

# Can a green mobile telephony operator succeed in Switzerland?



**Thesis carried out for obtaining HES-SO diploma**

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Credits : <http://www.iron-shield.com/images/cellphone.jpg>  
<http://th.interia.pl/51,b4bd8135f795806/Grass-Dew.jpg>

## Statement

This thesis is completed within the context of the final examination at the Geneva School of Business Administration, for obtaining the title of Bachelor of Business Administration. The student accepts, if necessary, the confidentiality clause. Use of conclusions and recommendations formulated in the thesis, without prejudging their value, do not engage the responsibility of either the author, the advisor, the juror and the Geneva School of Business Administration.

“I certify having realized the work hereafter on my own, without having used sources other than those mentioned in the bibliography.”

Done in Geneva, November 2007

Aurélien Robert

## Greetings

I believe no good work can ever be executed without the support of external people, whether they would be industry experts, teachers or institutions. Hereafter I wish to send a warm thank you to some of the people who helped me during the realisation of this project.

First of all, I wish to thank Magali Dubosson-Torbay, Director of the Geneva School of Business Administration and my thesis advisor, for her always constructive and well thought-out advices as well as her enthusiasm towards my work.

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Finally, thank you to all the people who generously donated time to answer my questionnaire, thus giving me the very raw material essential to my work.

## Executive summary

A very entrepreneurial intuition happened to be at the source of this project. The intuition that the Swiss mobile telephony market is a “green-able” one, meaning a new virtual operator whose value proposition relies on the ethics of its functioning and offer could be launched: a green mobile operator.

Thus, this document aims at inquiring whether such an operator would actually be relevant, industry-wise and consumer-wise. It only constitutes the very first step towards the hypothetical actual creation of a green mobile operator and, as a consequence, only addresses the very major elements needed to form an answer.

These list as follows:

- Is the Swiss mobile telephony market limp enough to allow entrance to a newcomer?
- What is a Mobile Virtual Network Operator (MVNO) and how can it create value?
- Do the ethics of the functioning and offer of a green mobile operator represent valid core competences?
- How do consumers perceive ethical companies and how frequently do they purchase from them?
- What are consumers' decision factors and means of comparison when choosing their mobile operator?
- How do consumers value the green mobile operator concept and are they willing to switch for it?

The first three questions were treated through desk research. First, I analyzed the market situation and evolution. Then, I went back to the very definition of an MVNO and observed various existing ones and I ended up by submitting the green mobile operator concept to a viability test using a mix of strategic analysis methods.

The last three questions were addressed using a field market study in order to get the consumers' feeling about ethical companies and consumption, mobile telephony and the combination of both. Firstly, it was essential to understand how consumers perceive ethical companies and how they relate to them. Secondly, I needed to understand how consumers proceed when they choose their mobile operator and get a hint of how they would choose their operator today. Finally, the consumers' response to the green mobile operator concept and their hypothetical willingness to sign up were questioned.

Then, by combining the results of the analysis of the mobile telephony industry and those of the survey, I was able to assess whether the green mobile operator concept is a commercial opportunity that should be considered or not.

The first answer this research brought is that the **Swiss mobile telephony market is not limp enough to allow entrance of a newcomer**. Reasons for this are the declining progression rate of revenues, a penetration rate that reached saturation, the maturity of the market and a fierce competition.

Secondly, I demonstrated that **the ethics of the functioning and offer of a green mobile operator are elements not clearly sufficient to survive on the market**. Indeed, the underlying competences are not solid enough. An operator relying on these elements only could then probably not hold a defensible position on the market.

Thirdly, the survey unveiled that the respondents have a **very positive perception of ethical companies** and are used to consume their products or services. The respondents clearly identify companies that, in their own opinion, integrate sustainable development principles and perceive their added value. Moreover, such companies are often considered more attractive and a majority of respondents like the fact that they share similar values and principles.

Fourthly, **when it comes to choosing a mobile operator, respondents said the price, network quality as well as the offer & services are the key elements** (offer & services includes the applications and the matching with one's needs). Besides, more respondents would make a formal comparison before choosing a new operator and a large majority of them uses several sources of information to form an opinion.

Finally, the respondents are clearly **satisfied with their current mobile operator** but a large proportion declared to be ready to change, even more if they could change for a green mobile operator. The results are overly enthusiastic but it does confirm the genuine interest of the respondents for such a mobile operator and it shows that they do perceive its value.

Consumers say yes, the industry says no. In the end, launching in Switzerland a new mobile operator relying on the ethics of its functioning and offer is a commercial opportunity I recommend not to pursue.

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## Introduction

The research laid out hereafter tries to answer the following question: can a green mobile operator succeed in the Swiss market? Today, many business sectors see the arrival of green, or ethical, offers but it shall be interesting to analyze whether the Swiss mobile telephony industry and the Swiss consumers are open to such a change.

The first part of document starts with an overview of the Swiss mobile telephony industry in order to determine if it is limp enough to allow entrance of a newcomer. Then, the concept of Mobile Virtual Network Operator (MVNO) is explained and analyzed to outline various value creation methods as well as ups and downs. Next, I examine the validity and sustainability of a green, or ethical, core competence.

The second part of the document concerns the market study I carried out to understand how consumers perceive ethical companies, how they choose their mobile operator and whether they would be ready to sign up with a green mobile operator. It includes the methodology followed to conceive the survey and a presentation of the questionnaire I designed. Then, the results are detailed and I end this part of the document with a global synthesis, which responds to the questions that are at the origin of this work.

Finally, a conclusion stating my recommendation as to whether a green mobile operator could succeed ends the document.

Nota Bene: throughout this document, the following expressions are indistinctively used with the same respective meanings: green, ethical and sustainable; mobile operator, mobile telephony operator and operator; virtual operator, mobile virtual operator, mobile virtual network operator and MVNO; green operator and green mobile operator.



# 1. Swiss mobile telephony market

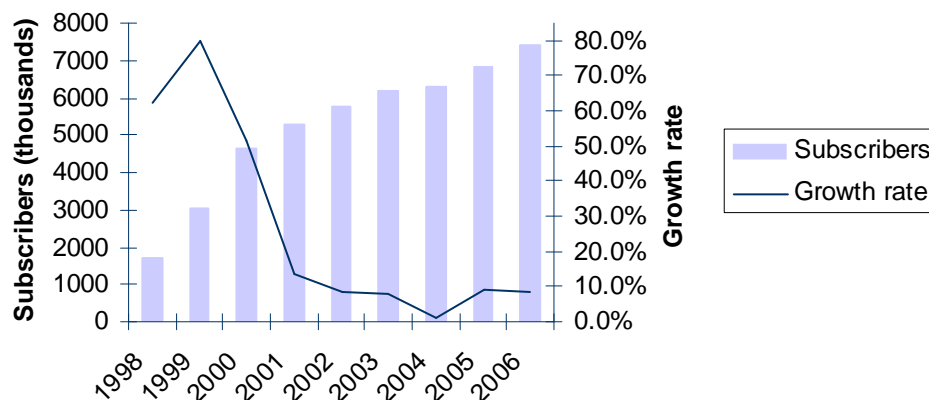
## 1.1 Market definition

The whole document will refer to the Swiss mobile telephony market excluding the B-to-B pan (corporate/enterprises offers) and all operators not cited in the following list: Swisscom, Orange, Sunrise, Migros, Coop, Tele2, Yallo, Talk-Talk, Cablecom, Mobilezone Net, Lebara.

## 1.2 Market size

While the 90's saw the mobile telephony market grow at exponential rates, the first years of the new millennium showed a much slower progression. Indeed, the market reached a certain maturity as the growth rate of subscribers (both prepaid & postpaid) remains stable between 7.9% and 8.9% from 2002 to 2006, except for 2004. For the year 2004, growth went back down to 1.4%, as the prepaid market encountered a 4.5% decrease. This was due to a Federal council regulation forcing all prepaid users having bought their card after November 1 2002 to register their number and identity. At end 2006, the Swiss market represented 7.418 million subscribers, dispatched between postpaid subscribers, accounting for approximately 60% of total subscribers, and prepaid subscribers<sup>1</sup>.

**Figure 1**  
**Subscribers and growth rate evolution**



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<sup>1</sup> OFCOM, Statistique des télécommunications : évolution jusqu'au 31.12.2006 pour certains indicateurs.

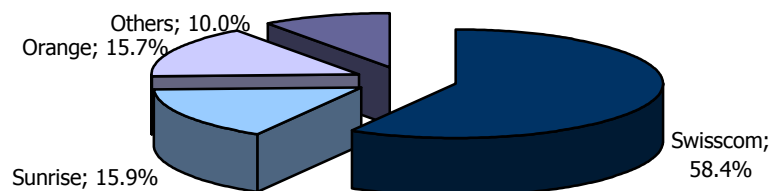
As far as the financial value is concerned, these mobile users represent (pure mobile services only<sup>2</sup>) a quoted value of approximately 4.817 billion Swiss francs for the year 2005. Though the overall growth rate from 1999 to 2005 reaches 92.3%, the year-on-year progression sharply declined during the same period<sup>3</sup>. This is mainly attributable to a continuous fall in telephony prices. Indeed, the mobile telephony services price index went down from 100 in 1998 to 63.4<sup>1</sup> in 2005, small medium and big users altogether.

### **1.3 Operators**

The market experienced a lot of change since 1998, when Swisscom became a public company and DiAx and Orange were granted mobile communication licenses. Prior 1998, Swisscom benefited from a monopoly, as communications had been a matter of state for a long time. Thus, the historical operator held 98.5% of the mobile communications market for the year 1998 – the remaining 1.5% being held by DiAx. During the following years, Swisscom's market share rapidly dropped and levels off somewhere around 62% since 2002.

In the mean time, Sunrise's (formerly DiAx) market share jumped from 1.5% to 15.4% in 2006 while Orange's, entered in the market in 1999, went up from 10.2% to 15.7%. The three major operators accounted for 89.5%<sup>1</sup> of the total Swiss mobile telecommunications market (data corrected of the MVNOs market shares, usually included in the physical operators'), hence qualifying it as a highly concentrated market.

**Figure 2**  
**Mobile operators market share 2006**



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<sup>2</sup> Excludes interconnection costs, additional services costs and others types of derived costs.

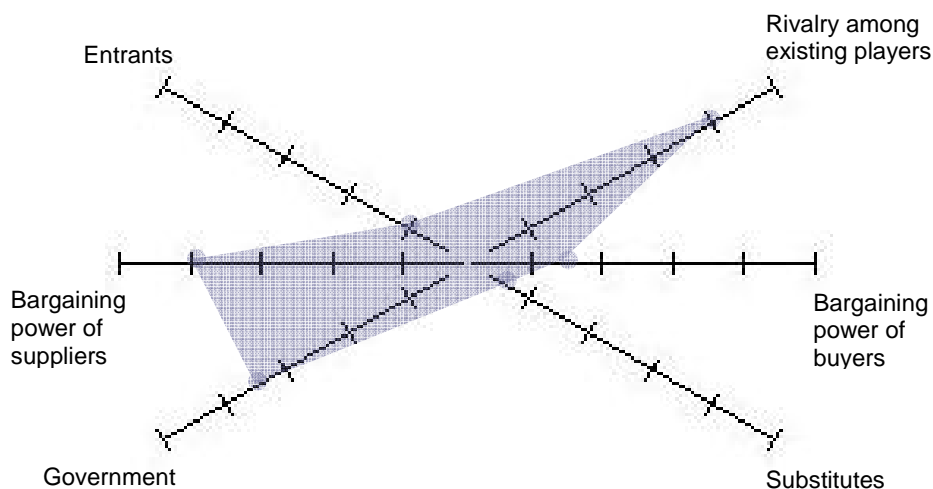
<sup>3</sup> OFCOM, Statistique officielle des télécommunications 2005

Swisscom, Orange and Sunrise are physical network operators, meaning they own and control a physical network infrastructure over the Swiss territory. Aside from these physical operators, Mobile Virtual Network Operators (MVNOs) exist (named “Others” on Figure 2). Basically, they buy communication minutes from a physical operator and resell them under their own brand. Thus, they do not have to deal with the network infrastructure (as mentioned in Appendix 1, Swiss MVNOs, Tele2 is an exception). The chapter 2 explains more thoroughly what is an MVNO and how it works.

### **1.4 Competitive analysis**

The Swiss mobile telephony market, from the MVNOs point of view, appears as a very competitive one.

**Figure 3**  
**Swiss mobile telephony market, Porter hexagon**



However, the threat of new entrants is very low. This is due to the existence of several entry barriers, financial and commercial mostly. Firstly, consumers encounter a pretty high cost of transfer when willing to change their operator (notice delay, possible contract rupture fee, paperwork). Secondly, volume is a very important factor, which means virtual operators are required to have large clients databases even prior their market entry in order to quickly bring these clients to their new offer and reach a critical size. Thirdly, an extensive distribution network has proven to be a key factor in bringing the offer towards the consumer. Fourthly, the current market saturation induces newcomers will have to steal customers from existing companies, which is much

harder. Such conditions altogether make it very difficult and somehow unappealing for potential newcomers to enter the market.

Among existing competitors, the rivalry is very intense. Indeed, compared to 17 European countries, the number of operators in service (physical and virtual) is about 60% higher in Switzerland, proportionally to the population<sup>7</sup>. The market saturation caused a fierce price war, which has led to important prices reductions for all products. As stated in section 1.2, the prices index lost 36.6 points from 1998 to 2005 but the decrease is probably not ending soon as Swiss mobile telephony prices remain higher than European countries' average. For the year 2006, all utilisation levels mixed, Swiss prices were approximately 46% higher than average prices within the EU25 countries<sup>7</sup> (this data only takes into account the three main operators in Switzerland).

As for the bargaining power of buyers, it is close to nil. Transfer costs remain pretty high to customers, as it requires them to respect strict time periods to cancel a subscription, otherwise a fee is to be paid. Plus, it is always too much paperwork according to a consumer's opinion. Moreover, clients are numerous over the Swiss territory and dispersed; they do not form a cohesive group, hence their lack of power against mobile operators. The last element that deprives buyers from bargaining power is the impressive amount (over 80) of different mobile telephony plans available on the market. Such superabundance has critical consequences on the ease of information and choice for consumers, as they don't have access to or don't know the necessary tools and lack time to fully compare the possibilities.

Another element increasing the competitive intensity of the market is the absence of substitutes to mobile telephony, whether they would be direct or indirect. Generic substitutes, including goods or services consumers could spend their money on instead of mobile telephony (leisure, housing, food etc.), have not been privileged and, obviously, a massive drop in mobile telecommunication spending is not foreseen nor even possible from a realistic point of view.

When it comes to the Swiss mobile telephony market, the government and affiliate authorities play an important role. Not only is the historic operator still partially controlled by the Confederation, 54.8% of the shares at end 2006<sup>4</sup>, but the Federal Office of Communication (OFCOM), the Federal Commission for Communication (ComCom) and the Commission for Competition (ComCo) are very actively watching

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<sup>4</sup> SENN, Felix. La Confédération détient 54.8% des actions Swisscom à fin 2006

the mobile telephony market and pressuring its players for more competition and transparency.

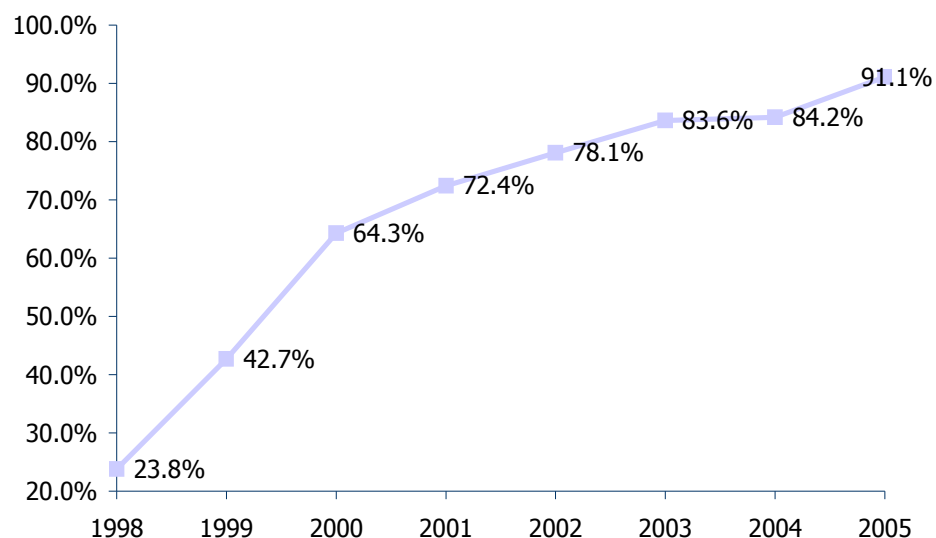
Finally, the bargaining power of suppliers appears very strong. No surprise when transfer costs are high for consumers and when there is a risk of forward integration. This risk is due to the control physical operators have over virtual operators, allowing them to initiate a consolidation movement for their benefit.

### **1.5 Life cycle**

All signs point to a mature market.

First of all, recent studies<sup>5</sup> show the mobile penetration rate reached 91.1% at end 2005. This data is coherent with the 7.418 million mobile users registered a year later, theoretically raising the penetration rate somewhere about 98% of the 7.507 million permanent residents in Switzerland. Such figures make the Swiss market one of the most saturated among OECD countries, whose average neared 80% at end 2005<sup>5</sup>.

**Figure 4**  
**Mobile telephony penetration in Switzerland**



Source : OECD. Global Communications Outlook 2007

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<sup>5</sup> OECD. Global Communications Outlook 2007

Second of all, the operators' revenue growth abruptly declined over the past years, pointing out their difficulties to increase their profitability. Falling from 39.6% in 1999 to 1.7% in 2005, the revenue growth rate indicates the market is slowing down as profits increases can no longer mainly come from new subscribers. Such figures clearly demonstrate the market primary potential is close to being exhausted and players are already forced to find ways to develop and take advantage of a secondary potential. But for now this situation leads, on one hand, to an amplified competition, since operators are fighting to steal each others' subscribers. On the other hand, mobile telephony companies also try to enlarge their clients database by targeting younger potential users; it is not uncommon anymore to see 10 years old kids equipped with such mobile devices.

Finally, multiple market observers plead in favour of the market maturity. In an April 2006 article, the Declaration de Berne describes the market as saturated and highly competitive<sup>6</sup>. In July 2007, the Federal Office for Communication published a study of the Swiss market in international comparison, which also agrees on the market saturation<sup>7</sup>. On the professional magazines side, July 2005 issue of PME magazine for instance backs up the general consensus towards a mature market in the mobile telephony sector<sup>8</sup>.

### **1.6 Is the market limp enough to allow entrance of a newcomer?**

My analysis of the situation considers four distinct elements: financial elements, subscribers number growth, the competition and the market's life cycle.

To begin with financial elements, they do not tend to pledge in favour of the entrance of newcomers. The global market size in monetary terms shows a constant decrease in its year-on-year variation. In the year 2005, the variation reached a record-low at 1.7%<sup>3</sup>, basically following the GDP evolution (+1.9%<sup>9</sup>). These figures suggest that profit possibilities are very limited on the market and that they can be exploited in discredit of existing operators only. Besides, the revenue per subscriber drastically dropped between 1998 (USD 1210) and 2005 (USD 562)<sup>5</sup>.

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<sup>6</sup> DECLARATION DE BERNE. Les Suisses et la fièvre du portable

<sup>7</sup> OFCOM. Le marché suisse des télécommunications en comparaison internationale

<sup>8</sup> YAGZI, Aline. Clients, collaborateurs, actionnaires...pour en finir avec l'infidélité. *PME Magazine*

<sup>9</sup> TSR.CH. Le PIB a progressé de 1.9% en 2005. In : *tsr.ch – Info website*.

To continue with the subscribers number growth, it looks pretty difficult as well. Penetration rate reached 91.1% at end 2005 and must be close to a hundred now, which indicates the market is saturated. Then, when new clients cannot be found, competitors' clients become the main target and they are usually pretty hard to get. Their current operator won't let them go easily and since transfer costs are high for customers, the battle's outcome hardly looks positive.

Then, the competition is also an issue. As demonstrated in the competitive analysis in section 1.4, the market is tough as nearly all operators fight on the same argument: price. Besides, new entrants need a huge clients database and a large distribution network, which constitute significant entry barriers.

Finally, if we look at the market life cycle, it backs up the previously mentioned elements, which are consistent with a mature market. Considering entering the market during this phase is usually riskier and requires more resources.

Nevertheless, these highly negative elements might be, partially at least, compensated by another very important element: differentiation. As said before, the current players on the market, except Lebara (more details on this MVNO in Appendix 1), focus their effort on reducing the prices. What Lebara did, very brightly, is they focused on differentiation and targeted a very specific segment (people mainly calling family or friends abroad). This niche strategy allowed the operator to make a successful entrance on the market earlier this year, even though the market was saturated. Thus, it makes perfect sense, that in a market filled with look-alike offers, one could make it by offering something different and precisely tailored to the needs of a specific segment. This might even be the beginning of a vast fragmentation movement, redefining the market segments and placing them in a new growth phase. Similar events were observed in other industries: airline companies (Easyjet), food retail (Aldi, Lidl etc.) and so on. As far as current MVNOs are concerned, the industry professionals I met, Stefan Luder at Cablecom and Gian-Reto Saner at Tele2, both think that some of them offering me-too solutions will probably have to get out of the market in the next years.

However, once again, all the other elements considered were negative and, looking at the situation from a global perspective, I would have to qualify the Swiss mobile telephony market as not limp enough to allow the entrance of a new virtual operator.

