fact that both texts do not explicitly but only indirectly discuss on that problem.

In view of questions number eight, it is noticeable that informants of QB answered with *no* with far more determination (56.5%), as those of QA (33.3%). This could again be due to the fact that Anderson gives examples of possible consequences: He states that making such kind of distinction “made the ethical slide down society’s slippery slope inevitable” (l. 23) and could lead to the legislation of “infanticide” or “euthanasia” (1.25): Again, examples of *semantic*

slanting. Moreover also heuristics could be applied, like for instance “abortion is dangerous in every respect”. As abortion is very often expressed in terms of *killing* and *murder*, people could also have been influenced by metaphors like “abortion is murder” etc.

These aspects could have also triggered the following examples, although the main results do not seem to be significant:

Question 9	Votes	%	Question 9	Votes	%
yes	3	12,5%	yes	5	21,7%
rather yes	8	33,3%	rather yes	6	26,1%
rather no	6	25,0%	rather no	6	26,1%
no	7	29,2%	no	5	21,7%
no answer	0	0,0%	no answer	1	4,3%

Question 10	Votes	%	Question 10	Votes	%
yes	1	4,2%	yes	4	17,4%
rather yes	4	16,7%	rather yes	1	4,3%
rather no	10	41,7%	rather no	9	39,1%
no	8	33,3%	no	9	39,1%
no answer	1	4,2%	no answer	0	0,0%

Both questions refer to aspects which were discussed in detail in TB, as already mentioned above. As one can see, informants of QB who answered with *yes* or *rather yes* tended to answer with more determination, namely with a definite *yes*. Those of QA, who answered with *yes* or *rather yes* preferred the answer *rather yes*, which can be due to the fact that they were somehow influenced by the text passages, heuristics or even metaphors mentioned above.

The next table shows the results of question eleven and twelve:

QA			QB		
Question 11	Votes	%	Question 11	Votes	%
yes	10	41,7%	yes	10	43,5%
rather yes	4	16,7%	rather yes	7	30,4%
rather no	5	20,8%	rather no	3	13,0%
no	4	16,7%	no	3	13,0%
no answer	1	4,2%	no answer	0	0,0%

Question 12	Votes	%	Question 12	Votes	%
yes	5	20,8%	yes	11	47,8%
rather yes	5	20,8%	rather yes	7	30,4%
rather no	8	33,3%	rather no	4	17,4%
no	5	20,8%	no	0	0,0%
no answer	1	4,2%	no answer	1	4,3%

Also the results of Question 11 show a very slight tendency that informants, who read TA, answered more often with *no* or *rather no* (37, 5%), as those of QB (26%). Although these results can not make a claim to be statistically significant, one could say that people QA were slightly influenced by Peikoff's argumentation "That which lives within the body of another can claim no rights against its host" (l. 12), which contains a form of *semantic slanting*, as the word "that" indicates that this is seen as thing and not as an independent human being.

Question 12 shows significant results, which probably could be traced back to the fact that informants of QA were not as well-informed as participants of QB, as TB contains detailed information on the fact that an unborn child is able to feel pain during abortion, depending on its age. Whereas only 41, 6 % of the informants of QA thought that an unborn child can feel pain during abortion, 78,2% of the other group of informants thought that this could be a true fact. Therefore, it can be supposed that the attitude intensity towards this aspect was rather low and as a result people were very prone to persuasive messages as they simply did not know if it is true or not. According to Hovland, the professional argumentation and the fact that the article was written by an expert may have underlined this kind of opinion shaping.

The fact that no single informant of QB answered with *no*, could lead to the assumption that there was nobody who did not read the text, except for the possibility that they were already informed on this matter before and therefore answered with *yes* or *rather yes*.

Informants of QB who answered with *rather no* were either subjected to the peripheral route of persuasion and could not elaborate the information in an adequate way or did not believe that the information given is based on true facts.

The following diagram shows the answers given to question 13 and 14:

QA			QB		
Question 13	Votes	%	Question 13	Votes	%
yes	6	25,0%	yes	4	17,4%
rather yes	5	20,8%	rather yes	4	17,4%
rather no	10	41,7%	rather no	8	34,8%
no	2	8,3%	no	7	30,4%
no answer	1	4,2%	no answer	0	0,0%

QA			QB		
Question 14	Votes	%	Question 14	Votes	%
yes	9	37,5%	yes	4	17,4%
rather yes	10	41,7%	rather yes	6	26,1%
rather no	1	4,2%	rather no	8	34,8%
no	4	16,7%	no	5	21,7%
no answer	0	0,0%	no answer	0	0,0%

Also answers to question 13 can lead to the assumption that the informants of both groups were somehow influenced by the texts, although there is only a slight difference which could not be interpreted as significant. However differences can be seen referring to the no-answers. Whereas only 8, 3% of the QA informants answered with *no*, a total 30,4% of the QB informants did it. This can be due to Peikoff's arguments with respect to this matter: He explicitly mentions that it could be a "death sentence" on various levels (1.27). Therefore the reader gets sensitized for this aspect, whereas informants of QB were, apart from the general statement of their text, probably more influenced by the connotation of the compound "death sentence", as it has a very negative connotation and therefore creates also a negative feeling, which does not emphasise the process of persuasion.

The results of question 14 seem to be quite significant, as there are almost twice as much yes and rather yes answers in group A as in group B. However, it is very hard to discuss possible reasons for that. Trying to sum up the text in one sentence or find another title for Peikoff's article, one could come up with "anti-abortionists close their eyes to reality", which means that actually the whole text is created to convince the reader of this certain aspect. Therefore, all reasons discussed above can have led to that result, which also shows that the text definitely influenced the reader with respect to their opinion.

Furthermore, especially the last section of the article refers to his viewpoint towards anti-abortionist and contains a great amount of emotional language and *semantic slanting*, as well as some kind of metaphors which could have underlined the persuasive process in this certain connection. Therefore Peikoff somehow follows metaphors like "pregnancy can be a curse or punishment" etc, as he expresses possible consequences in terms of curse or in terms of *punishment*, using legal jargon: "The actual life of the parents be

damned”, “this is a death sentence...”, “Give up your life...”, “Sentencing a woman to sacrifice her life...”, “...demand the sacrifice of an actual, living individual” (l. 27-29).

Also the replacement of the word *foetus* with the term *clump of tissue* (l. 31), as well as calling the anti-abortionist standpoint a “classic Big Lie” may have contributed to the prevailing results.

Additionally, it seems obvious that the question itself could be seen as a type of heuristic, as statements like “anti-abortionist close their eyes to reality” are very common expression of views, which can be frequently heard on the radio or on TV and are therefore more likely to be answered in the affirmative.

Answers to question 15 do not represent significant results. However one could detect a tendency that people who read TB and answered with *yes* or *rather yes*, tended to answer twice as much with a definite *yes* as those of QA. Possible reasons for that may be the same ones as discussed in detail for question 14 etc.

QA			QB		
Question 15	Votes	%	Question 15	Votes	%
yes	3	12,5%	yes	6	26,1%
rather yes	7	29,2%	rather yes	3	13,0%
rather no	11	45,8%	rather no	6	26,1%
no	2	8,3%	no	8	34,8%
no answer	1	4,2%	no answer	0	0,0%

Referring to George Lakoff’s theory of conceptual metaphors it is very difficult to find out special metaphors, which people used to answer the questions, as we actually do not know what people thought, while filling out the questionnaires. However, it seems obvious that people tend to follow certain metaphors throughout the whole questionnaire. Maybe very prototypical ones like for instance “abortion is murder”. This could be especially true of informants who for example read TA and constantly answered with *yes* to questions 1,2,3, 4, 6, 9, 10, 11, 12,13, and with *no* to questions 5,7,8,14, like it is almost done by informant 14 of QA (compare appendix).

Some other examples for other ways of using metaphors are already mentioned above.