## 2. Mobile Virtual Network Operators

### 2.1 Definition

The UK Federal Office of Communications (OFCOM) defines an MVNO as “an organisation which provides mobile telephony services to its customer, but does not have allocation of spectrum.”

In other words, an MVNO buys wholesale minutes to a physical operator, which has allocation of spectrum, and resells them under its own name. These wholesale minutes represent the exceeding capacity of the physical operator.

Going deeper into the definition, care must be taken to distinguish the different MVNO categories existing. These categories are qualified by the level of coverage the MVNO has over the telecom value chain. Although, there is no universal classification as some sources talk about three categories and some others mention up to five. Based on that, I will use 3 categories, as some of the intermediary categories do not show vast differences. Besides, such a classification is comprehensive enough for the purpose of this work.

**Tableau 1**  
**MVNO classification**

<b>Brand MVNO</b>	<b>Advanced MVNO</b>	<b>Full MVNO</b>
Uses SIM cards issued by the host	Issues its own SIM cards	Issues its own SIM cards
Tariffs are defined with the host	Tariffs are defined with the host	Tariffs are freely defined
No control over network elements	Partial control over network elements	Full control over network elements

The above tableau shows what distinguishes the three categories of MVNO, in regard with the following criteria: issuance of the SIM cards; definition of the tariffs and physical network elements control. When MVNOs started emerging, in the late 90's, the common belief was that the key to success for a virtual operator was to go as deep as possible into the host, thus becoming an advanced MVNO and eventually a full MVNO. Although, this theory was proven wrong, partly because of the success of



Virgin Mobile in 1999 in the UK<sup>10</sup>. In Switzerland, all MVNOs this document refers to, except Tele2, may be considered as brand MVNOs.

The notion of “network elements” includes a key component of the network infrastructure: the Home Location Register. The HLR is the key register in which every user of a network must be registered. It contains vital information characterizing the user as well as its current location<sup>11</sup>. I will briefly explain further down why the HLR makes a difference between physical operators and MVNOs (section 2.4.1).

In order to set up their services, MVNOs often use an MVNE, Mobile Virtual Network Enabler. An MVNE is a turn-key solution designed to allow an MVNO to launch its activity. The MVNE provides everything the virtual operators needs, which include some or all of the following:

- Customer Relationship Management software
- Web portal
- Workflow system
- Resources management module
- Billing system
- ERP
- Added-value services platform (ringtones, images etc.)
- Data warehouse
- IVR (Interactive Voice Response)

MVNEs are very useful as they allow virtual operators to drastically reduce their capital requirements as well as the implementation time.

## **2.2 How they create value**

On the Swiss market, MVNOs offerings are very similar to each other and may be qualified as low-cost. They take advantage of the very light structure an MVNO has compared to a physical operator and reduce the costs, overhead ones – cost generated by the simple existence of the company – in particular. Thus, they are able to lower the price to the end-user

Although, other methods to create value out of an MVNO offering exist. On other markets, we can observe different types of virtual operators, such as content-focused, ethnic or luxury ones (non exhaustive list).

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<sup>10</sup> BOORMAN, Christian. MVNO EXPLAINED : MORE.

<sup>11</sup> WIKIPEDIA. HLR.

Examples:

- Content-focused: NRJ Mobile, launched by the eponymous French radio station; features lots of music and games for download.
- Ethnic: Movida, USA; aims at the Spanish community with specific tariffs and content.
- Luxury: Voce, USA; an entry fee and a monthly fee give access to unlimited mobile services plus personal assistance.

These niche operators are really interesting and, in my view, indicate a possible next step for Swiss-operating MVNOs. Price is still the main point of dispute between them but, as everyone knows, price wars are no good. It has been useful, because the prices on our market were way too high, but on a long-term perspective reducing the prices just won't be possible anymore.

On the contrary, I think there are tremendous reserves of added-value lying in the concept of niche-based operators focusing on specific communities, ethnics or same-interest-led groups. Embracing these opportunities should allow virtual operators to harness the huge potential of their light structures and supposedly more accurate client knowledge.

Moreover, another condition to ensure long-life success for a virtual operator lies in the choice of its host. Experts in the sector remind us that MVNOs have to move along with the evolving technologies and prepare for the so-long-awaited convergence as well<sup>12</sup>. Indeed, quadruple-play – fixed telephony, internet, television and mobile telephony as a single operator's package – is on its way in Switzerland and it is crucial for virtual operators to take this element into account in their strategic road map. This key step in the sector evolution sets another bouquet of threats and opportunities and my opinion is that there will be either fully-convergent MVNOs either absolute-non-convergent MVNOs (no-frills offers). The telecom industry is too competitive to allow mid-range players, hence the necessity for current MVNOs to have this thought out.

In the end, two distinct generic strategies appear possible: cost leadership, the one being favoured at this time, or a focus strategy oriented on differentiation. However, the question deserves to be raised on the viability of an operator choosing to focus on a specific segment since the Swiss market is quite small and largely dominated by the historic operator and characterized by a high penetration level as well. In addition, it is

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<sup>12</sup> BLUESTEIN, Whitey. Three key to MVNO success.  
COLE, Andrew. How to Avoid MVNO Failure.

clearly unthinkable to make up for additional costs of differentiation by charging higher tariffs in such a competitive market. Nevertheless, as mentioned in Appendix 1, Swiss MVNOs, Lebara (Section 2.5.7), the latest MVNO entrant in the market, follows this strategy, price premium excepted, and is doing pretty well.

## **2.3 Ups and downs**

Among the several advantages the MVNO structure offer, I will highlight the following ones:

- lower investment
- quicker time to market
- leveraging brand equity into mobile market
- increasing brand loyalty
- new channel for existing content
- focusing on a specific segment

On the other hand, the following disadvantages should be noticed (concerns Brand and Advanced MVNOs only, as defined in section 2.1):

- dependence on the host
- no control over the Home Location Register (HLR)
- tariffs subjects to host approval

### **2.3.1 Ups**

#### **2.3.1.1 Lower investment**

The major advantages relates to cash. Physical operators have to invest huge amounts to build and then maintain and develop their physical infrastructures. They represent an important entry barrier for companies attracted to the mobile telephony market, hence the interest of avoiding these costs by setting up an MVNO.

In addition, important savings can also be made on other infrastructure investments: customer relationship application, web platform, data platform, billing software and more. These elements are particularly costly (around \$100 million) and require a lot of time to be implemented (2 years). That is where MVNEs become very useful, by allowing newcomers to cut this cost down million and reduce the implementation time to a few months (based on the MVNEs' market leader, Visage Mobile)<sup>13</sup>.

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<sup>13</sup> BROWN, Erika. I Want My MVNO!.

### **2.3.1.2 Quicker time to market**

It is an obvious fact as virtual operators don't have to worry about the physical infrastructure. This point is even more relevant when the possibilities given by MVNEs are taken into consideration.

### **2.3.1.3 Leveraging brand equity into mobile market**

MVNOs are more likely to be pre-existing famous brands. As they may be interested in entering the mobile market, an MVNO structure will allow them to do it easily while largely using their brand equity to gain traction and grab a share of the market.

### **2.3.1.4 Increasing brand loyalty**

Offering mobile telephony services represent an additional way for established brands to develop a relationship with their clients. Thus, they may project a better image of their company or products and, most important, get to know them better. All the data collected on the customer should eventually lead them to better target their original product or service.

### **2.3.1.5 New channel for existing content**

Companies active in content-oriented industries such as television or music may use an MVNO to reach their users in a new way. Such cases are more often observed in other countries such as France (M6 Mobile) or the United States (Helio).

### **2.3.1.6 Focusing on a specific segment**

The lightness and flexibility given by an MVNO structure should allow such an operator to focus its effort on a specific segment. A regular operator could not do it because of the higher costs induced by adjusting its offer to a specific target and because of the smaller size of the market it then reaches. These conditions make it impossible for a physical operator to compensate its fixed costs.

## **2.3.2 Downs**

### **2.3.2.1 Dependence on the host**

This outlines again the necessity for the MVNO to choose the right host since their technological evolution are tied. Other aspects of this dependence should be taken into account, such as the network coverage and communication quality offered by the host.

### **2.3.2.2 No control over the Home Location Register**

Control over the HLR permits more innovation in the services offered and also determines the “real” owner of a customer.

### **2.3.2.3 Tariffs subject to host approval**

The ability to set its own tariffs sure is an advantage as restraints fixed by the host might jeopardize the business development plan based on expected margins levels.

## **2.4 Overview of the Swiss MVNO market**

There are currently eight MVNOs on the Swiss market. Except for Tele2, which is an Advanced MVNO, they are all Brand MVNOs. Most of them entered the market in 2005, but it's not perfectly clear why. Pierre Zinck, scientific collaborator at the Federal Commission for Communication (ComCom) thinks several reasons are involved. First, he says, physical operators had to find new ways to generate revenues since the market was about to reach its saturation point. In addition to that, Tele2 was just granted a concession and was due to enter the market before end 2005. Tele2's plan was to bring prices down, which forced existing operators to react. They did, by reducing their own prices and they might also have chosen to let MVNO competition in because they could still benefit from the traffic their users would generate. Thus, the physical operators are able to exploit their own infrastructures better. I agree with that and would add that, while allowing MVNO competition, physical operators control it because virtual operators depend on them.

**Tableau 2**

### **MVNOs, their physical partner and entry year**

Migros	Swisscom	2005
Tele 2	Swisscom	2005
Yallo	Sunrise	2005
Cablecom	Sunrise	2005
CoopMobile	Orange	2005
Mobilezone net	Orange	2005
Talk-Talk	Sunrise	2006
Lebara	Sunrise	2007

Most of them were companies with pre-existing extensive clients' database – sometimes not even related to the telecom industry –, which they were hoping to draw to their new offer. Migros and Coop are perfect examples of such companies: they both gather an impressive amount of trustful clients and were not active in the telecom business until then. It is also interesting to notice that all physical operators are

involved with MVNOs. This implies the previous postulate about physical operators' motivations to allow MVNOs in the market were correct, especially regarding the optimization of the use of their infrastructure and the revenue increase. Another expert, Jonas Lindh, Strategic Product Manager at Business Consulting at Ericsson, says it is also an opportunity to save acquisition costs on all the customers the MVNOs seduce. He adds that it may help the operator access new segments he couldn't efficiently reach before<sup>14</sup>.

More information on each of the Swiss MVNOs is given in Appendix 1.

## **2.5 Existing green MVNOs**

A few green virtual operators have emerged, mostly in Europe. It shall be interesting to compare their offers.

**Tableau 3**  
**Existing green MVNOs**

Country	Name	Green components	Profits	Users role
Belgium	Elo Mobile	Web based, complete transparency, e-billing	100% redistributed	Users choose among selected projects one to donate their profits to
Belgium	Phonethic	Web-based	12% redistributed	Users choose among selected associations one to donate their profits to
Netherlands	TommyTelecom		No redistribution	Users have to donate time or money to a cause and get rewarded for it
UK	Green Mobile	Web-based, paperless billing	25£ donated to a charity on sign-up, 6% of the monthly bill redistributed to a charity, 50£ back to the user after 6 months	Users choose among selected associations one to donate their profits to
UK	Phone Co-Op	Web-based, carbon offsets, renewable energy use, recycled paper and stationery, paper usage reduction, promote use of public transports by its staff, recycling waste products, improving energy efficiency in the workplace	100% redistributed	Co-own the company, all profits are redistributed to them
USA	Earth Tones	Web-based, recycled paper, e-billing available, cell phones recycling, green alerts	100% redistributed	None, profits are automatically dispatched through multiple associations

One of the first things we notice in this comparison is that, most of the green operators use a percentage redistribution scheme. Five out of six do it and, among them, 80% redistribute a share of or all the profits to a project or charity association. Only one stands out, Phone Co-Op, in that the company is actually co-operatively owned by the users and they are the final recipients of the profits generated by the company.

<sup>14</sup>

Then, looking more deeply at the companies' structure and functioning, more than half of them does not take, or doesn't communicate about, measures taken in order to improve their eco-efficiency. Two of them only, Earth Tones and Phone Co-Op have integrated numerous important measures in that area.

Finally, the users' role is very limited in four of the six operators, where they simply have, at most, to choose the project or association which will benefit from the profits redistribution. The Phone Co-Op case is particular as the users are expected to get more involved in the operator activity (general assembly, board nomination etc.). As concerns Tommy Telecom, they require their customers to individually donate time or money to a cause of their choice, which is an interesting way to get people to act.

From a global point of view on this offers' comparison, we see that they are mainly very close to each other. However, it is not an issue as the concept has to be tested and these rather basic offers are probably a good way to start. At a later stage, further developments and more innovation and variety in the offer will come along if the basic business model is solid.

### 3. “Green” core competences analysis

#### 3.1 Introduction

Prior to the analysis of the consumers’ reaction towards a potential green MVNO offer, it is necessary to analyze whether the underlying core competences are robust enough on a theoretical basis.

A couple of methodologies are combined in this analysis. First one is described by Johnson, Scholes and Fréry<sup>15</sup> and considers the following elements in order to determine whether a core competence is robust enough to sustain a competitive advantage: rareness; complexity; causal ambiguity and corporate culture. However, the last three points can only be applied to an existing company and will therefore be overlooked here.

The second methodology used runs down from C.K. Prahalad and G. Hamel writings on the subjects and analyses the following elements: relevance; difficulty of imitation and breadth of application. It is not aimed at determining the robustness of a competence but whether it can be properly qualified as “core” or not. I intentionally skip the “relevance” part, since it requires ad hoc feedback from the consumers, whereas this section of the work is meant for “on-paper” analysis only.

The result of the analysis, relying on the rareness, difficulty of imitation and breadth of application, should indicate whether the competences analyzed are eligible as “core” competences.

Let us keep in mind what would constitute the green MVNO. The value of this green virtual operator would mainly rely on the ethics of its functioning and offer: online presence only; no paper; energy use reduction; carbon offsets and redistribution of a share of profits to the community. Then, it is a matter of building up the right offer, reflecting the company’s values and efficiently addressing its target.

Therefore, the competences the green MVNO would need are:

- integrating sustainable development principles
- conceiving and delivering a green mobile telephony offer

The second competence is purposely tied to the mobile telephony market, as it is recognized by experts<sup>12</sup> that it is a very particular market where an excellent

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<sup>15</sup> JOHNSON, Gerry, SCHOLES Kevan and FRERY, Frederic. *Strategique*.



understanding of its dynamic is needed to succeed<sup>16</sup>. As a consequence, it makes sense to analyze the ability to conceive and deliver a green mobile telephony offer instead of simply a “green offer”, whatever industry it may be in. Possibilities are vast, whether the user would choose a charity to redistribute a percentage of his bill or would get trees planted for each USD 20 of voice communication or might trade time he donated to the community against communication credits. Perhaps, the very specific underlying links implied in setting up such green mobile offers in a value-generating way are the most difficult to figure out here.

## **3.2 Analysis**

The methodology is consecutively applied to both of the core competences analyzed.

### **3.2.1 Rareness**

The rareness of a competence maybe consequent to several conditions, such as the ownership of the competence, protected access to the clients or suppliers, non-transferability of the competence or historical advantage. In the UK for instance, the Virgin group is active in many markets said to be traditional and dominated by contemplative more than active companies; the vision and involvement of Richard Branson, who owns the competence, account for a lot in these successes.

#### **3.2.1.1 Competence 1 – Integrating sustainable development principles**

Firstly, the ownership of the competence may appear as a not important component vis-à-vis this competence. Indeed, as there are now lots of people around the globe having been involved in integrating sustainable development principles within any type of business, such knowledge and experience are not rare anymore.

Secondly, access to clients and suppliers is undoubtedly free and unprotected for any of the operators and such element can therefore not be accounted in favour of the rareness of the competence.

Thirdly, as concerns the transferability of the competence, I would refer to what I said in the first paragraph of this section: consultants in sustainable development ease the transfer of the competence.

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<sup>16</sup> HILL, Kelly. MVNO market not as easy as one, two, three.

Finally, the historical advantage here refers to the fact that a long-time established company benefits from a cost advantage since its investments are entirely amortized. In the green MVNO case such point is not relevant since it is a new company.

To sum up, it clearly appears that the core competence in question, integrating sustainable development principles, cannot be qualified as rare.

### **3.2.1.2 Competence 2 – Conceiving and delivering a green mobile telephony offer**

To begin with the ownership of the competence, it is here an important element. It requires green business and mobile telephony knowledge and experience in order to create an offer ideally reflecting the company's beliefs and harnessing the sustainability of its structure. Thus, the company is able to bring more value to the consumer in a clearly identifiable way. Stefan Luder, Head of PM Telephony at Cablecom, agrees on the fact it would be not be easy to find the right formula, which brings true value and doesn't just look like a marketing trick. Hence the importance of hiring experienced professionals in the green mobile telephony business, which are very rare, to correctly integrate "green" elements within a mobile telephony offer in order to generate value perceived by the consumer.

Then, as concerns the transferability of the competence, being able to conceive and deliver a green mobile telephony offer only makes sense in the mentioned industry. Thus, the competence is non-transferable.

The outcome concerning access to customers or suppliers and historical advantage is identical as stated in section 3.2.1.1.

To sum up, it clearly appears that the core competence in question, conceiving and delivering a green mobile telephony offer, can be qualified as rare.

## **3.2.2 Difficulty of imitation**

No competitive advantage can be sustained if the underlying core competence is easy to imitate. In the personal computer business for example, Apple has developed the ability to improve user experience and is still unchallenged by its competitors.

### **3.2.2.1 Competence 1 – Integrating sustainable development principles**

As concerns integrating sustainable development principles, it is a competence whose basics are pretty easy to imitate. Indeed, sell services online exclusively, eliminate paper, reduce energy consumption, offset carbon emissions and share profits with the

community are no mysterious activities. It would sure take time and money to an existing operator to abolish the use of paper within its organization and make a sustainability analysis of its structure in order to initiate a carbon offset plan but such actions are still easily accessible.

### **3.2.2.2 Competence 2 – Conceiving and delivering a green mobile telephony offer**

Things could be a lot less easy when it comes to conceiving and delivering an offer reflecting the company's values. There is a million ways to build up an offer out of a given structure and, as previously stated in section 3.2.1.2, experienced professionals in the green MVNO business are rare. It is simple logic that a green MVNOs expert would probably come up with a much higher-valued offer and such expertise might make the core competence in question harder to imitate. In addition, as previously mentioned, the underlying links may be very important here as they strongly differ from those involved in a regular mobile operator and require a different business model.

Thus, existing operators could not integrate green mobile offers that easily or quickly, which leads to qualifying this competence difficult to imitate.

### **3.2.3 Breadth of application**

A core competence is supposed to allow a company to extract many applications out of it. For instance, easyGroup is specialised into setting up low-cost businesses and has used that competence through the creation of low-cost companies in more than fifteen different sectors already.

#### **3.2.3.1 Competence 1 – Integrating sustainable development principles**

Being able to combine efficiency and sustainability is definitely something useful. Nevertheless, when you are a mobile network operator, it doesn't help you developing your activity, it just makes it more ethical.

Then, if a mobile operator develops its business by adding new services, functionalities and so on, it will be able to implement these elements in a sustainable way. Which is good, but the ability to integrate sustainable development principles did not lead to these developments; innovation did.

Therefore, the breadth of application criterion is not met.

### 3.2.3.2 Competence 2 – Conceiving and delivering a green mobile telephony offer

The question here is ambiguous. On one hand, such a competence can surely lead to multiple applications. Indeed, it allows the operator to create numerous offers, targeting different consumer profiles within the segment or adapting to technological evolutions and particular social trends. Hence the value of it, as it gives the operator flexibility and helps achieving continuous improvement.

On the other hand, the competence is inherently tied to a very specific market. Therefore, it cannot be used in different markets or industries, which diminishes its value. However, making a comparison, I would consider “innovation” as a competence allowing plentiful applications, regardless of the fact that these occur in the same market or not.

Thus, conceiving and delivering a green mobile telephony offer should be considered as a competence leading to several applications.

### **3.3 Do the ethics of the functioning and offer of a green mobile operator represent valid core competences?**

**Tableau 4**  
**Competences analysis outcome overview**

	Integrating SD principles	Conceiving a green mobile offer
Rareness	Fail	Pass
Difficulty of imitation	Fail	Pass
Breadth of application	Fail	Pass

As stated in the above tableau, the first competence could not be qualified as a valid core competence, due to its failure to meet all criteria.

Regarding the second competence, it can be considered as a core competence. Nevertheless, I think the operator could not rely on this competence for more than a few years before it would become less defensible and would have to develop other core competences to survive on a longer term.

The outcome is then mixed but indicates that the accent should be put on the resources needed to conceive green mobile offers as it appears to be the right way to generate value out of the green operator concept. Then, on a larger time horizon, other core competences must be developed otherwise it won't be sufficient.

## 4. The field test

In this chapter, the focus is on the consumers' opinion towards ethical consumption, mobile telephony and the green mobile operator concept.

In order to assess the consumers' views on these points, a survey was carried out. A questionnaire was created and proposed to a certain number of people around the country. The questionnaire was conceived following the method taught in Marcello Pietro Romano's class at Geneva School of Business Administration<sup>17</sup>.

### 4.1 Methodology

#### 4.1.1 Designing the questionnaire

The questionnaire is constituted of four distinctive parts, which correspond to the various elements of the study as follows:

- Basic socio-demographic information and filter questions
- Perception of ethical companies and consumption frequency for their products/services
- Consumers' decision factors and process when choosing their mobile operator
- Consumers' valuation of the green MVNO concept and willingness to switch for it

Except for the first one, each part was designed according to the previously mentioned method. Thus, this forms a canvas, based upon which I elaborated the questions.

Most of the questions are closed ones, which I preferred in order to limit the scope of answers, ease comparison and facilitate the results treatments. It is also a lot more convenient for the respondents.

Two versions of the questionnaire were realised, a French one and a German one.

#### 4.1.2 Distributing the questionnaire

I chose to use an online platform, SurveyGizmo (<http://www.surveygizmo.com>), to distribute the questionnaire as it allows to reach more people as well as to process the

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<sup>17</sup> FERNANDEZ, Joaquin. Recherche de marketing : Schémas de travail; Méthodologie pour la réalisation d'études de marché.

results much more easily. Plus, it also gives great possibilities in terms of interactivity as some questions can be triggered or hidden depending on previous answers.

I also think it is more convenient for the respondents, who may freely choose the time and place to take the questionnaire.

The two versions of the questionnaire can be seen here:

<http://etude.td-telephonie.sgizmo.com> French version

<http://etude.da-telefonie.sgizmo.com> German version

I promoted the questionnaire through my personal network but also through e-mailing, forums and blogs. Reaching Swiss German people was obviously a bit harder but it eventually worked out pretty well. I e-mailed approximately 30 of the 100 biggest Swiss blogs owners and offered them to take the questionnaire, which quite a fair proportion of them did. Some of them also forwarded the link to their own contacts and three of them even posted an article on my research and the questionnaire (see Appendix 3, Articles). Besides, I also posted notes in a few Swiss German forums to invite people to the survey.

All these efforts together ended up in more than 140 questionnaires taken, out of which 107 were valid and usable for the analysis. Besides, I've also had the occasion to discuss with several respondents and all opinions were very positive as to the clearness and the easiness of the questionnaire. It raised many questions in the respondents mind and led to interesting discussions on ethics and mobile telephony.

#### **4.1.3 Collecting & analyzing the results**

The online platform I used gathers all the data and allows direct retrieving as an Excel-compatible file.

Then, I mainly use the pivot table function from Excel to extract totals and proportions for each question. I also separately treated the answers to each question according to each socio-demographic characteristic gathered: gender, linguistic region, age group, education level and occupation. Charts presenting overall results only are shown in this document but all the other charts are in Appendix 2.

Based on this, I was able to observe overall trends as well as particular points of divergences between respondents with different socio-demographic characteristics and I analyzed the results point by point, following the canvas the questionnaire was based on.

## **4.2 The questionnaire**

The questionnaire has a particular nature in that it inquests three distinct domains consequently: consumers' perception of ethical companies, consumers' decision factors for a mobile operator and consumer's valuation of the green MVNO concept.

For this reason, the parts two to four each have specific characteristics and shall be considered individually here (first part is just about the respondents' basic information).

Hereafter, is detailed the study canvas, part by part, along with the corresponding questions.

### **4.2.1 First part – basic socio-demographic information and filter questions**

**Tableau 5**  
**Basic information**

<b>Basic information</b>	
First name	
Gender	
Age	
	16-25
	26-35
	36-45
	46-55
	56-65
Canton of residence	
Occupation	
	Employee
	Independant
	Student
	On job research
	Retired
	Other
Education level	
	High school
	College
	Graduate school
	Other

This first series of questions allows socio-demographic classification of the results. Some results may become particularly interesting when put in perspective vis-à-vis these elements.

**Tableau 6**  
**Filter questions**

Filter questions	
Do you use a cell phone?	
Which operator with?	

A negative answer to the first filter question ends the questionnaire and, to the second question, an answer other than one of the Swiss operators comprehended in this document ends it too.

## **4.2.2 How do consumers perceive ethical companies and how frequently do they purchase from them?**

### **4.2.2.1 Canvas**

**Tableau 7**  
**Expression of need for information canvas**

Expression of need for information	
Origin of the problem	External uncertainty, consumers' perception
Problem formulation/information needed	Assess the consumers' perception
Result expected	A perception analysis
Information needed	Ethical companies known by consumers
	Consumption frequency for ethical companies' products/services
	Appreciation of ethical companies

When we raise the question above, we face a problem whose origin is an external uncertainty, as consumers are part of the external environment. More precisely, the consumers' perception is the key issue. Therefore the result we're aiming at is an analysis of the latter. Let's keep in mind that at this stage and according to the means available, this shall be a brief analysis.

In order to achieve it, the three elements included in the "Information needed" area are the key elements required.



**Tableau 8**  
**Problem approach canvas**

Problem approach	
Decision problem	Further inquire the possibility to launch a green mobile operator
Study objective	Assess the consumers' perception towards ethical companies and consumption frequency for their products/services

The decision problem will be the same in all of the four parts of the questionnaire. This entire document is a primary exploration of the possibility for a green MVNO to enter the Swiss market, hence it is the first step only. Therefore, the questionnaire shall help me decide whether this venture should be taken to the next step or not.

As regards the objective of this second part of the study, it is to get a first overview of how consumers consider ethical companies, which ones they consider as such and at which frequency they purchase from these companies.

**Tableau 9**  
**Data collection canvas**

Data collection	
Study type	Quantitative field
Universe	Men & women 16-65 years old, using a mobile phone with a Swiss number
	Geographic context: Switzerland
	Temporal context: Spend enough time in Switzerland to use Swiss mobile telephony offers

This portion of the study is oriented as a quantitative study, though valid representativeness of the sample can not be met, due to limited resources. The universe remains the same for the whole questionnaire.

#### 4.2.2.2 Questionnaire

**Tableau 10**  
**Second part – questionnaire**

Utilization, consumption and general behaviour	
Can you name some ethical companies : companies who integrate ecological issues, whether it would be within their general functioning (energy efficiency, paper waste reduction etc.) or in the conception of their products/services?	
Have you purchased a product/service from one these companies within the last 6 months?	
At which frequency do you consume such products/services?	
	Once a week or more
	2-3 times per month
	Once a month or less
	More rarely
	Never
Do you consume products/service conceived by ethical companies or by regular companies more often?	
In a near future, are you planning on mainly purchasing from ethical companies?	

This part of the questionnaire helps getting a general understanding of how well consumers are aware of ethical companies and how they relate to them. If the respondent answers “Never” to the question on the frequency of purchase, the subsequent questions concerning ethical companies are skipped and the questionnaire continues with the questions concerning mobile telephony, which are presented in the section 4.2.3 further below.

**Tableau 11**  
**Second part – questionnaire (suite)**

Opinions, attitudes and scales	
Rate the following statement, from "I don't agree at all" to "I totally agree"	
	Ethical companies are more attractive than regular ones
	Ethical companies give me a greater satisfaction, because of their ethics
	Ethical companies should sell their products/services at a higher price than their regular competitors
	I'm ready to go further to get access to an ethical company
	I like ethical companies because I care about the impact of my actions
	I like ethical companies though I'm not a fierce defender of ecology
	Ethical companies stick better to my values and principles
	There is no difference between an ethical company and a regular one

Here, the very perception of consumers towards ethical companies is more broadly observed. The statements proposed relate to different elements: ethical companies' image, delivered satisfaction, products/services prices (premium) and consumers' willingness to make an effort to reach ethical companies. Also, the relation between "liking ethical companies" and "being eco-conscious" as well as the role of the consumers' values and principles. Hence the importance of this section as it gives very precious information through simple and intuitive statements.

### 4.2.3 What are consumers' decision factors and means of comparison when choosing their mobile operator?

#### 4.2.3.1 Canvas

**Tableau 12**  
**Need for information canvas**

Expression of need for information	
Origin of the problem	External uncertainty, consumers decision factors and process
Problem formulation/information needed	Aknowledge the key decision factors and process
Result expected	Consumers' decision-making pattern
Information needed	Elements considered to take the decision
	Importance of these elements
	Means of comparison used

In this part, the problem originates from the lack of knowledge about what consumers base their choices on and how they proceed, very roughly, to make that choice. Thus, the expected result of this section of the questionnaire is a very general decision-making pattern.

**Tableau 13**  
**Problem approach**

Problem approach	
Decision problem	Further inquire the possibility to launch a green mobile operator
Study objective	Understand the consumers' key decision factors and means of comparison when they choose their mobile telephony operator

**Tableau 14**  
**Data collection**

Data collection	
Study type	Qualitative field
Universe	Men & women 16-65 years old, using a mobile phone with a Swiss number
	Geographic context: Switzerland
	Temporal context: Spend enough time in Switzerland to use Swiss mobile telephony offers

The study type of this section of the questionnaire is qualitative, as I am interested in the decision process and the motivations hereby involved.

#### 4.2.3.2 Questionnaire

**Tableau 15**  
**Third part – questionnaire**

Opinions, attitudes and scales
Why did you choose your current operator?
How did you consider the following elements when choosing your mobile operator? Rate them from "Not at all" to "Very strongly"
Network coverage
Tariffs
Free calling minutes/sms
Mobile phone accessible with an offer from the operator
The operator ethics
Friends/contacts using the same network
Image/values of the operator
Applications/services available
Other

The two questions here are aimed at revealing what matters most in the consumers' mind when they choose their mobile operator. The first one is an open question and it will be interesting to see if the answers are similar to the next question's, which proposes to rate various elements according to how they were considered ("Not at all", "Secondarily", "Very Strongly").

**Tableau 16**  
**Third part – questionnaire (suite)**

What means did you use to make a comparison/choice? Tick those used
Comparis.ch
Specialised magazines
Articles in newspaper
Operator's advertisements
Specialised website/forum
Friends/contacts recommendations
Other
None
If you had to change your operator today, who would you go for?
Why would you choose this operator?
How would you consider the following elements when choosing your mobile operator? Rate them from "Not at all" to "Very strongly"
Network coverage
Tariffs
Free calling minutes/sms
Mobile phone accessible with an offer from the operator
The operator ethics
Friends/contacts using the same network
Image/values of the operator
Applications/services available
Other
What means would you use to make a comparison/choice? Tick those you would use
Comparis.ch
Specialised magazines
Articles in newspaper
Operator's advertisements
Specialised website/forum
Friends/contacts recommendations
Other
None

This section's purpose is to unveil why consumers chose their current operator, using what means, and what operator they would choose today, for what reasons and using what means. Using consequently top-of-mind questions and separate elements rating often helps highlighting things the respondent would not say, or think, at first. This technique is used here to get more chance to understand the consumers' motivations.

#### 4.2.4 How do consumers value the green mobile operator concept and are they willing to switch for it?

##### 4.2.4.1 Canvas

**Tableau 17**  
**Need for information canvas**

Expression of need for information	
Origin of the problem	External uncertainty, consumers' perception of the green MVNO offer and consumers' mobility
Problem formulation/information needed	Assess the consumers' perception and mobility
Result expected	Consumers attitude towards change
Information needed	Perception of the green MVNO offer components
	Satisfaction with current operator
	Willingness to change for a new operator
	Willingness to change for a green MVNO

Very important elements are addressed here. The origin of the problem is to know how consumers perceive the green MVNO concept and whether they would be ready to leave their current operator for a green MVNO. This will allow me to assess, in general terms, the consumers' attitude towards change.

**Tableau 18**  
**Problem approach canvas**

Problem approach	
Decision problem	Further inquire the possibility to launch a green mobile operator
Study objective	Assess whether the consumer is ready to give up his actual operator and sign up with a green MVNO

**Tableau 19**  
**Data collection canvas**

Data collection	
Study type	Quantitative field
Universe	Men & women 16-65 years old, using a mobile phone with a Swiss number
	Geographic context: Switzerland
	Temporal context: Spend enough time in Switzerland to use Swiss mobile telephony offers

As in the second part, this is here a quantitative canvas I used here.

#### 4.2.4.2 Questionnaire

A brief definition of what would constitute a green MVNO is given as follows: mobile telephony operator working 100% on the Internet, paperless, reducing its energy consumption, compensating its CO2 emissions and redistributing a share of profits to the community.

**Tableau 20**  
**Fourth part – questionnaire**

Opinions and attitudes
How do you value the components of this ethical operator? Rate from "No interest" to "Absolutely relevant"
100% over the Internet (no store)
Paperless
Reduction of its energy consumption
Compensation of its CO2 emissions
Redistribution of a share of profit to the community (charities, aid foundations etc.)
Are you satisfied with your current operator?
Would you change for another operator if a offer looking more attractive showed up?
Under identical conditions (tariffs, services etc.) would you leave your current operator and go for an ethical operator?

The answers to these questions will be particularly useful to assess how the consumers value the green MVNO concept and its specific components. In addition, comparing the consumers' satisfaction with their current operator and their willingness to change for any other operator or for a green MVNO in particular will be extremely interesting. However, it is likely that a portion of consumers declare they are ready to change their operator but them actually doing it is another issue. Similar shifts are often observed in questionnaires assessing the consumers' willingness to pay for something; it seems to have vanished when the customer is at the store. As a consequence, these answers should be considered carefully but they will surely provide a very useful hint of actual marketing information.

## 5. The survey results

The results' presentation and analysis is structured following the four parts described in the previous chapter. For each part, I detail the results, which corresponds to the questions I try to answer through this work.

The results are not scientifically representative for the whole Swiss people.

### 5.1 Basic socio-demographic information

**Tableau 21**  
**Gender, region & age**

Gender, region & age			
			Totals
Men   Women	72	35	107
%	67%	33%	100%
			Totals
French-CH   German-CH	61	46	107
%	57%	43%	100%
16-25	55		51%
26-35	30		28%
36-45	16		15%
46-55	5		5%
56-65	1		1%

Surprisingly, there is a large majority of men who took the questionnaire. This might be attributable to the fact the questionnaire was available on the Internet only and women are less frequently on the Internet than men<sup>18</sup>. However, this does not have a significant impact on the global results.

Young people in general are particularly numerous to have taken the questionnaire, which is rather normal as they usually tend to show more interest for mobile telephony.

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<sup>18</sup> REMP, MA Comis 2005.



**Tableau 22**  
**Education level & occupation**

Education level & occupation		
High school	19	18%
College	54	50%
Graduate school	21	20%
Other	13	12%
Student	37	35%
Employee	53	49%
Independant	9	8%
Unemployed	3	3%
Retired	1	1%
Other	4	4%

Higher education level people are largely represented among the respondents, 70% of them holding a university or even higher degree. Also, we see a very clear majority of employees, followed by students, accounting together for 84% of all respondents.

**Tableau 23**  
**Who is your current mobile telephony operator?**

Mobile telephony operator		
Swisscom	45	42%
Orange	30	28%
Sunrise	21	20%
Migros	8	7%
Coop	2	2%
Télé2	1	1%

The distribution of the respondents over the different operators almost corresponds to the reality in that the ranking from Swisscom to Coop is right in terms of market share.

## **5.2 How do consumers perceive ethical companies and how frequently do they purchase from them?**

### **5.2.1 Ethical companies known by consumers**

**Tableau 24**

**Can you name some ethical companies?**

<b>Ethical companies</b>			
	Fr-CH	Ge-CH	Totals
Coop	21%	17%	20%
Migros	21%	13%	18%
Max Havelaar	20%	4%	13%
Switcher	18%	2%	11%
Companies named	46	56	89
No answer	25%	39%	31%

The top-mentioned companies are, unsurprisingly, those intuition would have made me pick. Coop arrives first, mentioned by 21% of Swiss French respondents and 17% of Swiss German respondents.

Swiss German respondents, although they were less to take the questionnaire, named 10 more companies than Swiss French respondents (the total excludes repetitions). Accordingly, on the Swiss German side again, scores were much more dispersed and, except Coop and Migros, no company really stands out from the others.

Also, Swiss German respondents were unable to name any ethical company in a larger proportion, 39% against 25%, which shows a clearly lower awareness towards ethical companies. From a global point of view, only 31% of the respondents did not name any ethical company, which is a quite fair ratio.

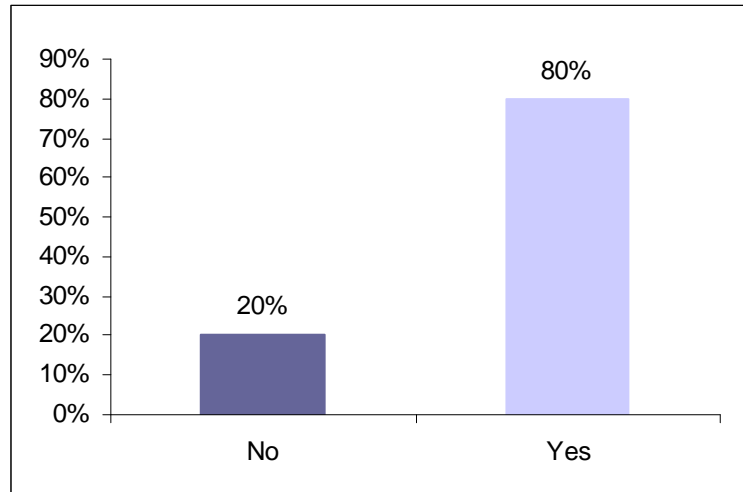
According to these results, it appears Swiss people are well aware of ethical companies, even though the definition given in the questionnaire was minimal. It's an established notion in the consumers' mind that immediately relates to precise companies (up to 8 different names for a respondent; 2.55 names average per respondent).

(N.B: there is no right or wrong as to whether the companies named are ethical or not; I am primarily interested in the respondents' perception of ethical companies, whatever it is)

## 5.2.2 Consumption frequency for ethical companies' products/services

Figure 5

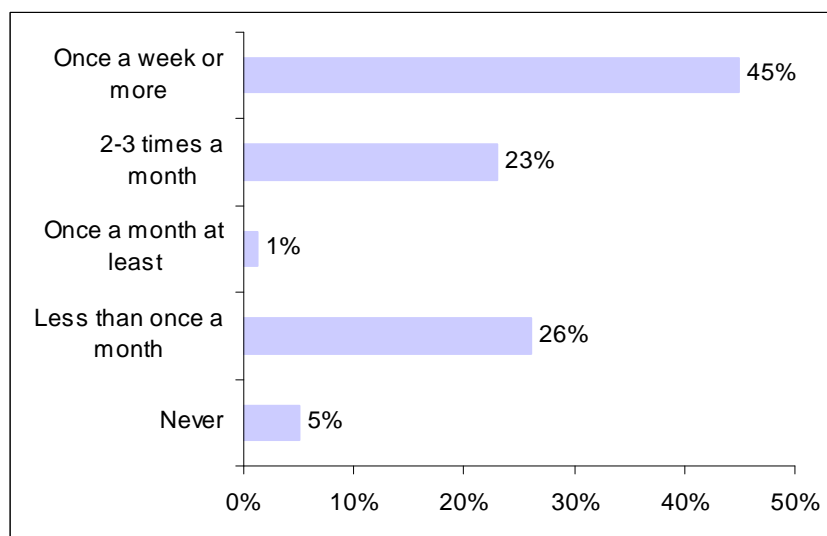
Have you consumed a product/service from an ethical company within the last 6 months?



On an overall basis, 80% of the respondents who named at least one ethical company also purchased their products/services in the last 6 months. This excellent score shows consumption of products/services from such companies is well implanted in the respondents' habits.

Figure 6

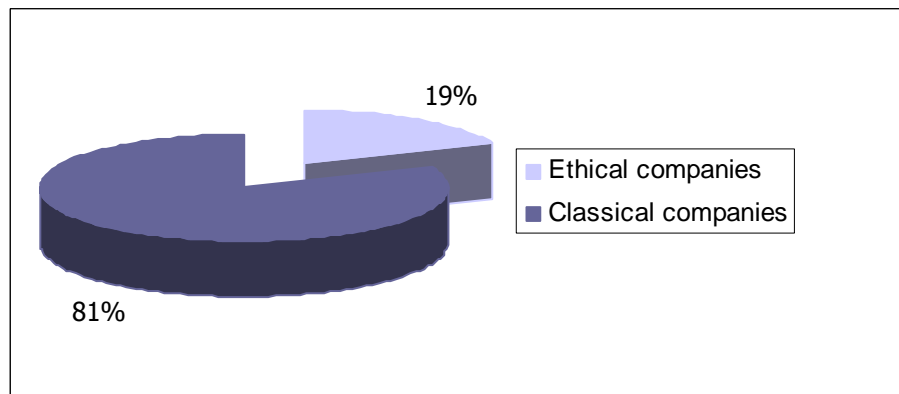
At which frequency do you consume products/services from ethical companies?



Almost half of the respondents who were previously able to name an ethical company state they consume their products/services once a week or more, which indicates a vivid interest for such products/services. Added to those who consume the latter 2-3 times a month, the group reaches 78%. Thus, a large majority of respondents may be qualified as frequent consumers of products/services from ethical companies.

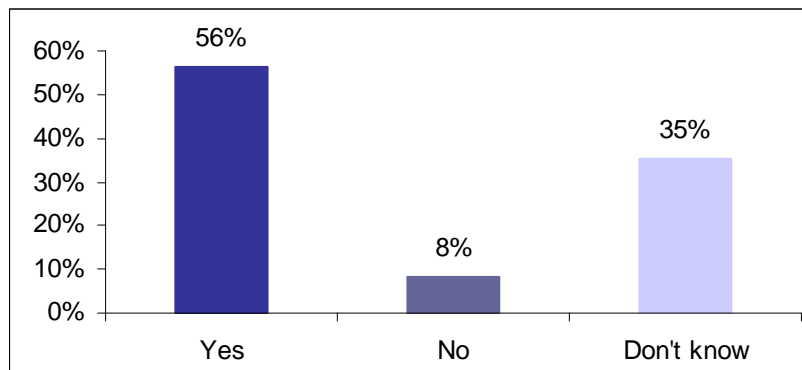
However, they are still 31% not to consume those at all or less than once a month.

**Figure 7**  
**Type of companies favored**



Even though the respondents largely consume products/services from ethical companies, they declare that they still consume products/services from classical companies mostly.