IV. Conclusion

As it was shown, the influences of the articles on the readers could be proved to be probable. Furthermore it was possible to show that opinions could have been shaped and moulded to a certain degree. Various reasons, like for example the usage of emotional language within the texts or the usage of heuristics on the part of the informants, as well as the influence of certain metaphors, according to Lakoff's definition, could, among other reasons, have been responsible for the fact that people of the first group tended to answer constantly in a different way as those of the second one.

This could be seen as a striking example for the fact that simply reading a short article can have provable effects on peoples' thinking. This does not mean that these attitudes will not be changing again, but they will probably develop further into other opinions or attitudes which will then gradually form the person's personality, including moral convictions, as well as his or her way to perceive messages and discern reality. Furthermore, it shows, on the one hand, that there are only few attitudes which are really set and based on substantial convictions and which could not be directed in a certain way. On the other hand, it shows the enormous power of words and language which have great influence on what we think and how we perceive and built up our own reality.

Dear Reader,

We would appreciate your help in order to find out more about public opinion. The following questionnaire is part of a research referring to abortion and how the concept is seen and understood by people of different age and countries.

Please read the text carefully before you answer the questions in the second section. The last part consists of some personal data concerning your age, nationality etc.

Reading the article and filling out the questionnaire will take about 10 minutes. All information given to us will be treated strictly confidentially. Thank you for your support.

[> next step](#)

Section 1: Text

Abortion Rights are Pro-Life (by Dr. Leonard Peikoff)

Thirty years after Roe V. Wade, no one defends the right to abortion in fundamental, moral terms, which is why the pro-abortion rights forces are on the defensive. Abortion-rights advocates should not cede the terms "pro-life" and "right to life" to the anti-abortionists. It is a woman's right to her life that gives her the right to terminate her pregnancy. Nor should abortion-rights advocates keep hiding behind the phrase "a woman's right to choose." Does she have the right to choose murder? That's what abortion would be, if the foetus were a person. The status of the embryo in the first trimester is the basic issue that cannot be sidestepped. The embryo is clearly pre-human; only the mystical notions of religious dogma treat this clump of cells as constituting a person. We must not confuse potentiality with actuality. An embryo is a potential human being. It can, granted the woman's choice, develop into an infant. But what it actually is during the first three months is a mass of relatively undifferentiated cells that exist as a part of a woman's body. If we consider what it is rather than what it might become, we must acknowledge that the embryo under three months is something far more primitive than a frog or a fish. To compare it to an infant is ludicrous. If we are to accept the equation of the potential with the actual and call the embryo an "unborn child," we could, with equal logic, call any adult an "undead corpse" and bury him alive or vivisect him for the instruction of medical students. That tiny growth, that mass of protoplasm, exists as a part of a woman's body. It is not an independently existing, biologically formed organism, let alone a person. That which lives within the body of another can claim no right against its host. Rights belong only to individuals, not to collectives or to parts of an individual. ("Independent" does not mean self-supporting--a child who depends on its parents for food, shelter, and clothing, has rights because it is an actual, separate human being.) "Rights," in Ayn Rand's words, "do not pertain to a potential, only to an actual being. A child cannot acquire any rights until it is born." It is only on this base that we can support the woman's political right to do what she chooses in this issue. No other person--not even her husband--has the right to dictate what she may do with her own body. That is a fundamental principle of freedom. There are many legitimate reasons why a rational woman might have an abortion--accidental pregnancy, rape, birth defects, danger to her health. The issue here is the proper role for government. If a pregnant woman acts want only or capriciously, then she should be condemned morally--but not treated as a murderer. If someone capriciously puts to death his cat or dog, that can well be reprehensible, even immoral, but it is not the province of the state to interfere. The same is true of an abortion which puts to death a far less-developed growth in a woman's body. If anti-abortionists object that an embryo has the genetic equipment of a human being, remember: so does every cell in the human body. Abortions are private affairs and often involve painfully difficult decisions with life-long consequences, as well as serious health risks. But, tragically, the lives of the parents are completely ignored by the anti-abortionists. Yet that is the essential issue. In any conflict it's the actual, living persons who count, not the mere potential of the embryo. Being a parent is a profound responsibility--financial, psychological, moral--across decades. Raising a child demands time, effort, thought and money. It's a full-time job for the first three years, consuming thousands of hours after that--as caretaker, supervisor, educator and mentor. To a woman who does not want it, this is a death sentence. The anti-abortionists' attitude, however, is: "The actual life of the parents be damned! Give up your life, liberty, property and the pursuit of your own happiness." Sentencing a woman to sacrifice her life to an embryo is not upholding the "right-to-life." The anti-abortionists' claim to being "pro-life" is a classic Big Lie. You cannot be in favour of life and yet demand the sacrifice of an actual, living individual to a clump of tissue. Anti-abortionists are not lovers of life--lovers of tissue, maybe. But their stand marks them as haters of real human beings.