**Figure 8**  
**Intention to favor ethical companies**



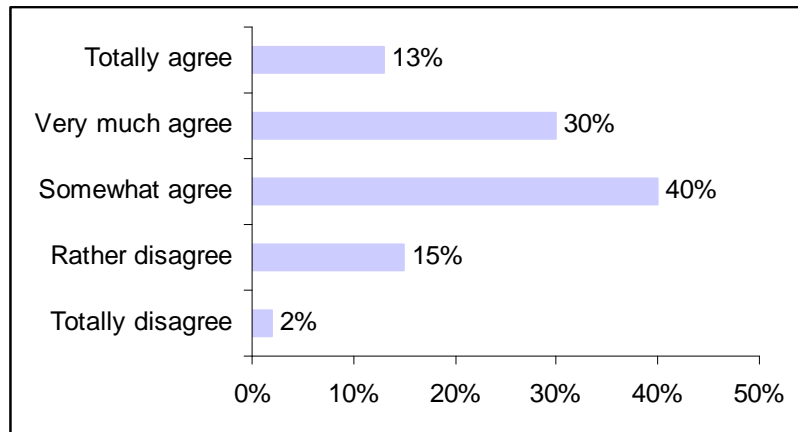
Accordingly with their interest for products/services from ethical companies, the respondents are pretty firm on their intention to turn mostly towards ethical companies

in a near future. Plus, a third of them are waiting to be convinced, so that is a pretty good perspective for ethical consumption in Switzerland.

### 5.2.3 Appreciation of ethical companies

**Figure 9**

#### **Ethical companies are more attractive than their classical counterparts**



The respondents were 7 out of 10 to somewhat or very much agree with the statement, which shows ethical companies benefit from a moderately better image. This seems like a fair and relevant result, as ethical companies are one of the main centres of attention since a few years now.

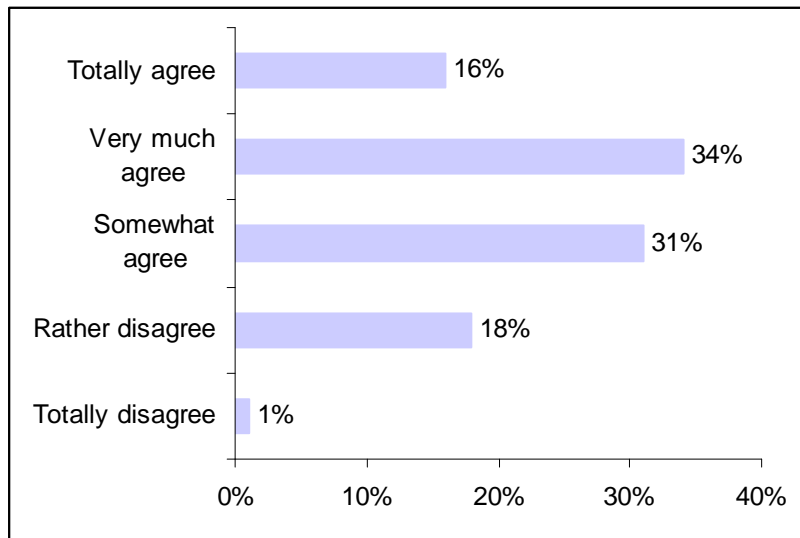
However, vast differences can be observed between Swiss French and Swiss German respondents (see Appendix 2, Charts, Figure 28). Indeed, Swiss German respondents appear to consider ethical companies more attractive in a much larger proportion. They were 68% to very much or totally agree, against 26% on the Swiss French side. Accordingly, only 3% of Swiss German respondents rather disagree, opposed to 23% of the Swiss French respondents.

This is quite of a surprise since 39% of the Swiss German respondents were previously unable to name any ethical company. Apparently, the concept is well known but the brands do not stand out as clearly as in Swiss French respondents' minds.

Also, it is interesting to notice that among the different age groups, the 36-45 respondents were the ones to agree the most with the statement as 71% very much or totally agree (see Appendix 2, Charts, Figure 29).

**Figure 10**

**Ethical companies give me a greater satisfaction because of their ethics**



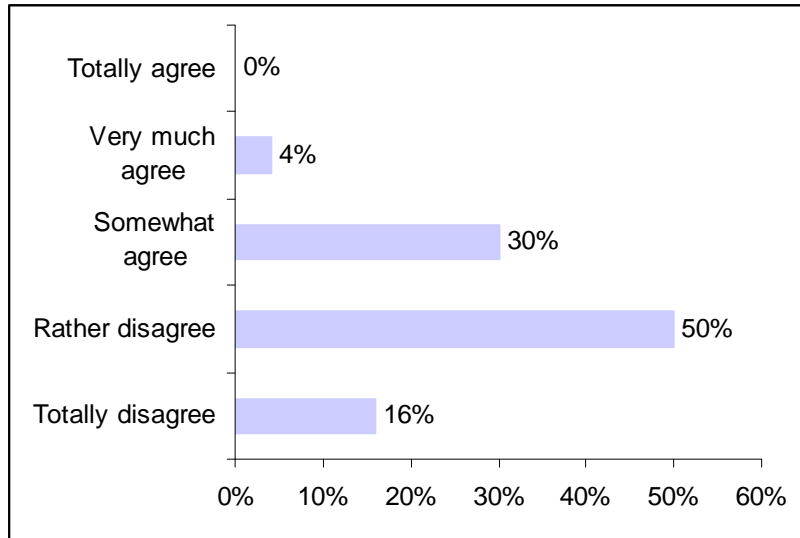
The results are very close to those shown in figure 9, with a majority of answers distributed over somewhat agree and very much agree (67%). What we can understand from this is that most of the respondents consider ethics as a value-generation element. When facing two similar offers, one from an ethical company and one from a classical company, the ethics of the first company may make the decision.

Differences between Swiss French and Swiss German respondents are noticeable (see Appendix 2, Charts, Figure 33). Indeed, 68% of Swiss German respondents very much or totally agree with the statement against 38% of Swiss French respondents. Once again, Swiss German respondents are more positive towards ethical companies.

The respondents between 36 and 45 years old were also the group that very much or totally agrees in the largest proportion (86%) (see Appendix 2, Charts, Figure 34).

**Figure 11**

**Ethical companies should sell their products/services at a higher price than their classical competitors**



A large majority (66%) of respondents are opposed to any price premium, which is no surprise. However, an encouraging 30% declared they somewhat agree on that. The debate about price premiums for ethically produced goods and services is an old one and it will remain present when goods or services targeting the mass market, which is a matter of volume and price, are concerned.

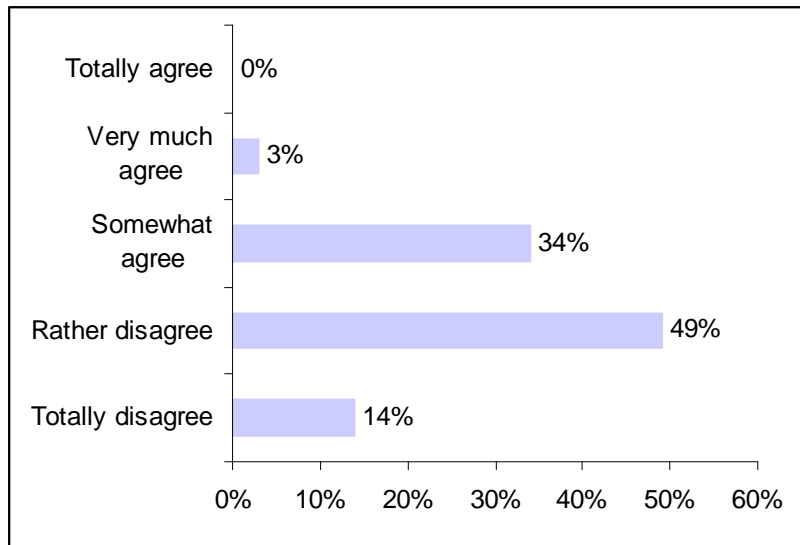
Women were clearly more opposed to price premium as 83% rather or totally disagree (men 58%) (see Appendix 2, Charts, Figure 37). All misogynistic consideration left apart, it is probably due to the fact women are still mainly in charge of food, cleaning products and body care products purchasing. Thus, they are more directly concerned by price issues.

Between Swiss German and Swiss French respondents, the opinions are quite different (see Appendix 2, Charts, Figure 38). The former are more open to the idea of price premiums, 51% somewhat or very much agree, than the latter – 22% somewhat or very much agree.

The occupation of the respondents also impacts the answers (see Appendix 2, Charts, Figure 41). Unemployed respondents all rather disagree with the statement while around a third of students, employees and independents somewhat agrees on it.

**Figure 12**

**I am ready to travel farther to get access to ethical companies**



When an effort is required from the consumers, whether it would be financial or physical, their interest often diminishes. This is what we see on figure 12, as 63% of the respondents would rather or absolutely not travel farther for getting access to ethical companies.

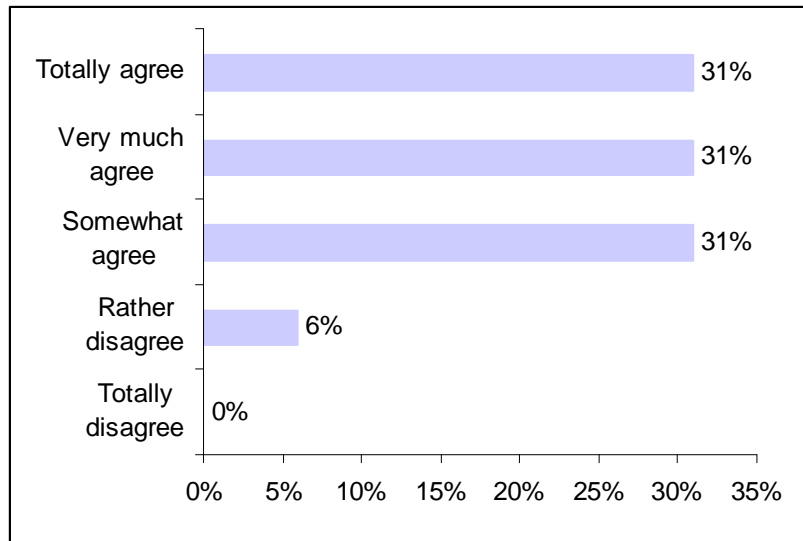
Men in particular are opposed to this idea, 73% rather or totally disagree, while women seem more flexible, 59% somewhat or very much agree (see Appendix 2, Charts, Figure 42).

The respondents' occupation also impacts on the reaction to this statement (see Appendix 2, Charts, Figure 46). Employees are 75% to rather or totally disagree, which is comprehensible since they usually have little time for shopping, but, on the contrary, 46% of students somewhat or very much agree.



**Figure 13**

**I like ethical companies because I care about the impact of my actions**

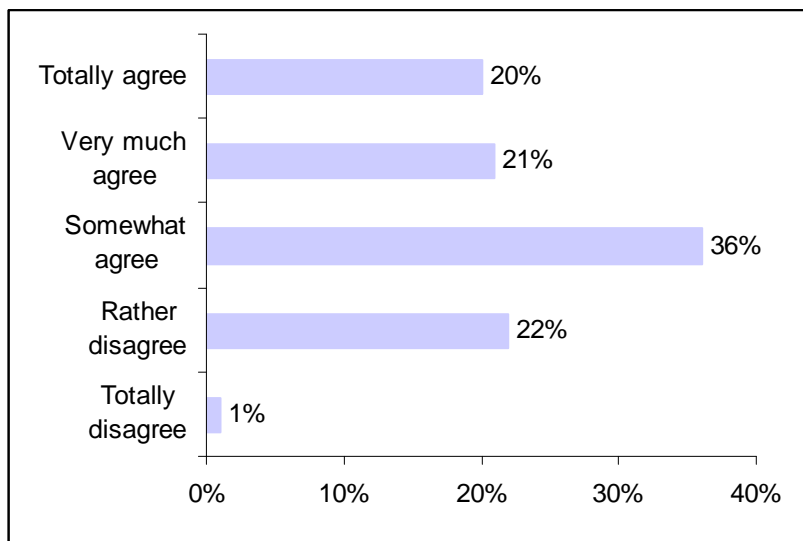


Excellent score on this statement as 93% of the respondents agree. They seem to have developed a solid eco-consciousness and express it through their appreciation of ethical companies.

The 36-45 years old group appears once again as the one most in favour of ethical companies; 64% of the respondents belonging to this category totally agree (see Appendix 2, Charts, Figure 49).

**Figure 14**

**I like ethical companies even though I'm not a fierce defender of ecology**

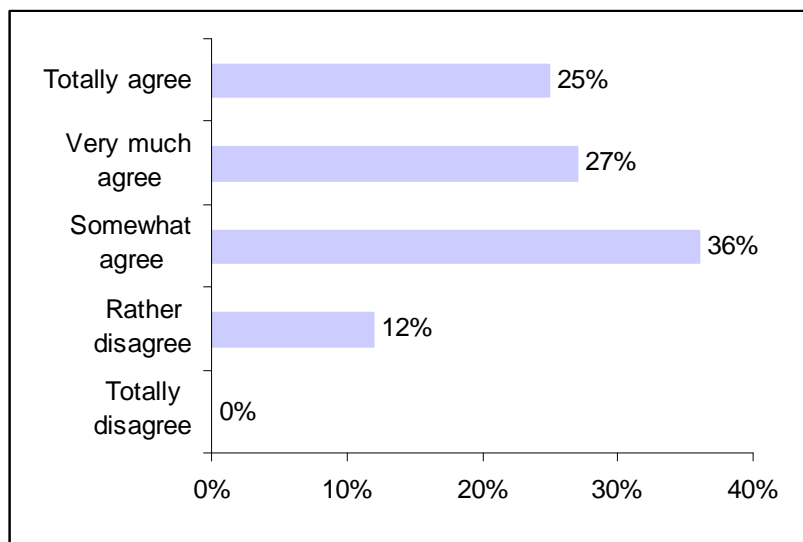


Most of the respondents, 77%, agree on this statement, thus confirming ethical companies are not addressing only fundamentally eco-conscious people but all consumers.

Respondents between 36 and 45 years old still stand out, as 43% of them rather or totally disagree with the statement. Thus, they imply they are fierce defenders of the ecology, which is relevant with the previous observations made (see Appendix 2, Charts, Figure 54).

We observe that the respondents developed a certain level of eco-consciousness, which is one of the reasons why they appreciate ethical companies. The definition “responsible consumer” would certainly be the most appropriate here.

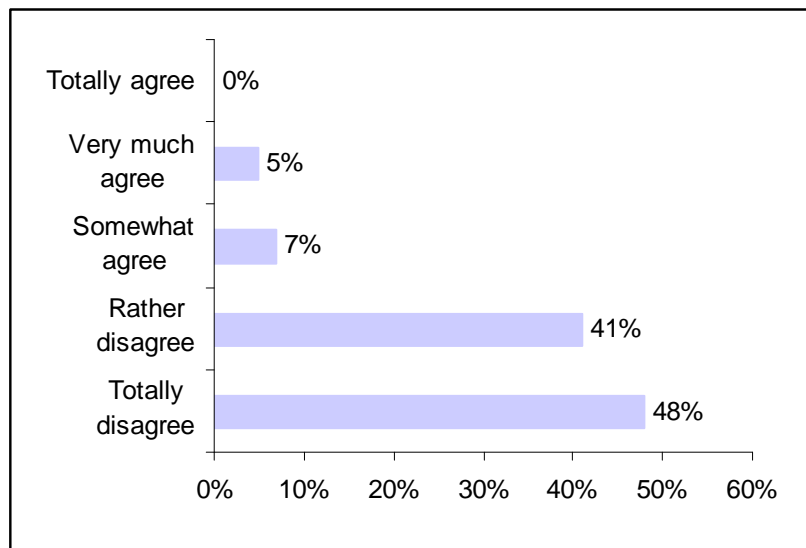
**Figure 15**  
**Ethical companies stick to my values and principles better**



A very good reaction to this statement as well: a majority of respondents, 88%, considers ethical companies correspond to their own beliefs and preoccupations, which demonstrate they relate to them in a very positive way. These elements are so deeply rooted inside one’s system that companies that are able to address them are, in my opinion, not any more speaking with the consumer but directly with the person. Hence the possibility to establish a solid and trustful relationship.

**Figure 16**

**There is no difference between an ethical company and a classical one**



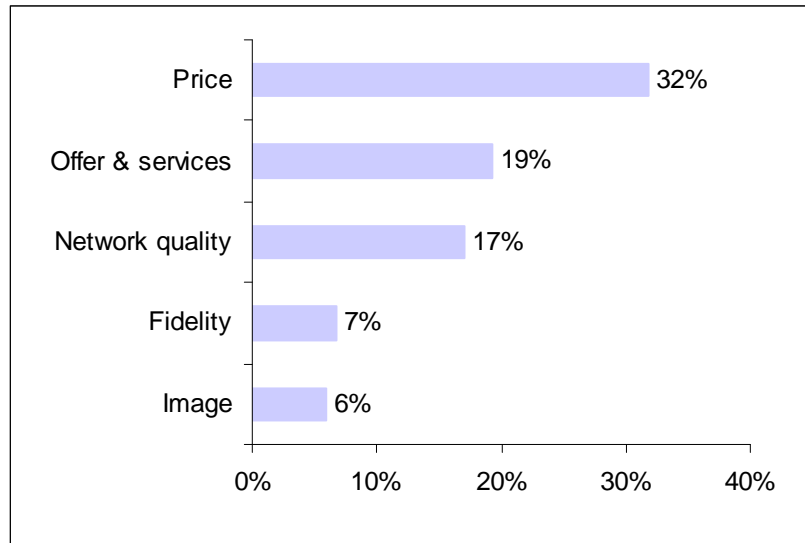
We see that a very clear opinion was expressed by the respondents; they perceive ethical companies in a different way than classical companies. Such clarity in the consumers' mind is good as it shows they are able to identify and differentiate the value proposition of an ethical company.

### **5.3 What are consumers' decision factors and means of comparison when choosing their mobile operator?**

#### **5.3.1 Elements considered to choose the current operator and their importance**

**Figure 17**

**Why did you choose your current mobile telephony operator?**



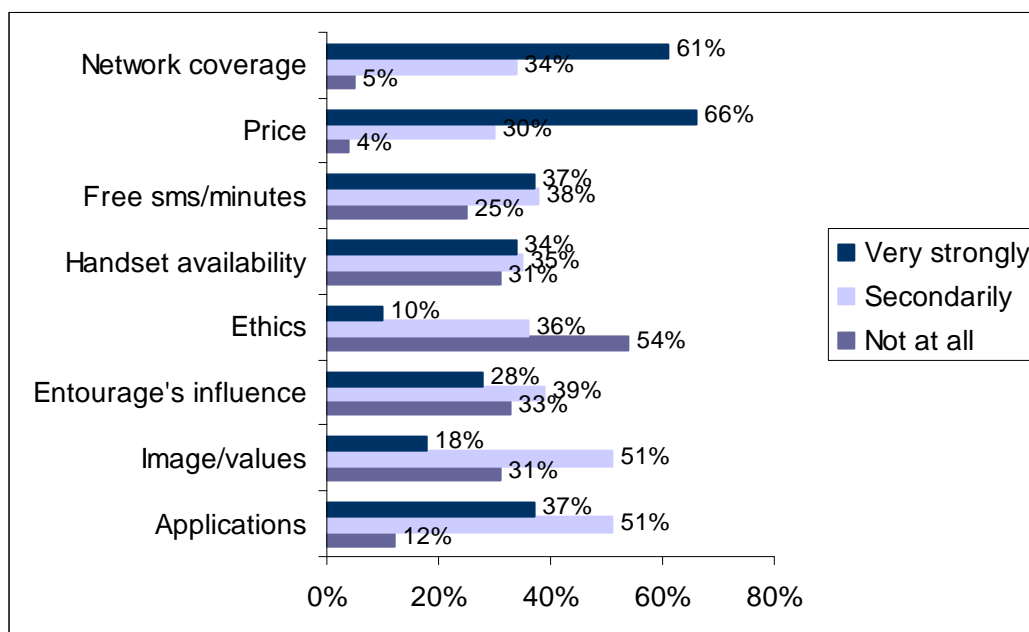
On top of mind, the price appears as the key decision factor in the choice of a mobile telephony operator. It is interesting, since most of the respondents are currently Swisscom subscribers, which does not offer the lowest tariffs of the market.

Then, offer & services (services range and matching between the needs and the offer content) is the second most often named reason. The respondents were numerous to say the services that the operator allows (e-mail, videophone etc.) or the fact that their tariff plan corresponds to their needs are very important.

My personal bias would have had me think that network quality would not appear in the top 3, since a high network quality is rather normal in Switzerland, but it was of importance for many of the respondents.

**Figure 18**

**How did you consider these elements when making your decision?**



Consistently with their top of mind answers, price is the element that was considered very strongly by most of the respondents (66%). Network coverage is second (61%) and applications third (37%). The latter partly corresponds to what was defined as “offer & services” in the previous question in that it refers to the services range. The top 3 factors then remain the same but in a slightly different order.

Also, many respondents (37%) admit considering free sms/minutes very strongly despite it almost did not come up in the previous question. Then, the handset that maybe accessible through an operator also counts as an important decision factor for 34% of the respondents.

On the contrary, the ethics of the operator were largely disregarded: 54% of the respondents did not consider it at all. At least this seems like an honest answer, not biased by the context of the questionnaire. It shall be interesting to see, further down in the questionnaire results, how the respondents would consider the ethics factor if they had to choose a new operator today. This will hopefully illustrate a change in their mindset and their will to integrate ethical questions even in the choice of a service such as mobile telephony.

Between men and women, the unique point of clear divergence lies in the consideration of the handset availability factor (see Appendix 2, Charts, Figures 67 &

68). Women were 60% to very strongly consider the possibility to access a specific cell phone when choosing their operator, against 21% of the male respondents.

Swiss French respondents and Swiss German respondents diverge on multiple points (see Appendix 2, Charts, Figures 69 & 70). First of all, free sms/minutes were more important to Swiss French respondents: 51% very strongly considered this element opposed to 17% of Swiss German respondents.

Then, the ethics of the operator were also considered in very different proportions. On the Swiss German side, 78% of the respondents secondarily or very strongly considered this factor. On the Swiss French side, they were 79% not to consider it at all.

Finally, consistently with their interest for the ethics of their operator, Swiss German were 80% to consider secondarily or very strongly its image/values and Swiss French respondents only 61%.

Among age groups, differences are also visible. 16-25 years old respondents were logically more interested in free sms/minutes – very strongly for 58% – (see Appendix 2, Charts, Figure 71) while 36-45 years old respondents claimed once more their consideration for ethics – secondarily or very strongly for 75%. (see Appendix 2, Charts, Figure 73)

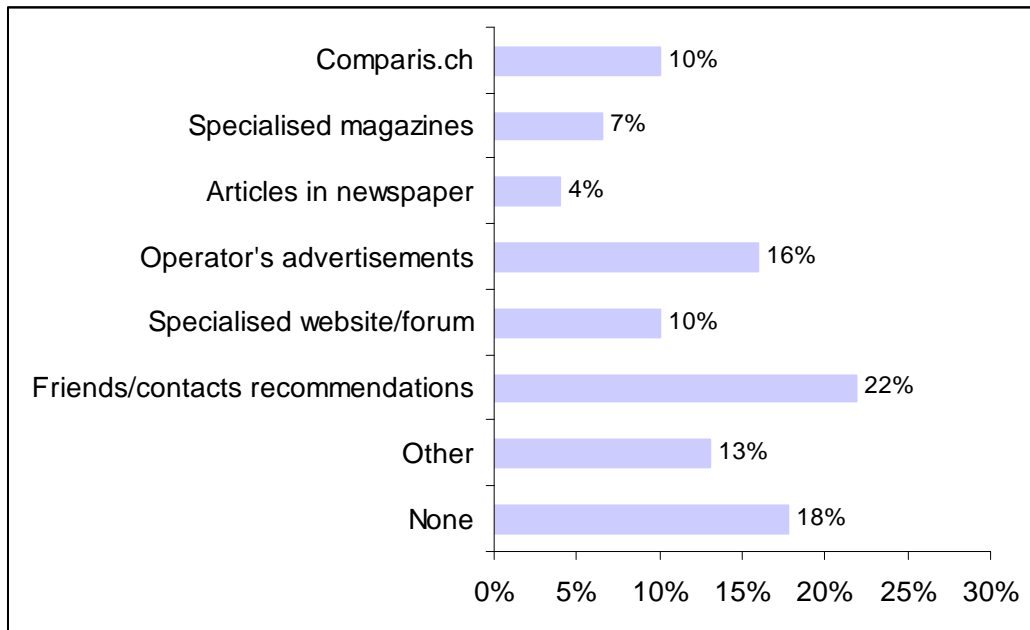
Surprisingly, the education level has a negative impact on the consideration for the ethics of the operator. The higher the education level is, the lower the consideration for this factor is. Graduate school alumni were 76% not to take it into consideration at all. (see Appendix 2, Charts, Figure 77)

The occupation of the respondents also plays a role (see Appendix 2, Charts, Figures 79 & 81). Students were primarily considering the price (87% very strongly) but independent people mainly focus on the network coverage (100% very strongly) and the application (56% very strongly), presumably in order to find the operator best fitting their fast moving professional life.

### 5.3.2 Means of comparison used

Figure 19

What means of comparison did you use?



Recommendations from friends and contacts were used by 22% of the respondents in order to help them choose their operator. For 18% of them the instinct was apparently enough as they did not use any particular mean of comparison. Interestingly, the operators themselves had a significant influence on the respondents' choices through their advertisements.

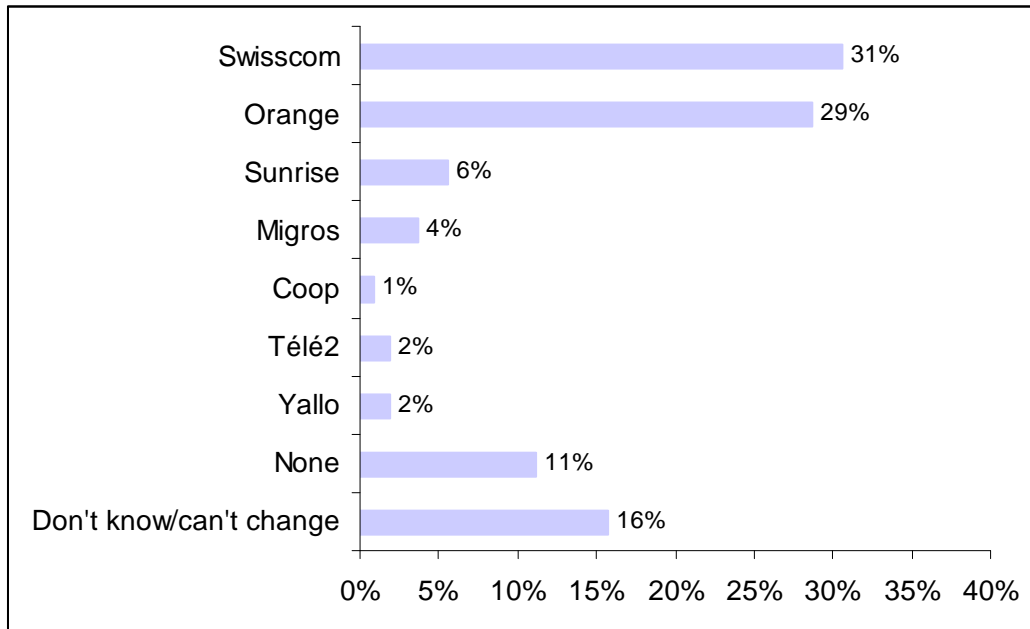
Men/women answers' comparison showed that the latter rely more often on their friends/contacts recommendation (32% against 17%) (see Appendix 2, Charts, Figure 83). Besides, 80% of the respondents of the 46-55 age group did not use any mean to execute a comparison, which clearly separates it from the other age groups (all around 18% not to have used any mean of comparison) (see Appendix 2, Charts, Figure 85).

Different occupations also induce different comparison methods (see Appendix 2, Charts, Figure 87). Unemployed respondents primarily trust their friends (50%) and articles in the newspaper (25%). Use of the online benchmark platform Comparis.ch is apparently preferred by respondents who stated their occupation was "other" (not student, employee, independent, unemployed or retired), as they were 29% to use it while other groups were between 0 and 12%.

### 5.3.3 Elements considered to choose a new operator and their importance

Figure 20

If you had to change your operator, who would you go for?



Swisscom remains very appealing to the respondents as almost a third of them would sign up with the historical operator if they had to choose a new operator. Orange is close behind and the two of them leave no chance to the competition, at least according to the respondents.

The main surprise here is the fact that Sunrise is so far behind Orange here because their market share is similar. It is probably a matter of image as it does seem, personal opinion, that Swisscom and Orange are way more present in mass media.

All the other operators were only marginally cited, even though they are probably cheaper, hence supposedly more attractive to 16-25 years old consumers, who account for half of the respondents here.

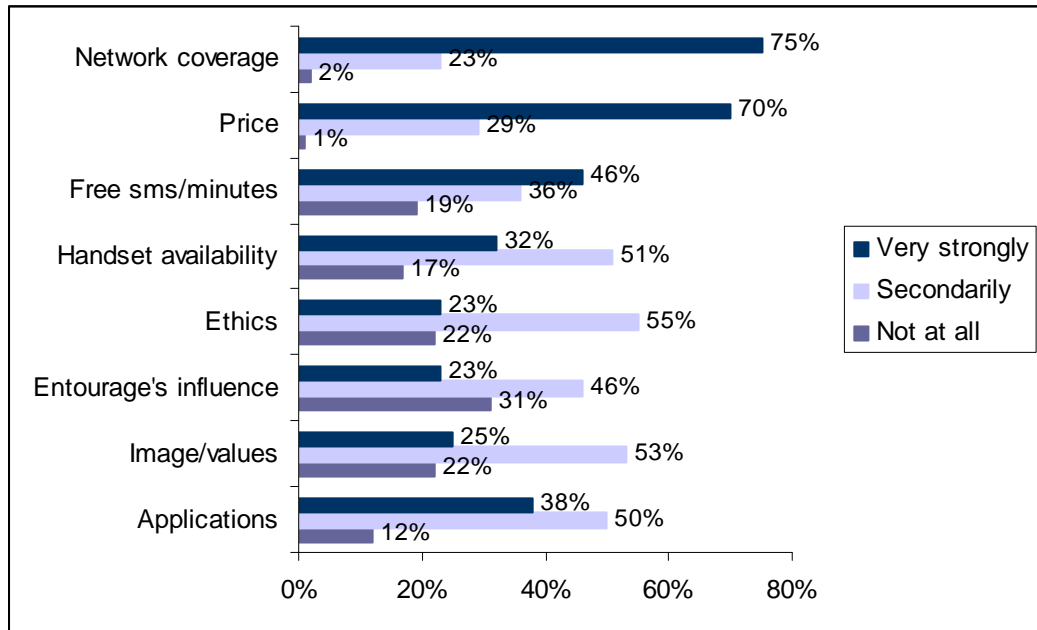
Among the respondents who named Swisscom, around a third of them praise its network quality above all and 10% consider its offer and services are appealing. Another 10% would go for Swisscom because they think the operator will host the Iphone in Switzerland. (see Appendix 2, Charts, Figure 93)



As regards those who would choose Orange, price is the main reason for 20% of them followed by the image of the company (17%) and its offer & services (13%). Network quality is a motive for only 7% of them. (see Appendix 2, Charts, Figure 94)

**Figure 21**

**How would you consider these elements when making your choice?**



Observing what the respondents would take into consideration to choose a new operator today compared to when they chose their current operator is very interesting.

Network coverage and price are even more important today (very strongly for 75% and 70% against 61% and 66%). The handset availability also progresses a bit, being considered secondarily by 51% of the respondents opposed to 35% before.

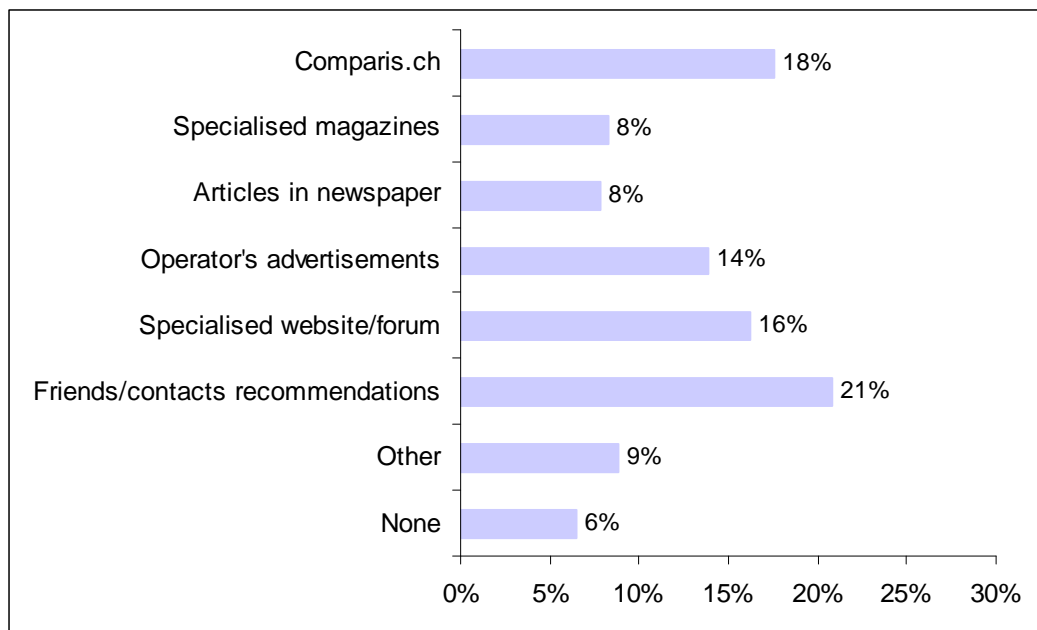
However, the factor whose consideration has the most increased is the ethics of the operator. Undoubtedly, the context of the questionnaire raised the respondents' interest for this element so these figures should be treated with caution. When they chose their current operator, the respondents were only 10% to consider its ethics very strongly, 36% secondarily and 54% not at all. If they had to choose a new operator today, the respondents claimed they would be twice more to strongly take ethics into consideration and 1.5 times more to secondarily take it into consideration. That means a total of 78% would consider this factor, opposed to 46% before. Hopefully, this is a sign that consumers are genuinely preoccupied by ethical issues and would also form their opinion according to this element.

Women appear much more interested in the price than men (very strongly 86% | 63%) as well as in free sms/minutes (very strongly 63% | 37%). The handset is also of much more importance to women, as 60% of them consider very strongly this element opposed to 18% of the male respondents. (see Appendix 2, Charts, Figures 95 & 96)

16-25 years old respondents are logically very interested in free sms/minutes, which are considered very strongly by 65% of them, and 36-45 years old are, consistently with their previous statements, highly valuing the ethics of the operator (secondarily or very strongly 94%). 46-55 years old respondents greatly diverge on this point as none of them would strongly consider this factor; price is also less important to them but network is a key point (100% very strongly). (see Appendix 2, Charts, Figures 99, 101 & 102)

### 5.3.4 Means of comparison envisaged

**Figure 22**  
**What means of comparison would you use?**



Comparing the means respondents say they would use to choose a new operator today and the ones they used when they chose their current operator reveals some interesting changes.

Comparis.ch, the online platform for benchmarking, would attract more respondents today (18% | 10%), as well as the articles in newspapers, which were cited twice more. Recommendations from friends and contacts are always as much appreciated and

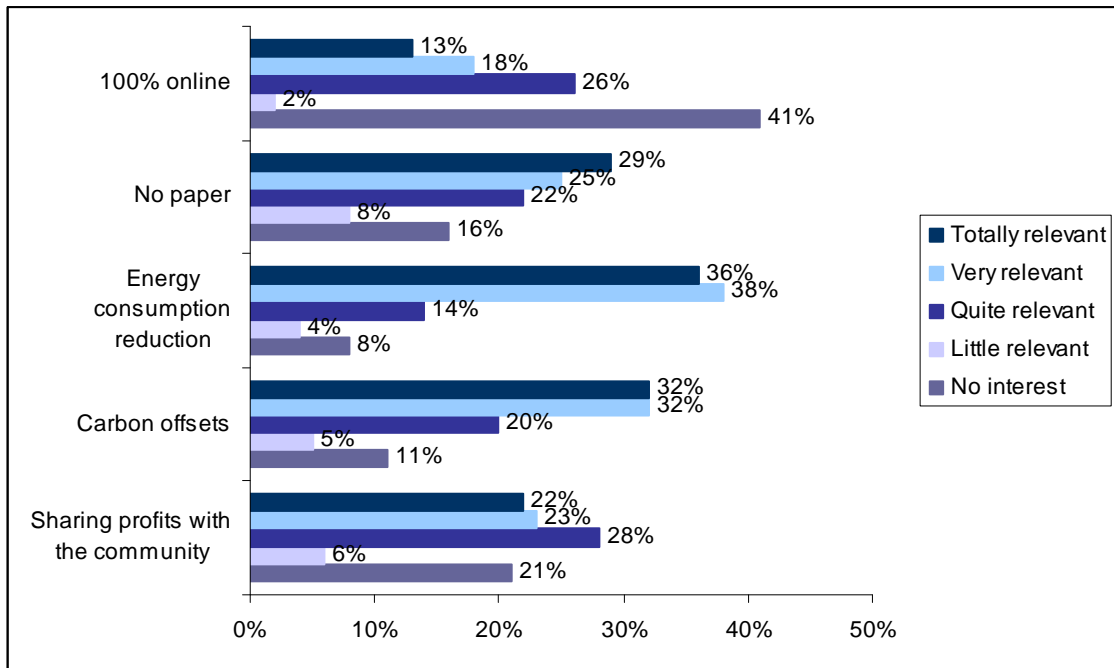
remain the favorite mean of comparison. Specialized websites/forums are up 6% and, on a general level, more respondents would use some way to make a comparison as they are only 6% to say they would not make any, 3 times less than before.

## 5.4 How do consumers value the green mobile operator concept and are they willing to switch for it?

### 5.4.1 Perception of the green MVNO offer components

Figure 23

How do you value the components of this ethical operator?



Very interesting section where we finally see how the consumers react to the concept of ethical operator.

First of all, I am surprised to see that 41% of the respondents consider that an exclusively online presence, no stores, is of no particular interest. Perhaps, the respondents did not link the fact of having a store and the impact on the environment, hence the little success of the 100% online proposition.

Then, the energy consumption reduction has received a large part of positive reactions (74% very or totally relevant). This is probably due to the fact that energy efficiency issues are a topic discussed daily in the media.

Also, the carbon offsets proposition was considered very or totally relevant for 64% of the respondents. It is a very good score, since it is a very particular process that certainly a few people only clearly understand.

The paper elimination and the profits sharing propositions received fairly positive reactions as well.

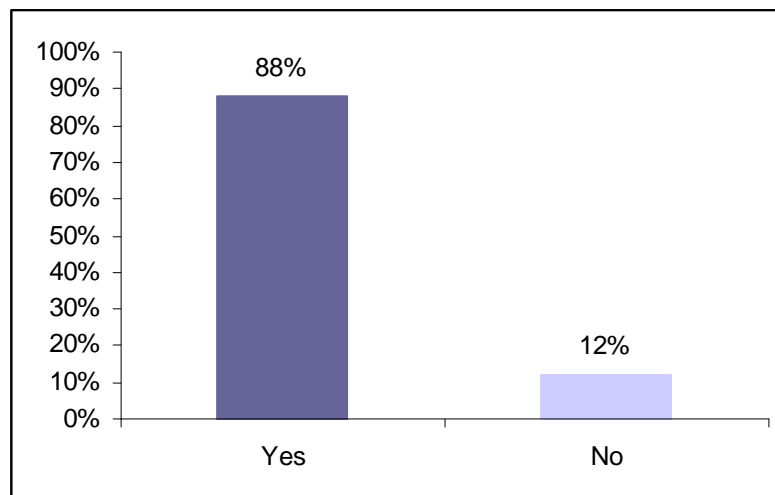
Women appeared to be more interested than men in the energy use reduction (very strongly 51% | 29%) and the carbon offsets propositions (very strongly 46 | 25%). (see Appendix 2, Charts, Figure 117)

A few differences can be observed between Swiss German and Swiss French respondents too (see Appendix 2, Charts, Figures 118 & 119). As regards the 100% online proposition, 63% of Swiss German estimated it was of no interested opposed to 25% of the Swiss French respondents. The latter are also a lot more interested in the no paper proposition: very or totally relevant for 72% of them against 31% of the Swiss German respondents. When it comes to redistributing a share of profit to the community, Swiss French respondents were 59% to declare it very or totally relevant but only 28% of the Swiss German respondents agreed.

#### 5.4.2 Satisfaction with current operator

Figure 24

Are you satisfied with your current operator?



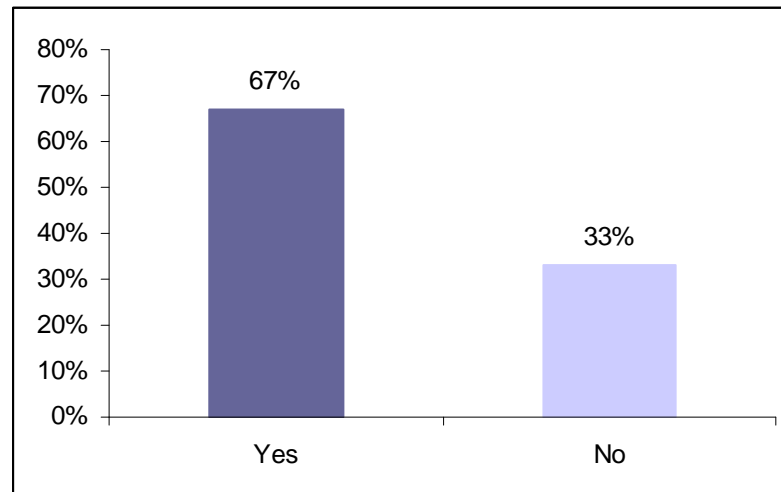
Most of the respondents are clearly happy with their current operator but we will see further down whether they would still be ready to change for another one.

Students are the only group that appeared to be less than 80% of satisfied customers (24% unsatisfied). (see Appendix 2, Charts, Figure 137)

### 5.4.3 Willingness to change for a new operator

Figure 25

Would you leave your operator if an offer looking more interesting showed up?