> next step

Section 2. Questions

- 1. Do you think that abortion is morally doubtful?
- 2. Do you think that abortion could be compared to infanticide or an act of murdering?
- 3. Do you think a twenty-day-old foetus can be called "infant"?
- 4. Do you think that a foetus can be called an infant as soon as a heartbeat can be identified?
- 5. Do you think there is any justified reason for abortion?
- 6. Do you think that abortion involves serious health risks?
- 7. Do you think it is necessary that politics interfere in this matter?
- 8. Do you think there is a difference between "person" and "human"?
- 9. Do you think that the legislation of abortion could under any circumstances lead to the distortion of moral standards in society?
- 10. Do you think that the legislation of abortion could under any circumstances lead to the legislation of euthanasia?
- 11. Do you think an unborn child can acquire any rights until its birth?
- 12. Do you think a child is able to feel any pain during abortion?
- 13. Do you think that the birth of a child could under any circumstances seen as a "death sentence" for a young mother? (Financially, socially, etc.)
- 14. Do you think that anti-abortionists close their eyes to reality?
- 15. Do you think that anti-abortion is pro-life?

Section 3: Personal data

- 1. Your age?
- 2. Your sex?
- 3. What is your profession?
- 4. Where do you come from (town)?
- 5. What is your nationality?
- 6. What is your mother tongue?
- 7. Do you have any personal experience with abortion (direct or indirect)?

Dear Reader,

We would appreciate your help in order to find out more about public opinion. The following questionnaire is part of a research referring to abortion and how the concept is seen and understood by people of different age and countries. Please read the text carefully before you answer the questions in the second section. The last part consists of some personal data concerning your age, nationality etc. Reading the article and filling out the questionnaire will take about 10 minutes. All information given to us will be treated strictly confidentially. Thank you for your support.

[> next step](#)

Section 1: Text

Arguments against abortion (by Kerby Anderson, President of the Probe Ministries International)

[...] The medical arguments against abortion are compelling. The first one surrounds the definition of life and death. If one set of criteria have been used to define death, could they also be used to define life? Death used to be defined by the cessation of heartbeat. A stopped heart was a clear sign of death. If the cessation of heartbeat could define death, could the onset of a heartbeat define life? The heart is formed by the 18th day in the womb. If heartbeat was used to define life, then nearly all abortions would be outlawed. Physicians now use a more rigorous criterion for death: brain wave activity. A flat EEG (electroencephalograph) is one of the most important criteria used to determine death. If the cessation of brain wave activity can define death, could the onset of brain wave activity define life? Individual brain waves are detected in the fetus in about 40-43 days. Using brain wave activity to define life would outlaw at least a majority of abortions. Opponents to abortion also raise the controversial issue of fetal pain. Does the fetus feel pain during abortion? The evidence seems fairly clear and consistent. Consider this statement made in a British medical journal: "Try sticking an infant with a pin and you know what happens. She opens her mouth to cry and also pulls away. Try sticking an 8-week-old human fetus in the palm of his hand. He opens his mouth and pulls his hand away. A more technical description would add that changes in heart rate and fetal movement also suggest that intrauterine manipulations are painful to the fetus." Obviously, other medical criteria could be used. For example, the developing fetus has a unique set of fingerprints as well as genetic patterns that make it unique. The development of sonography has provided us with a "window to the womb" showing us that a person is growing and developing in the mother's womb. We can discern eyes, ears, fingers, a nose, and a mouth. Our visual senses tell us this is a baby growing and maturing. This is not a piece of protoplasm; this is a baby inside the womb. The point is simple. Medical science leads to a pro-life perspective rather than a pro-choice perspective. If medical science can be used at all to draw a line, the clearest line is at the moment of conception. Medical arguments provide a strong case against abortion and for life. A third set of arguments against abortion would be philosophical arguments. A key philosophical question is where do you draw the line? Put another way, when does a human being become a person? The Supreme Court's decision of *Roe v. Wade* (is the name of a controversial decision made by the Supreme Court in the U.S in 1973. As a consequence of it, abortion is part of the "right to privacy") separated personhood from humanity. In other words, the judges argued that a developing fetus was a human but not a person. Since only persons are given 14th Amendment protection under the Constitution, the Court argued that abortion could be legal at certain times. This left to doctors, parents, or even other judges the responsibility of arbitrarily deciding when personhood should be awarded to human beings. The Supreme Court's cleavage of personhood and humanity made the ethical slide down society's slippery slope inevitable. Once the Court allowed people to start drawing lines, some drew them in unexpected ways and effectively opened the door for infanticide and euthanasia. The Court, in the tradition of previous line-drawers, opted for biological criteria in their definition of a "person" in *Roe v. Wade*. In the past, such criteria as implantation or quickening had been suggested. The Court chose the idea of viability and allowed for the possibility that states could outlaw abortions performed after a child was viable. But viability was an arbitrary criterion, and there was no biological reason why the line had to be drawn near the early stages of development. The line, for example, could be drawn much later. Ethicist Paul Ramsey frequently warned that any argument for abortion could logically be also used as an argument for infanticide. As if to illustrate this, Dr. Francis Crick, of DNA fame, demonstrated that he was less concerned about the ethics of such logical extensions and proposed a more radical definition of personhood. He suggested in the British journal *Nature* that if "a child were considered to be legally born when two days old, it could be examined to see whether it was an 'acceptable member of human society.'" Obviously this is not only an argument for abortion; it's an argument for infanticide. Other line-drawers have suggested a cultural criterion for personhood. Ashley Montagu, for example, stated, "A newborn baby is not truly human until he or she is molded by cultural influences later." Again, this is more than just an argument for abortion. It is also an argument for infanticide. More recently some line-drawers have focused on a mental criterion for personhood. Dr. Joseph Fletcher argues in his book *Humanhood* that "Humans without some minimum of intelligence or mental capacity are not persons, no matter how many of these organs are active." This is not only an argument for abortion and infanticide; it's adequate justification for euthanasia and the potential elimination of those who do not possess a certain IQ. [...]

> next step

Section 2. Questions

- 1. Do you think that abortion is morally doubtful?
- 2. Do you think that abortion could be compared to infanticide or an act of murdering?
- 3. Do you think a twenty-day-old foetus can be called "infant"?
- 4. Do you think that a foetus can be called an infant as soon as a heartbeat can be identified?
- 5. Do you think there is any justified reason for abortion?
- 6. Do you think that abortion involves serious health risks?
- 7. Do you think it is necessary that politics interfere in this matter?
- 8. Do you think there is a difference between "person" and "human"?
- 9. Do you think that the legislation of abortion could under any circumstances lead to the distortion of moral standards in society?
- 10. Do you think that the legislation of abortion could under any circumstances lead to the legislation of euthanasia?
- 11. Do you think an unborn child can acquire any rights until its birth?
- 12. Do you think a child is able to feel any pain during abortion?
- 13. Do you think that the birth of a child could under any circumstances seen as a "death sentence" for a young mother? (Financially, socially, etc.)
- 14. Do you think that anti-abortionists close their eyes to reality?
- 15. Do you think that anti-abortion is pro-life?