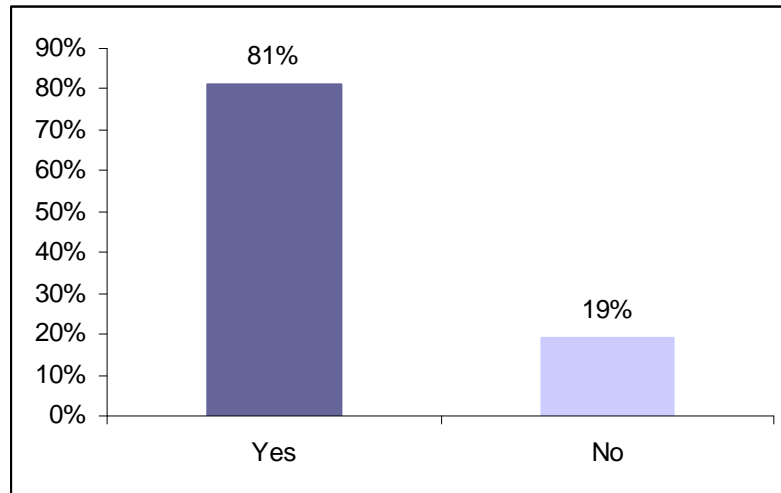


According to this result, the respondents are largely ready to leave their operator. However, figures on the consumers fidelity to their operator show a different reality. Between 2000 and 2005, the average proportion of subscribers leaving their operator was 1.43%<sup>3</sup>. There seems to be here a huge misevaluation from the respondents of their own propensity to actually do it.

Swiss French respondents declared they would be ready to change in a higher proportion than Swiss German (75% | 57%) and so did 36-45 years old respondents compared to other age groups. (see Appendix 2, Charts, Figures 139 & 140)

**Figure 26**

**Under identical conditions (tariffs, services etc.), would you leave your current operator and go for an ethical operator?**



A clear positive result concerning the respondents' interest for a green operator. Once again though, caution must be observed towards the actual realisation of their intentions. But that remains a very positive signal affirming that the respondents do perceive the value of an ethical operator and would even prefer it compared to a regular operator.

## 6. Global synthesis

**Is the Swiss mobile telephony market limp enough to allow entrance to a newcomer? No!**

It clearly appears that the Swiss mobile telephony industry is too difficult to penetrate.

Firstly, the year-to-year profits progression has been in sharp decline for several years now, margins are getting thinner and the revenue per subscriber was cut in half between 1998 and 2005. Volume and cost efficiency have become key elements in the survival of the operators, which is why a new operator, unless backed up by huge financial capabilities on an extended time horizon, would have no interest, and no chance, in entering the market

Secondly, the Swiss mobile telephony market is saturated as the penetration rate is close to 100%. The subscribers are captive; transfer costs are pretty high then customers are reluctant to leave their operator and the latter do everything they can to retain them.

Thirdly, the market is currently in a mature cycle, which is not the most adequate period to enter it. Indeed, in a mature industry, the growth rate is minimal and larger resources are needed for penetration.

Finally, the competition is very intense and most of the operators fight on the price, which lowers the margins. Moreover, the need for extensive pre-existing clients database and distribution network constitute high entry barriers. Perhaps, a differentiated offer targeting a very specific segment would have a little chance but given the facts that prices cannot be raised and volume must be maximised, that makes it impossible if the operator is only active in Switzerland.

In light of these elements, unless the new operator is part of global telecom group, backed up by strong financial support and oriented at a specific segment, my assessment is that the Swiss mobile telephony market is not limp enough to allow entrance to a newcomer.



**Do the ethics of the functioning and offer of a green mobile operator represent valid core competences? Not quite**

For analysis purpose, the ethics of the functioning and offer were divided into two separate competences : integrating sustainable development principles is one and conceiving a green mobile telephony offer is the other.

Concerning the first one, it cannot be considered as a valid core competence. Indeed, it is neither rare, difficult to imitate or allowing a large breadth of applications.

Concerning the second one, it can be considered as a valid core competence, although care must be taken as it probably does not allow a company to solely rely on it for more than a few years.

As a consequence, setting up a mobile operator whose main value lies in the ethics of its structure and offer is in my opinion possible if measures are taken to ensure that other core competences are developed or acquired. Otherwise, these competences are not sufficient to defend a position in the market.

**How do consumers perceive ethical companies and how frequently do they purchase from them? Very well and very often!**

The market study showed very positive insights on how the respondents perceive ethical companies and on their consumption habits.

Firstly, the respondents were aware of numerous companies themselves consider as ethical and these were from very different business sectors and sizes. The notion of ethical company seems then clear in the respondents' minds and it shows their ability to identify them as such.

Secondly, 4 respondents out of 5 have consumed a product or services from an ethical company in the last 6 months and almost half of the respondents consume such products or services at least once a week. These very good scores illustrate how well the respondents are used to consume from ethical companies on a very regular basis.

Thirdly, the respondents showed a great appreciation for ethical companies. They were 83% to find them more attractive than classical ones and 81% said ethical companies give them more satisfaction because of their ethics. However, most of the respondents don't want to pay or travel more for an ethical company. On the plus side, over 80% of the respondents link their appreciation for ethical companies with their own values, principles and care for the impact of their actions. Such elements demonstrate the

responsibilities the respondents are willing to assume in the context of their habits as a consumer.

### **What are consumers' decision factors and process when choosing their mobile operator? Price, network quality and offer & services**

When the respondents were asked what were the elements they take into consideration when they choose a mobile operator, many answers came up. However, two thirds of the respondents very strongly considered the price when they chose their current operator and they would even be up to 70% if they had to choose a new operator today. The network quality was also a top concern for most of the respondents and it also increases today (61% before, 75% now).

The offer & services from the operator, which include the functionalities available (e-mail, 3G etc.) as well as the fact of having a tariff plan that fits one's needs best, completes the top three.

In the end, these answers show that the very basic elements count more than the rest. People want a fair tariff, a reliable network and an offer corresponding to their utilization needs. Nevertheless, a clear increase of the consideration for the ethics factor was observed (+32%), demonstrating that the awakening of the responsible consumer may soon occur in the mobile telephony market.

As far as comparison methods are concerned, a fifth of the respondents mainly trust their friends above all. What is interesting to notice is that, when they chose their current operator, 18% of the respondents did not use any mean of comparison but if they had to do it now only 6% would trust their own feeling. This is an illustration of the fact that consumers today have many more possibilities to access information and compare offers easily.

### **How do consumers value the green mobile operator concept and are they willing to switch for it? Certainly, but...**

The green mobile operator has received very good reactions from the respondents.

Firstly, as regards the elements that would compose this operator, most of them were largely considered as relevant by the respondents. In particular, those of the elements that are linked to broader environmental issues regularly discussed by the media had a greater success. However, vast differences among different genders or linguistic regions exist and were even more visible here than in the answers to other questions.

Secondly, as far as the willingness to change their operator is concerned, most of the respondents seemed very enthusiastic about it. Indeed, two thirds of them would change for a better offer and they were even 4 out of 5 to say they would sign up with a green mobile operator if they are ensured the same conditions as with their current operator. Though, statistical figures on the actual proportion of customers leaving their operator on a given year relate much less enthusiastically. Would a green operator be the panacea they have all been waiting for? I doubt it. Therefore, these figures should be considered very carefully. I would rather consider them as a sign that the green mobile operator concept really appeals to them and that they do perceive its value.

## Conclusion

In my opinion, launching a new mobile operator relying on the ethics of its functioning and offer is not recommended.

Indeed, even though the respondents' point of view appears very supportive of this idea, the current settings of the mobile telephony industry are hostile to a new operator.

However, considering the very positive feedback from the survey respondents, it could be interesting for an existing MVNO to inspire from the green mobile operator concept as part of a development measure. I'm thinking of MVNOs like Talk-Talk, Mobilezone Net or Cablecom, which are very small players in the market and may benefit from differentiation and a clearer positioning. There is no worth mentioning the big three here (Swisscom, Orange, Sunrise), as they are companies of a very different scale that are already integrating environmental issues at a certain level but won't position themselves as green mobile operators. They would not retire any significant benefit of it, neither in terms of market share or revenue. That is why I think a small MVNO would be best suited, especially given the higher flexibility such companies usually have.

Proof has been made through this document that the "green hype" has limits and does not constitute the panacea nor a suitable value proposition in all markets, no matter how positive the consumers' opinion may be.

It reminds me of the end of last century's Internet bubble, which was a very prolific period where many entrepreneurs thought adding ".com" to any kind of business was sufficient to succeed. That led to the historic crash we know of and that is why several observers today try to prevent the business and financial community to repeat that mistake in the green industry. Research, thinking and analysis are vital to avoid errors.

When I decided to explore the mobile telephony market trying to see whether a green operator would be a success, I obviously thought there was an interesting potential. It turned out I was wrong. Nevertheless, being wrong sometimes just feels right. It is part of an entrepreneur's job to be wrong and start over because entrepreneurs, like all pioneers, are here to ask questions and seek their answers, positive and negative. And when the answers are found through research, thinking and analysis before any action is taken, that is what I consider being a proficient and conscientious entrepreneur. Because next time the answers might be positive and success will be down the road.

That is what feels right about it.

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# Appendix 1

## Swiss MVNOs

### 1. Migros

Migros launched two mobile offers: M-Budget Mobile, a prepaid option initiated in 2005, and Migros Mobile, a postpaid offer started in 2006. M-Budget Mobile encountered a tremendous success, as it is the prepaid option with the lowest prices on the market. In December 2006, M-Budget Mobile celebrated its 300'000<sup>th</sup> client and firmly established its position as MVNOs' market leader. Undoubtedly, Migros' extensive distribution network played a key role in the achievement of its successful entry into the mobile telephony market.

As concerns Migros Mobile, the postpaid offer, it has been rated as a good but not revolutionary offer with slightly below average prices<sup>19</sup>.

### 2. CoopMobile

The 2nd largest Swiss retailer launched its mobile offer just a few days after Migros did, with very competitive features. However, CoopMobile focuses exclusively on a prepaid option. In this category, CoopMobile prices are in the same range as Migros', among the lowest on the market. Although, they offer a little more in terms of services (Combox, MMS etc.) compared to Migros. Here again, the company benefited from a long-time established distribution network to push its offer towards trustful customers. As of July 2007, they have 230'000 clients<sup>20</sup>.

### 3. Yallo

What's particularly interesting about Yallo is that it is 100% owned by Sunrise, one of the three physical operators. It was probably launched in an attempt from Sunrise to settle its position in the newly opened virtual operators market and retain the new breed of customers tied to it.

It is now among the biggest MVNO and offers a prepaid option only, which seduces around 100'000 clients. They made their way through the market with an efficient

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<sup>19</sup> BEYELER Ralf, Comparis.ch analyse le nouvel abonnement mobile de Migros

<sup>20</sup> According to a phone call with a representative from CoopMobile



partnership strategy. Indeed, their offer is available in several nationwide retail networks, such as Naville, Sunrise Centers, Mobilezone and Fust.

## **4. Cablecom**

Cablecom was originally a sole cable operator, which smoothly added several other elements to their offer over the years, including mobile telecommunications services. They propose prepaid and postpaid options.

They acquired a large clients' database, approximately 40'000, through their primary activity as a leading cable operator.

## **5. Talk-Talk**

Launched by the cell phone retail chain The Phone House, Talk-Talk offers both prepaid and postpaid options. One particularity of this operator is that calls made between two of its clients are free.

Talk-Talk is a mid-size player among the market, with a few tens of thousands users.

## **6. Tele2**

Tele2 Switzerland is part of the Tele2 group, a major player in the European telecommunications market. They offer both prepaid and postpaid options. Tele2 primarily entered the market as a fixed telephony and internet service provider, which allowed the company to build a solid customers database. Unlike other MVNOs, Tele2 owns a few antennas in major cities, making it an Advanced.MVNO.

## **7. Lebara**

Lebara is the most recent player in the Swiss mobile telephony market. The company is a subsidiary of Lebara Mobile, based in London. Their market approach greatly differs from their competitors as they focus on foreign people living in Switzerland and mainly calling their country of origin. It seems that success is on the way as the company is growing at a pretty fast pace (HR tripled in 3 months<sup>21</sup>).

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<sup>21</sup> Andrea, Nouveaux canaux de distribution pour Lebara Mobile. In : mobilemag.ch – news website.

## 8. Mobilezone net

The virtual operator launched by the nationwide cell phones retail chain is the smallest among the market. Indeed, they have around 2000 customers<sup>22</sup> enjoying their prepaid and postpaid offers. The company built its clients database through its cell phones retail chain, the largest independent one in Switzerland.

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<sup>22</sup> According to a phone conversation with one of their representative

## Appendix 2 Charts

Figure 27

**Ethical companies are more attractive than their classical counterparts**  
**Genders**

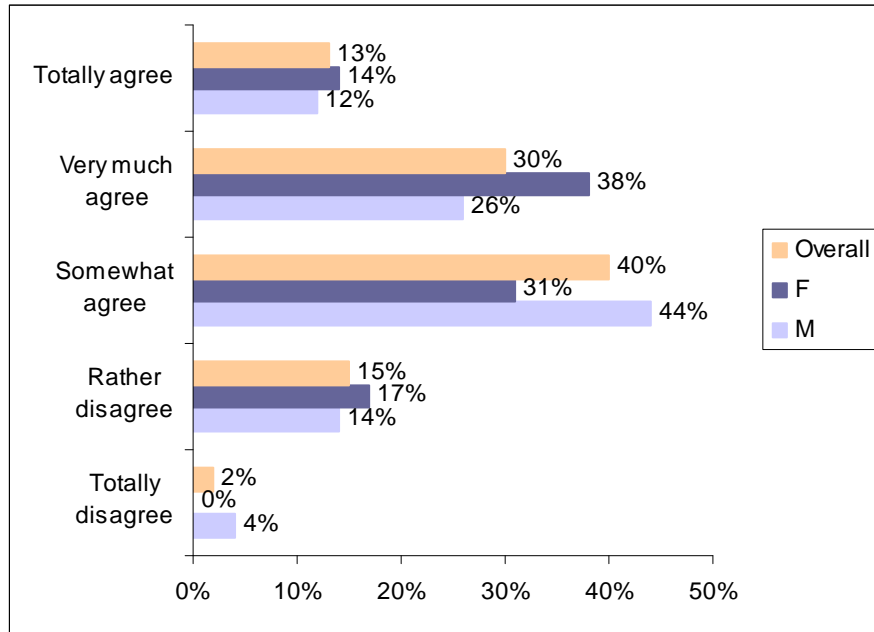
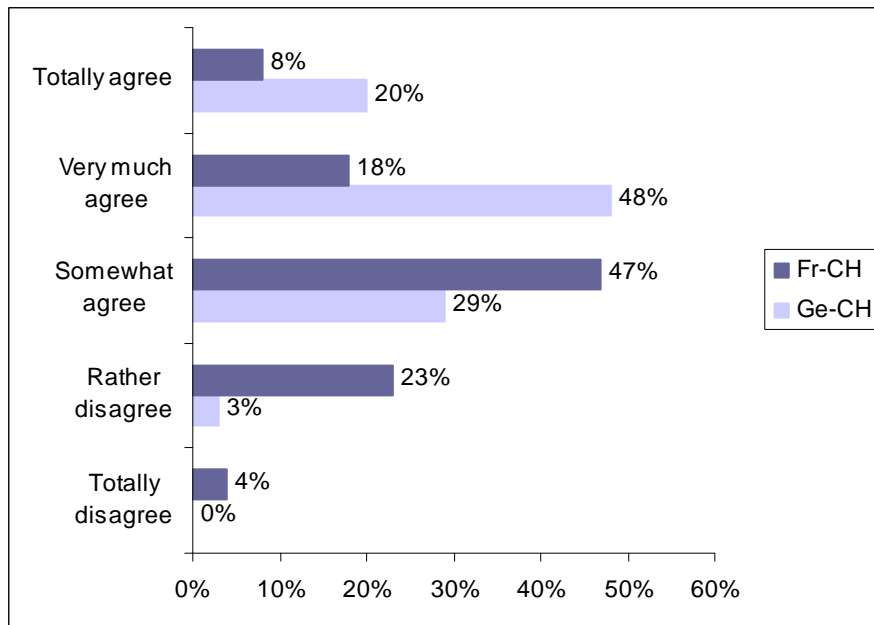