Section 3: Personal data

- 1. Your age?
- 2. Your sex?
- 3. What is your profession?
- 4. Where do you come from (town)?
- 5. What is your nationality?
- 6. What is your mother tongue?
- 7. Do you have any personal experience with abortion (direct or indirect)?

Questionnaire 1
24 Participants

Question 1	Votes	%
yes	5	20,8%
rather yes	10	41,7%
rather no	5	20,8%
no	3	12,5%
no answer	1	4,2%

Question 2	Votes	%
yes	4	16,7%
rather yes	6	25,0%
rather no	7	29,2%
no	7	29,2%
no answer	0	0,0%

Question 3	Votes	%
yes	2	8,3%
rather yes	4	16,7%
rather no	6	25,0%
no	12	50,0%
no answer	0	0,0%

Question 4	Votes	%
yes	10	41,7%
rather yes	8	33,3%
rather no	3	12,5%
no	3	12,5%
no answer	0	0,0%

Question 5	Votes	%
yes	17	70,8%
rather yes	2	8,3%
rather no	3	12,5%
no	2	8,3%
no answer	0	0,0%

Question 6	Votes	%
yes	7	29,2%

rather yes	6	25,0%
rather no	7	29,2%
no	3	12,5%
no answer	1	4,2%

Question 7	Votes	%
yes	6	25,0%
rather yes	8	33,3%
rather no	5	20,8%
no	4	16,7%
no answer	1	4,2%

Question 8	Votes	%
yes	5	20,8%
rather yes	1	4,2%
rather no	10	41,7%
no	8	33,3%
no answer	0	0,0%

Question 9	Votes	%
yes	3	12,5%
rather yes	8	33,3%
rather no	6	25,0%
no	7	29,2%
no answer	0	0,0%

Question 10	Votes	%
yes	1	4,2%
rather yes	4	16,7%
rather no	10	41,7%
no	8	33,3%
no answer	1	4,2%

Question 11	Votes	%
yes	10	41,7%
rather yes	4	16,7%
rather no	5	20,8%
no	4	16,7%
no answer	1	4,2%

Question 12	Votes	%
yes	5	20,8%
rather yes	5	20,8%
rather no	8	33,3%
no	5	20,8%
no answer	1	4,2%

Question 13	Votes	%
yes	6	25,0%
rather yes	5	20,8%
rather no	10	41,7%
no	2	8,3%
no answer	1	4,2%

Question 14	Votes	%
yes	9	37,5%
rather yes	10	41,7%
rather no	1	4,2%
no	4	16,7%
no answer	0	0,0%

Question 15	Votes	%
yes	3	12,5%
rather yes	7	29,2%
rather no	11	45,8%
no	2	8,3%
no answer	1	4,2%

Data

age	sex	profession	town	nationality	mother_tongue	experience_with_abortion
17	female	pupil		ger		
27	female	student	Ingolstadt	german	german	yes - indirect (gene-defect abortion)
25	female	student	Ingolstadt	German	German	no
21	female	student	pfaffenhofen	german	german	no
21	female	student	Germany	German	German	not at all
20	female	student	Dillingen (Bavaria)	German	German	no
23	male	student, / engineer	dillingen	german	german	no / only studies
21	female	tax inspector	Ingolstadt	German	German	no
21	female	Intern	Petoskey, Michigan	USA	English	no

21	female	student	Wangen	German	German	no
22	female	student	a town in Bavaria	German	German	no
22	Male	student	Eichstätt	German	German	no
22	female	student	eichstätt	russian/german	russian	yes (a friend of mine did it and she's now is regretting it)
21	F	student	Nürnberg	German	German	No
22	m	student	EI	German	German	no
28	female	student	Sindelfingen	German	German	yes
28	male	student	won't tell you	German	German	yes, indirect
24	male	student	Landshut	German	german	no
23	male	student	Eichstätt	Germany	German	Yes, indirect
25	femal	student	eichstätt	german	german	yes I have. Indirect
25	male	student	eichstätt	german	german	no
24	male	student	Landshut	german	german	no
22	female	student	Wasserburg am Inn	German	german	no
20	female	student	eichstätt	german	german	no