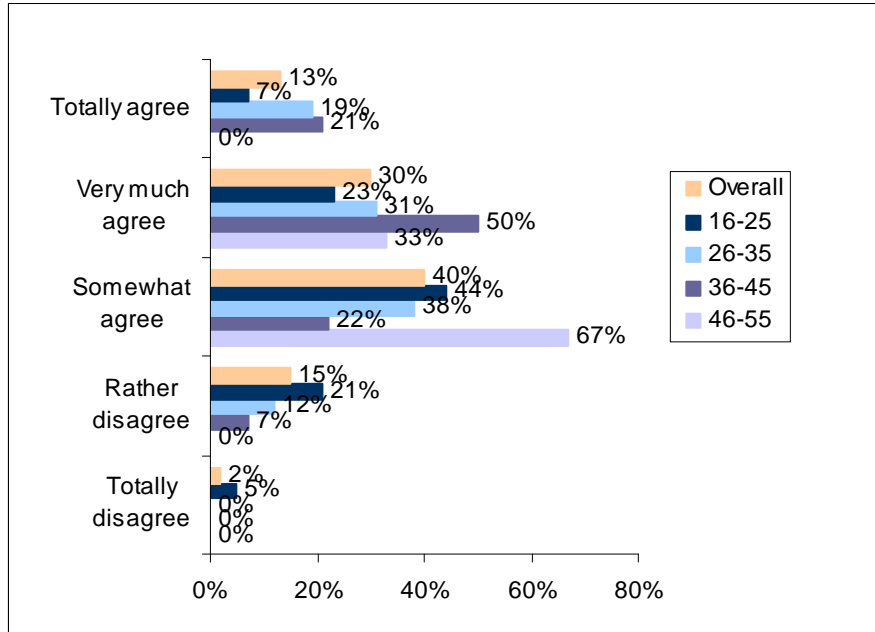
Figure 28

**Ethical companies are more attractive than their classical counterparts**  
**Linguistic regions**



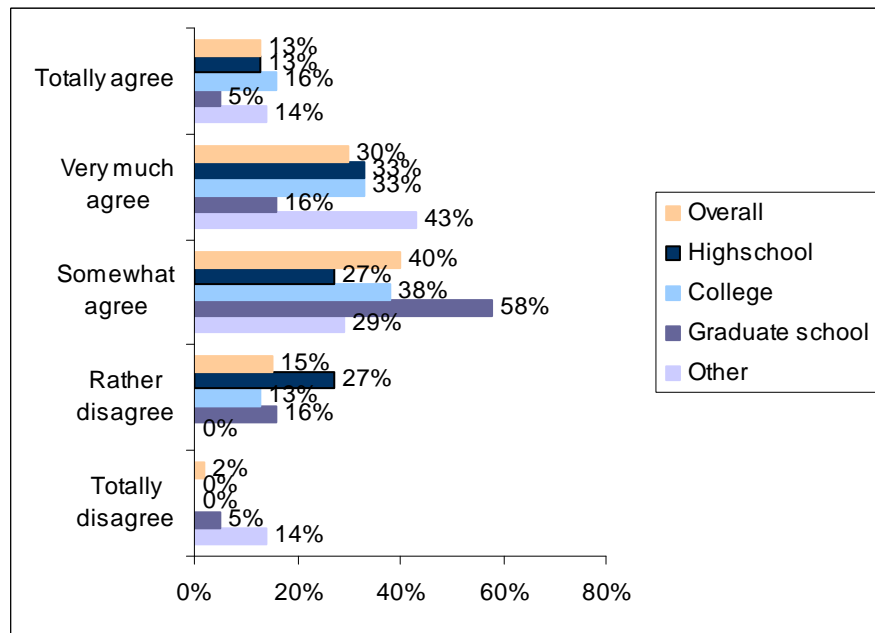
**Figure 29**

**Ethical companies are more attractive than their classical counterparts**  
**Age groups**



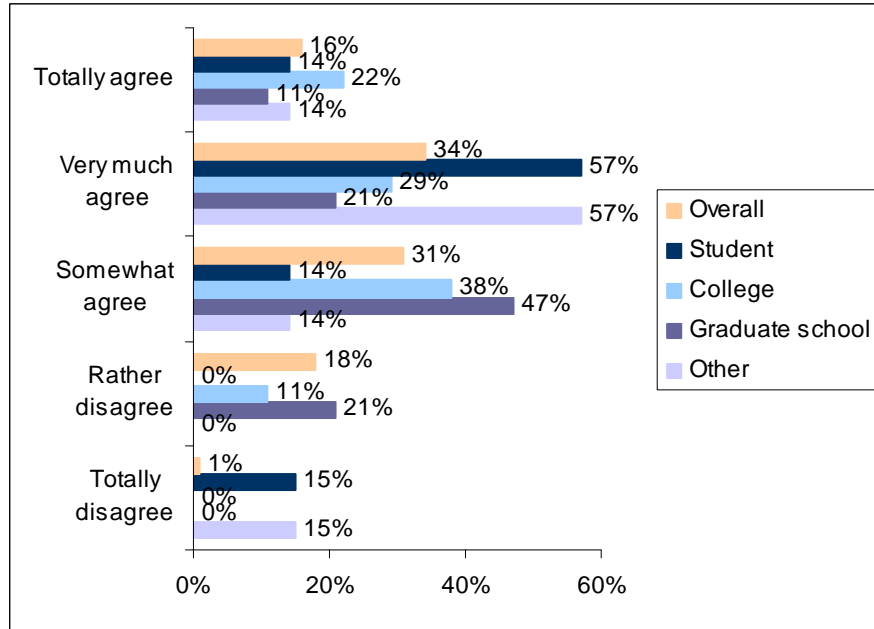
**Figure 30**

**Ethical companies are more attractive than their classical counterparts**  
**Education levels**



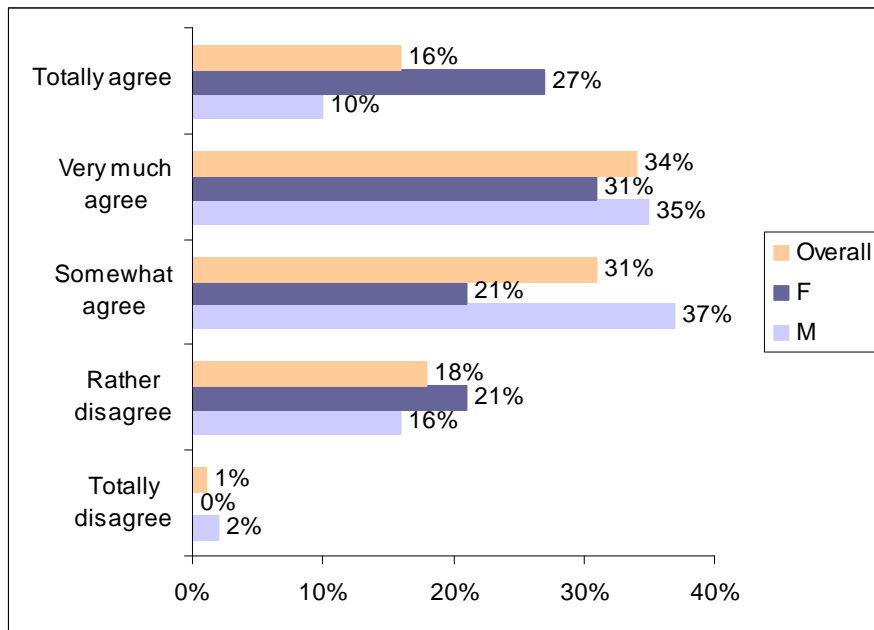
**Figure 31**

**Ethical companies are more attractive than their classical counterparts**  
**Occupations**



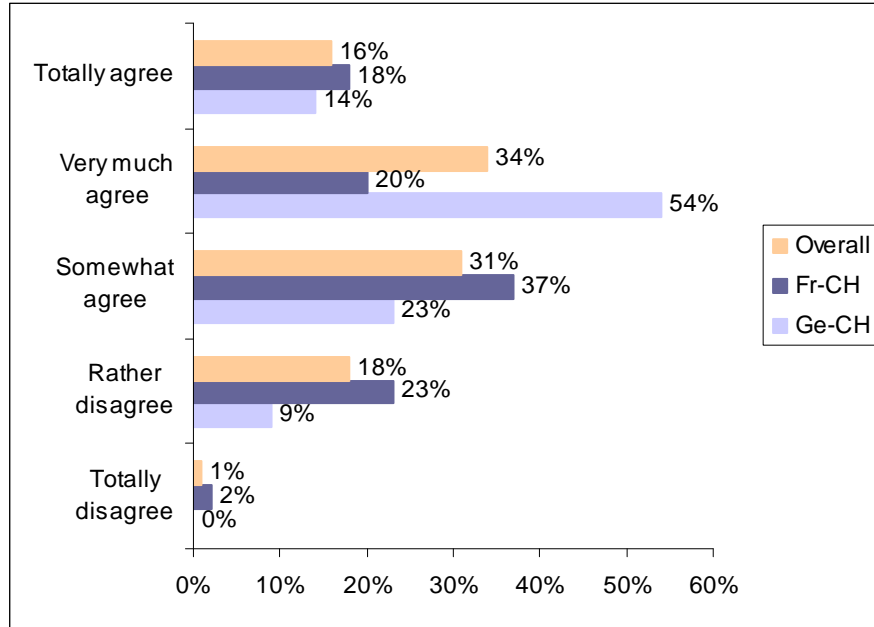
**Figure 32**

**Ethical companies give me a greater satisfaction because of their ethics**  
**Genders**



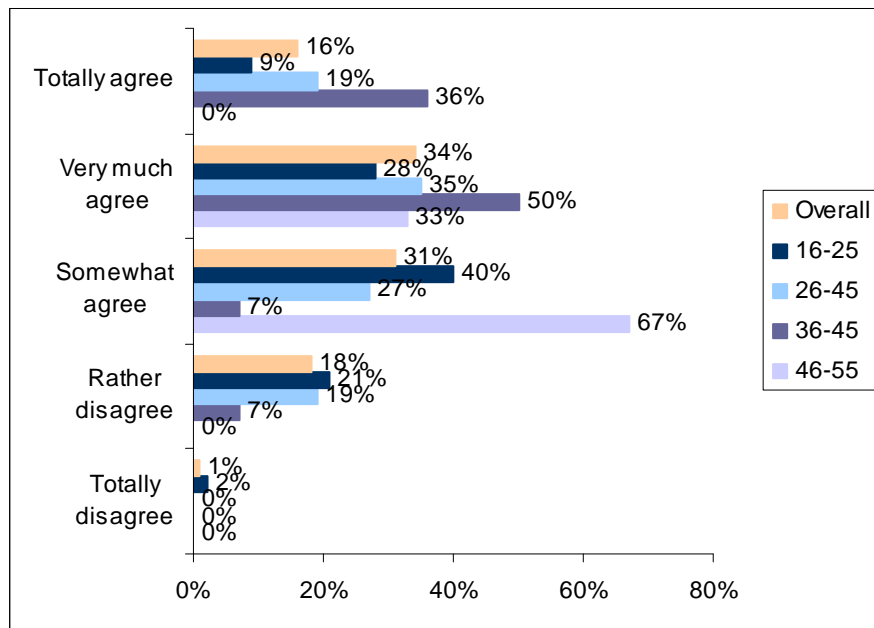
**Figure 33**

**Ethical companies give me a greater satisfaction because of their ethics**  
**Linguistic regions**



**Figure 34**

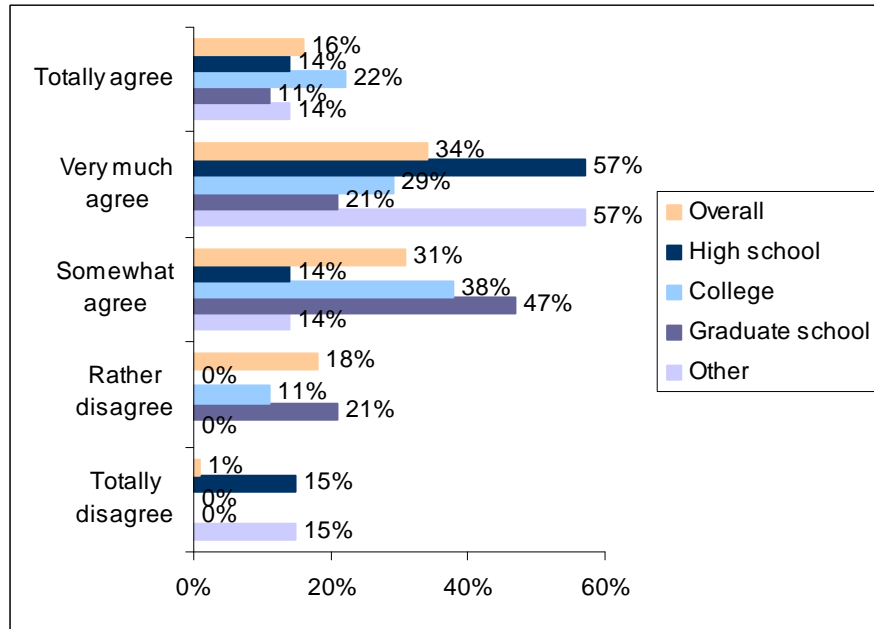
**Ethical companies give me a greater satisfaction because of their ethics**  
**Age groups**



**Figure 35**

**Ethical companies give me a greater satisfaction because of their ethics**

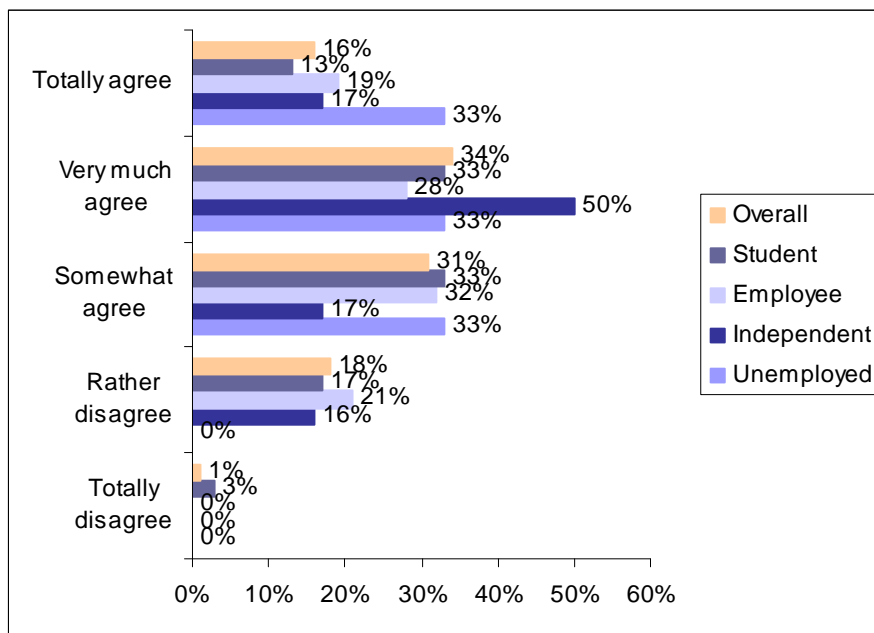
**Education levels**



**Figure 36**

**Ethical companies give me a greater satisfaction because of their ethics**

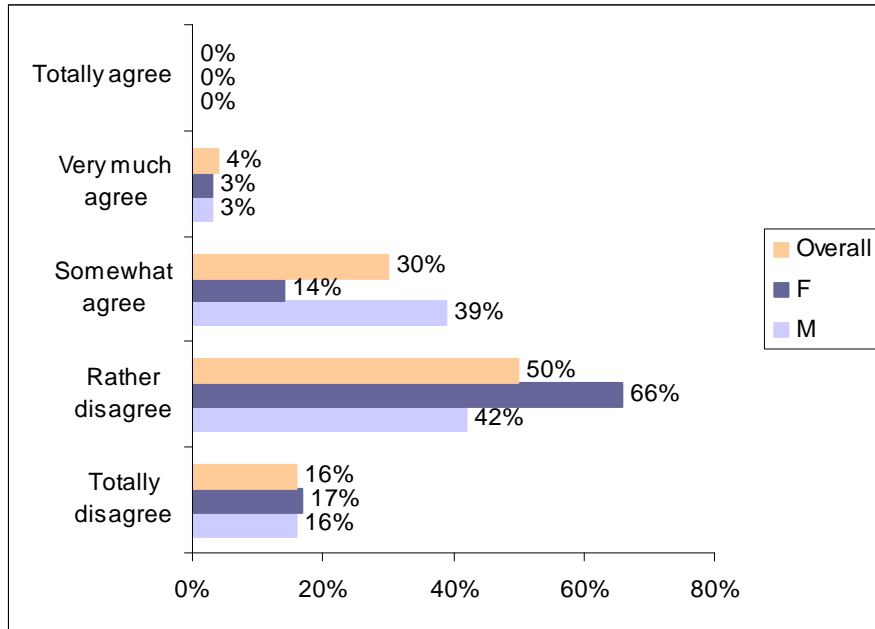
**Occupations**



**Figure 37**

**Ethical companies should sell their products/services at a higher price than their classical competitors**

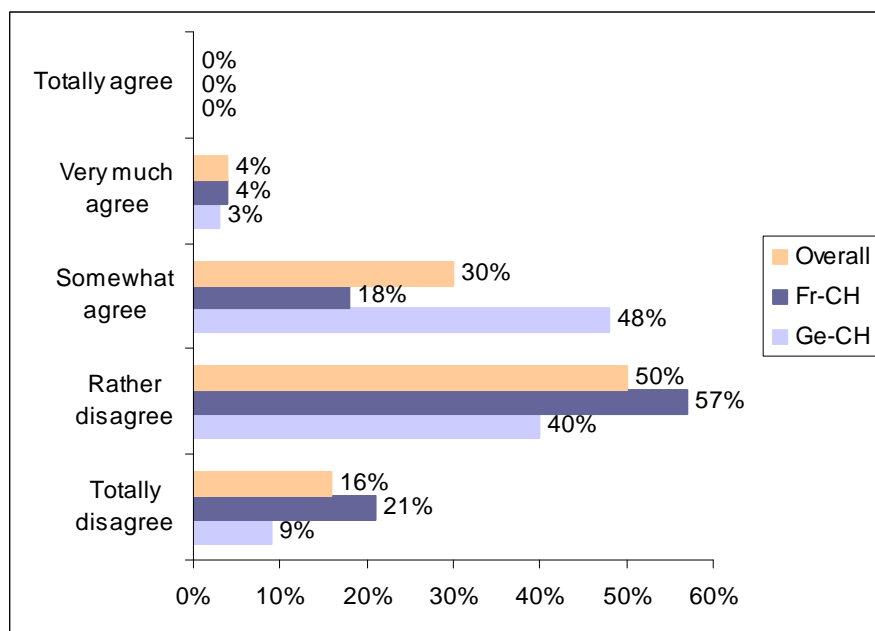
**Genders**



**Figure 38**

**Ethical companies should sell their products/services at a higher price than their classical competitors**

**Linguistic regions**

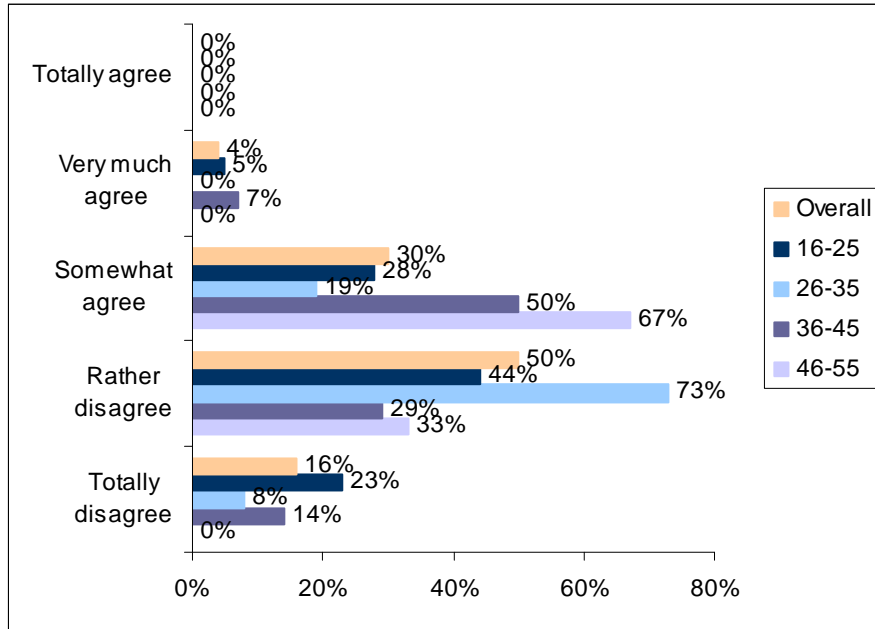




**Figure 39**

**Ethical companies should sell their products/services at a higher price than their classical competitors**

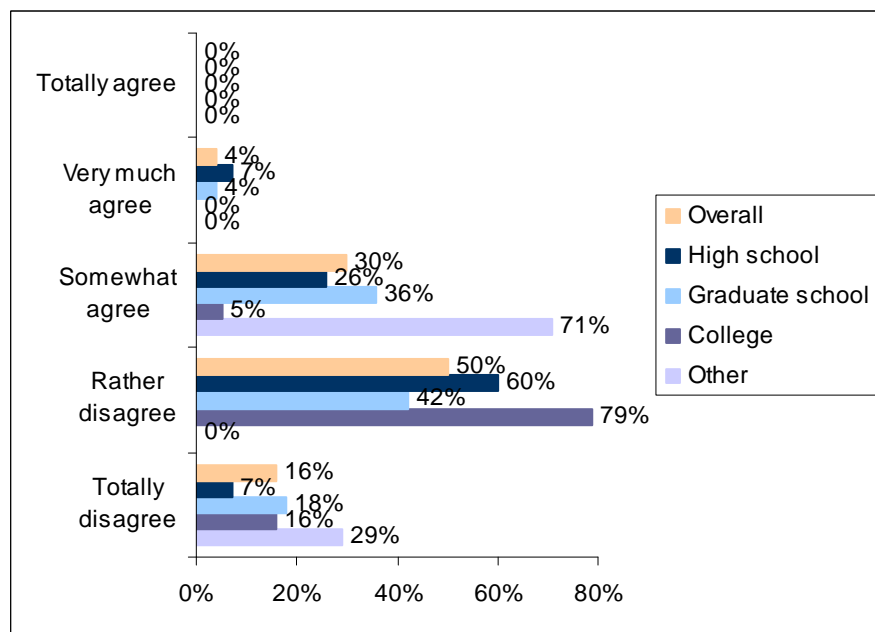
**Age groups**



**Figure 40**

**Ethical companies should sell their products/services at a higher price than their classical competitors**

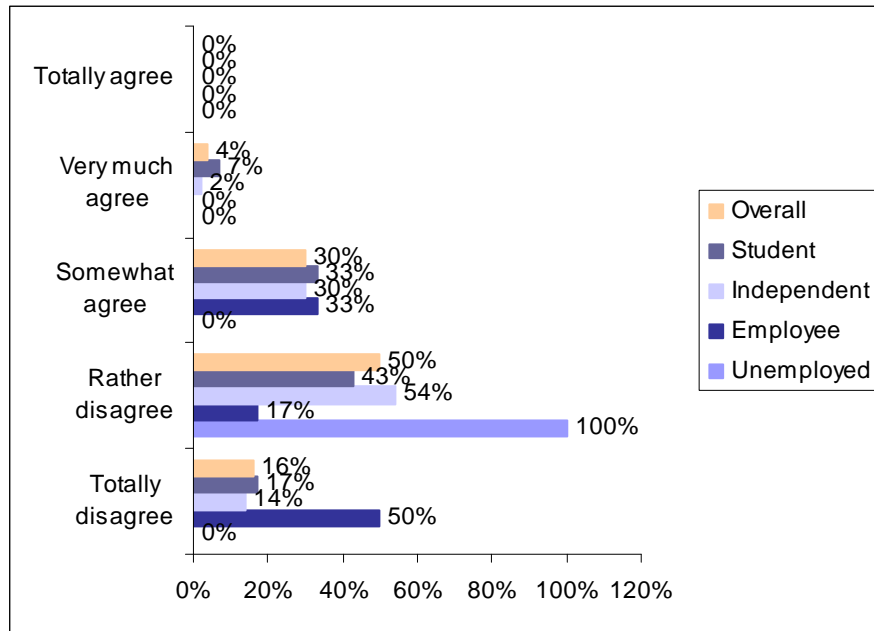
**Education levels**



**Figure 41**

**Ethical companies should sell their products/services at a higher price than their classical competitors**

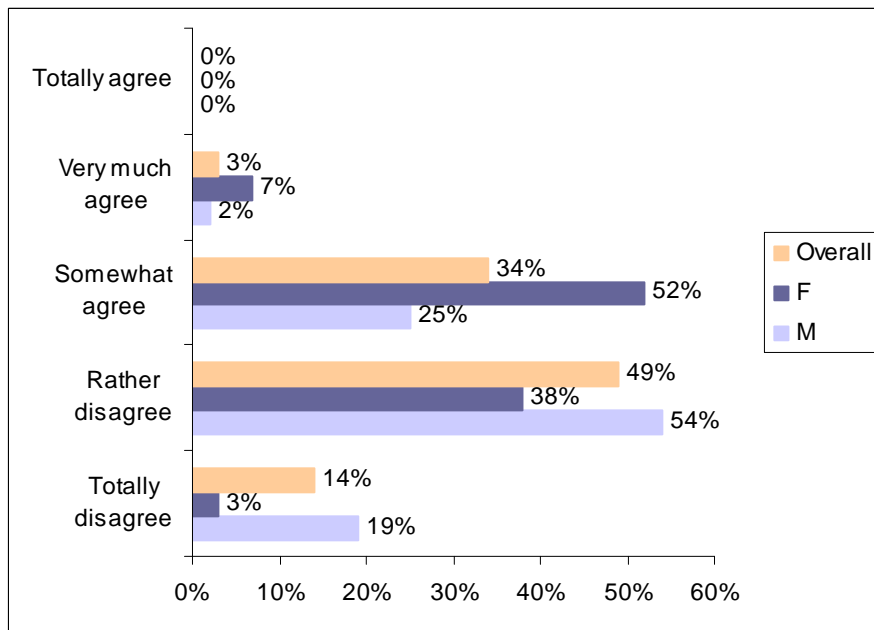
**Occupations**



**Figure 42**

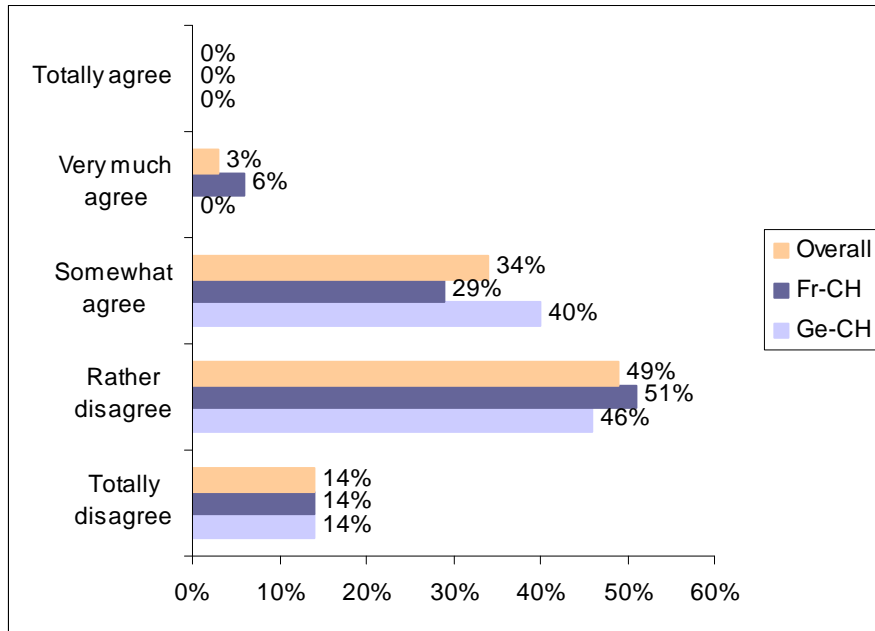
**I am ready to travel farther to get access to ethical companies**