Questionnaire 2
23 Participants

Question 1	Votes	%
yes	6	26,1%
rather yes	10	43,5%
rather no	2	8,7%
no	5	21,7%
no answer	0	0,0%

Question 2	Votes	%
yes	4	17,4%
rather yes	4	17,4%
rather no	9	39,1%
no	5	21,7%
no answer	1	4,3%

Question 3	Votes	%
yes	5	21,7%
rather yes	8	34,8%
rather no	7	30,4%
no	3	13,0%
no answer	0	0,0%

Question 4	Votes	%
yes	10	43,5%
rather yes	9	39,1%
rather no	1	4,3%
no	3	13,0%
no answer	0	0,0%

Question 5	Votes	%
yes	10	43,5%
rather yes	9	39,1%
rather no	3	13,0%
no	1	4,3%
no answer	0	0,0%

Question 6	Votes	%
yes	9	39,1%
rather yes	9	39,1%
rather no	3	13,0%
no	1	4,3%
no answer	1	4,3%

Question 7	Votes	%
yes	5	21,7%
rather yes	9	39,1%
rather no	5	21,7%
no	4	17,4%
no answer	0	0,0%

Question 8	Votes	%
yes	3	13,0%
rather yes	4	17,4%
rather no	3	13,0%
no	13	56,5%
no answer	0	0,0%

Question 9	Votes	%
yes	5	21,7%
rather yes	6	26,1%
rather no	6	26,1%
no	5	21,7%
no answer	1	4,3%

Question 10	Votes	%
yes	4	17,4%
rather yes	1	4,3%
rather no	9	39,1%
no	9	39,1%
no answer	0	0,0%

Question 11	Votes	%
yes	10	43,5%
rather yes	7	30,4%

rather no	3	13,0%
no	3	13,0%
no answer	0	0,0%

Question 12	Votes	%
yes	11	47,8%
rather yes	7	30,4%
rather no	4	17,4%
no	0	0,0%
no answer	1	4,3%

Question 13	Votes	%
yes	4	17,4%
rather yes	4	17,4%
rather no	8	34,8%
no	7	30,4%
no answer	0	0,0%

Question 14	Votes	%
yes	4	17,4%
rather yes	6	26,1%
rather no	8	34,8%
no	5	21,7%
no answer	0	0,0%

Question 15	Votes	%
yes	6	26,1%
rather yes	3	13,0%
rather no	6	26,1%
no	8	34,8%
no answer	0	0,0%

Data

age	sex	profession	town	nationality	mother_tongue	experience_with_abortion
22	female	student	Eichstätt	german	german	yes, indirect (a friend)
22	female	student	Manching	German	German	no
24	male	student	eichstätt	german	german	no
18	Male	Student	Anchorage	United States Citizen	English	Yes

22	male	student	Eichstaett	German	German	no
21	w	student	ingolstadt	german	german	no
23	female	student/industriekauffrau	rosenheim	german	german	no
22	female	student	Vechta	German	German	no
21	female	student	Ingolstadt	German	German	no
23	female	student	Ingolstadt	German	German	no
21	male	teacher (Music/English)	Eislingen	german	german	no
25	f	student	stuttgart	german	german	no
56	m	engeneer	Gundelfingen	german	german	no
23	female	student	Augsburg	German	German	No personal, but I 'm a friend of someone who did it.
20	fe	student	ingolstadt	german	german	no
21	f					
25	female	student	Eichstädt	German	German	no
27	male	student		German	German	no
22	female	student	neuburg a.d. donau	german	german	no
21	female	student	Ingolstadt	German	German	no
22	male	student	ingolstadt	german	german	no
20	female	student	Eichstädt	German	German	no
20	female	student	Dillingen	German	German	no

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