**Genders**



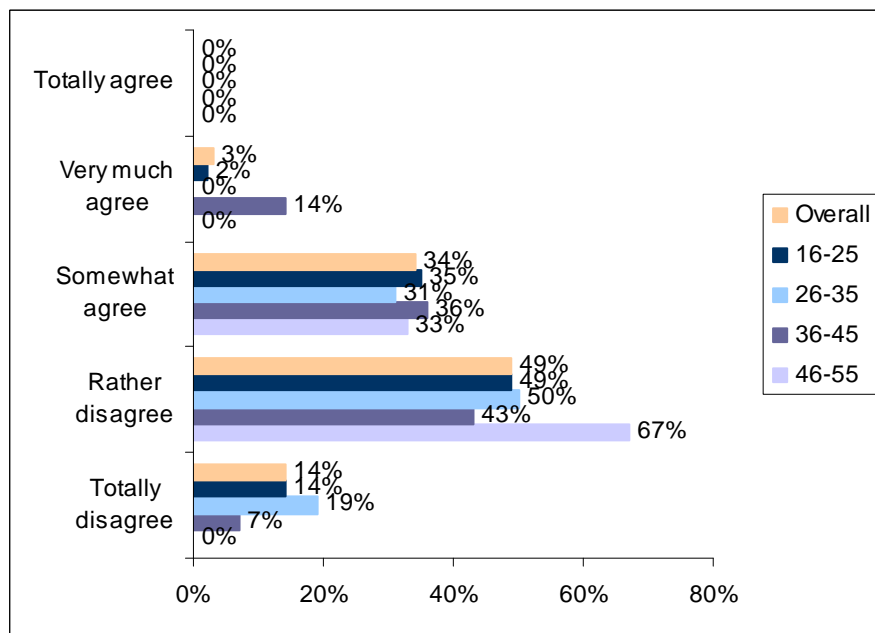
**Figure 43**

**I am ready to travel farther to get access to ethical companies**  
**Linguistic regions**



**Figure 44**

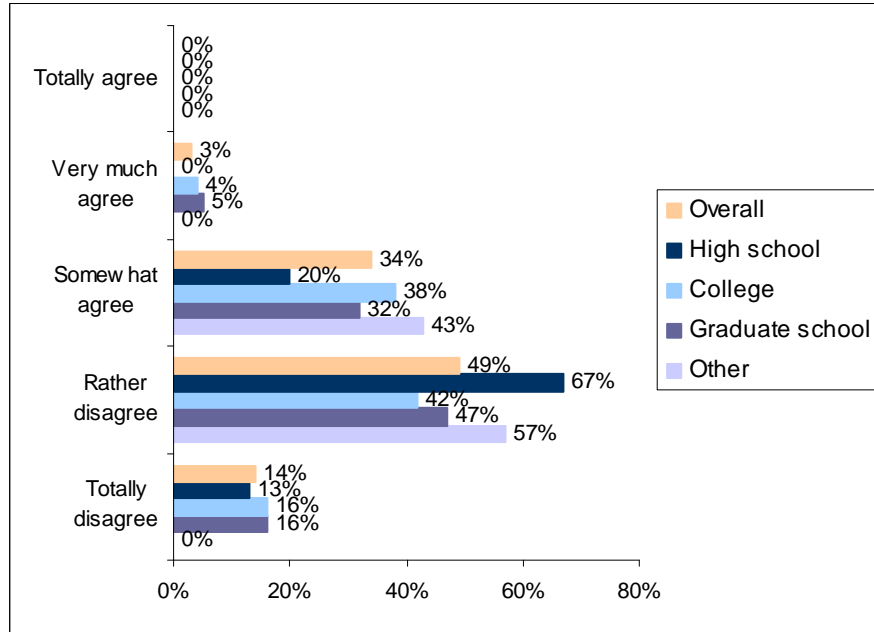
**I am ready to travel farther to get access to ethical companies**  
**Age groups**



**Figure 45**

**I am ready to travel farther to get access to ethical companies**

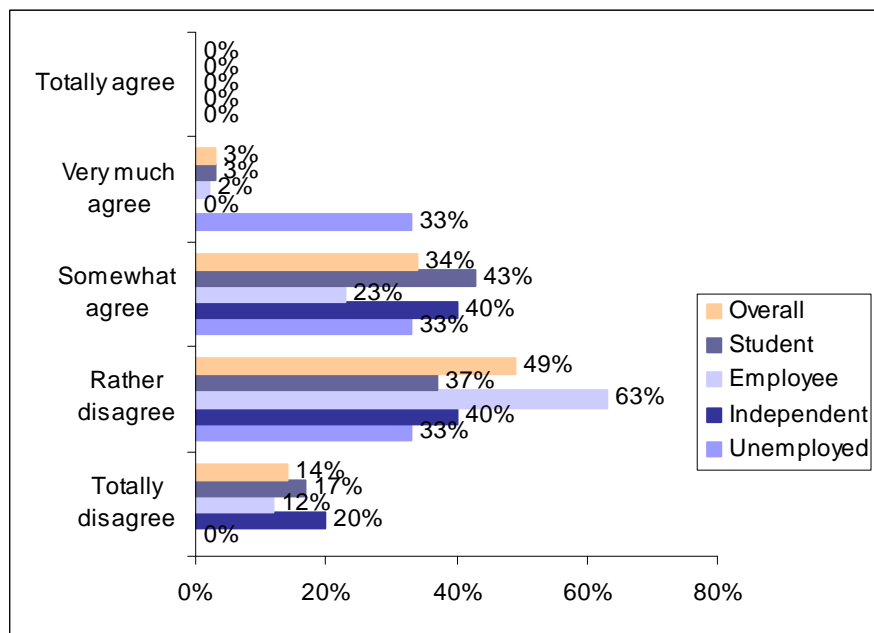
**Education levels**



**Figure 46**

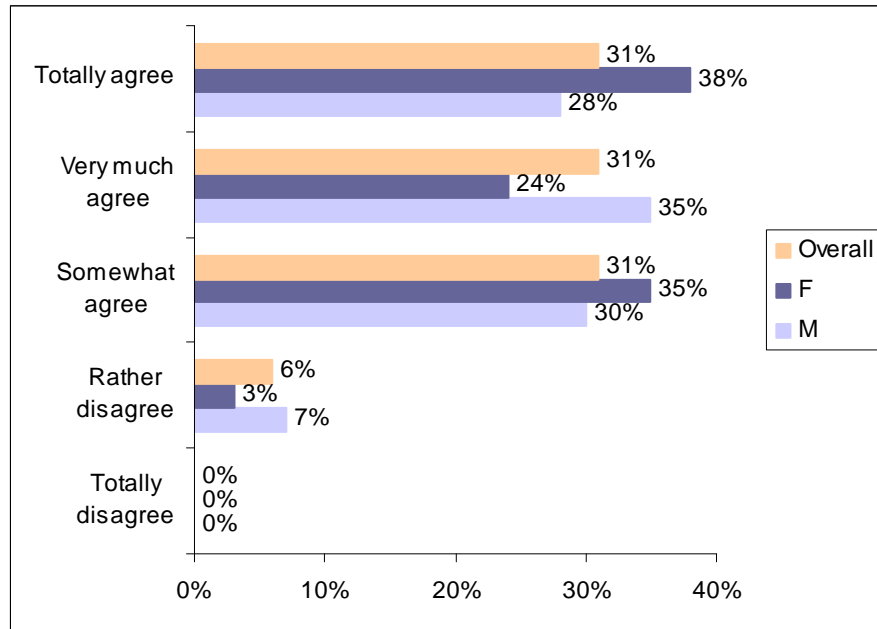
**I am ready to travel farther to get access to ethical companies**

**Occupations**



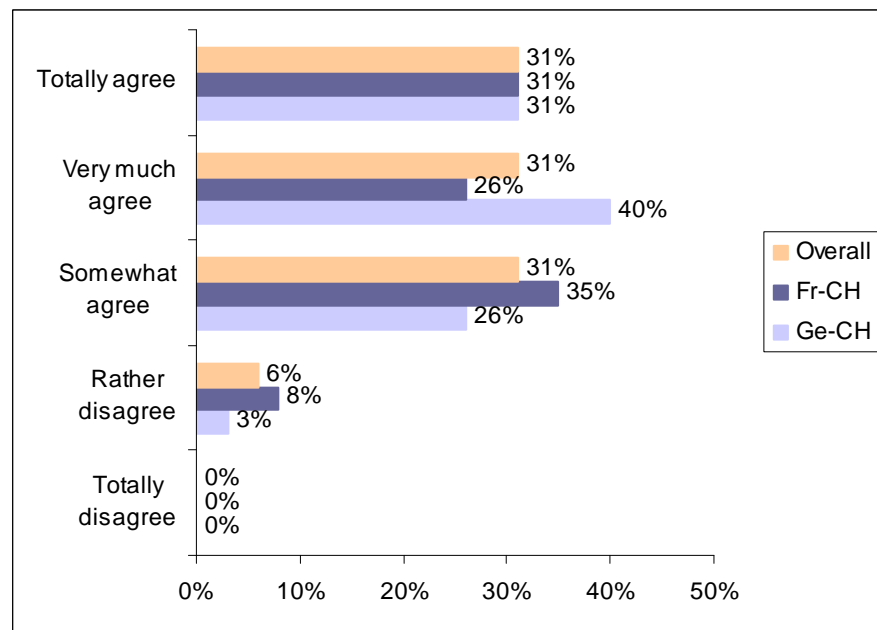
**Figure 47**

**I like ethical companies because I care about the impact of my actions**  
**Genders**



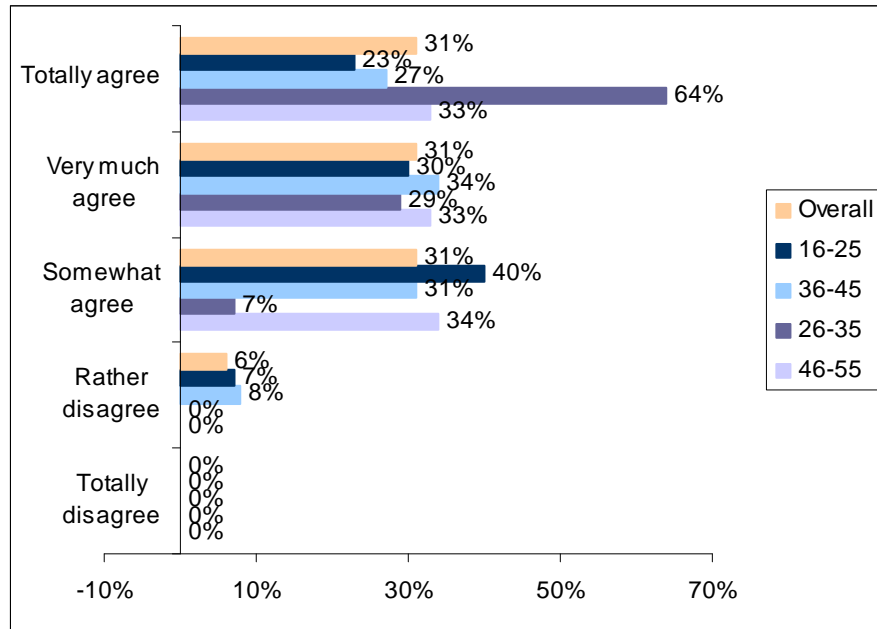
**Figure 48**

**I like ethical companies because I care about the impact of my actions**  
**Linguistic regions**



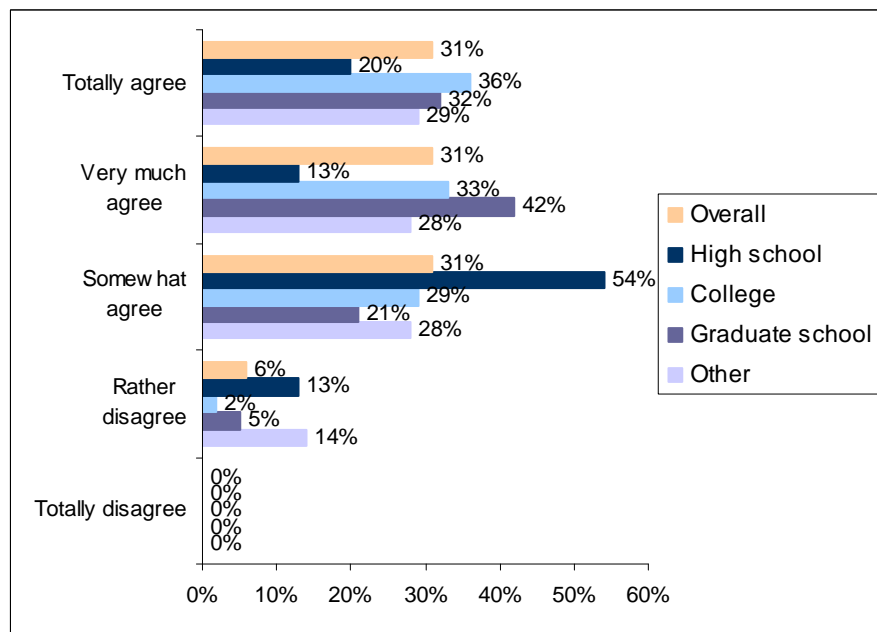
**Figure 49**

**I like ethical companies because I care about the impact of my actions**  
**Age groups**



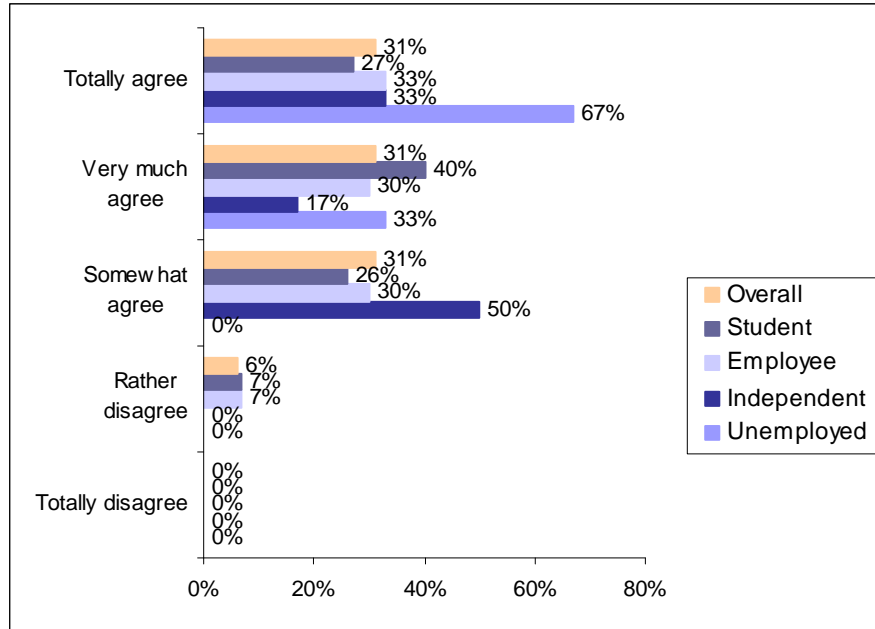
**Figure 50**

**I like ethical companies because I care about the impact of my actions**  
**Education levels**



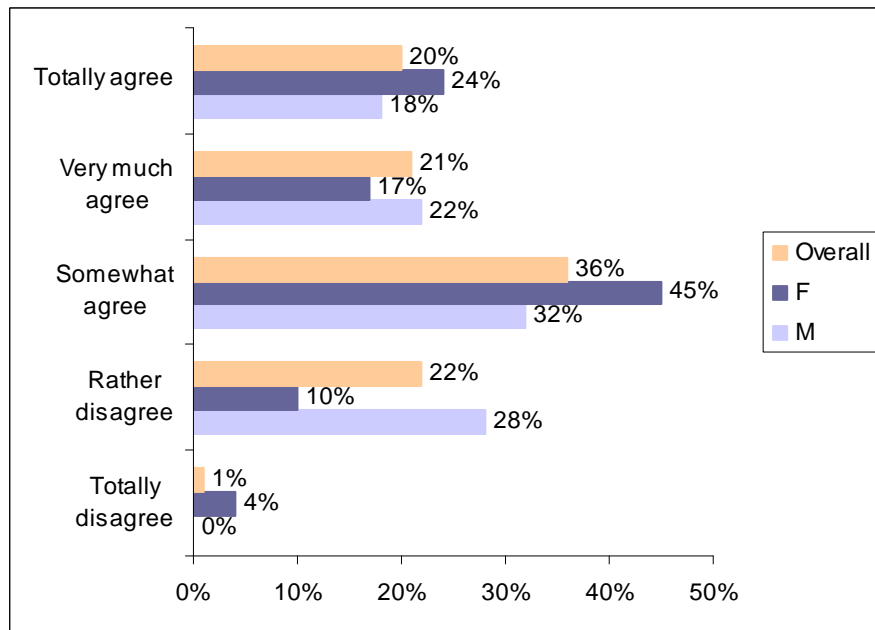
**Figure 51**

**I like ethical companies because I care about the impact of my actions**  
**Occupations**



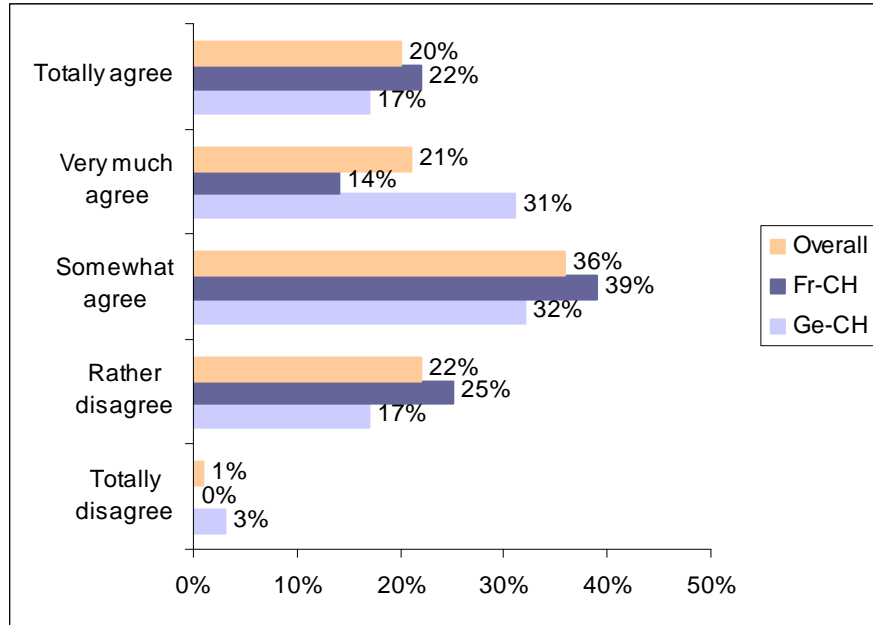
**Figure 52**

**I like ethical companies even though I'm not a fierce defender of ecology**  
**Genders**



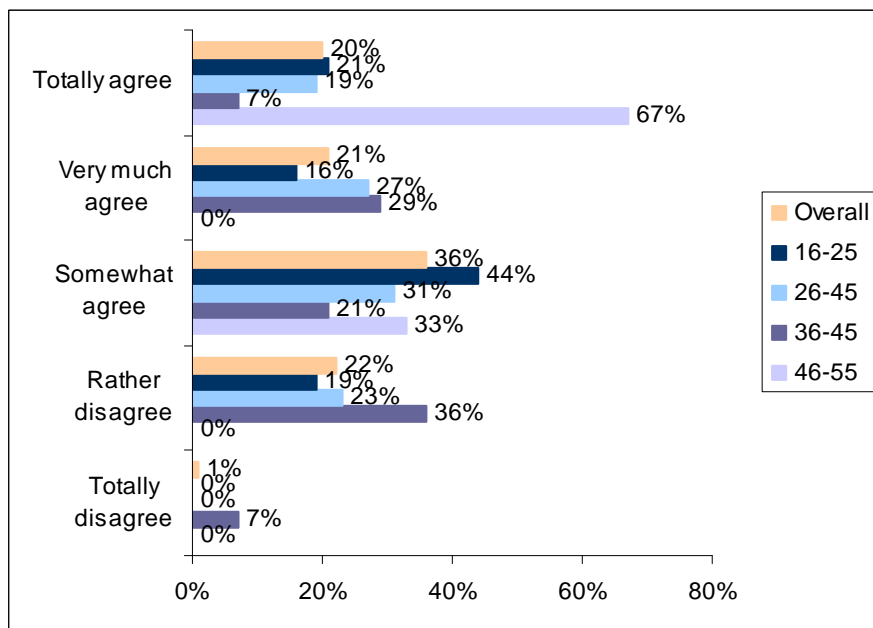
**Figure 53**

**I like ethical companies even though I'm not a fierce defender of ecology**  
**Linguistic regions**



**Figure 54**

**I like ethical companies even though I'm not a fierce defender of ecology**  
**Age groups**

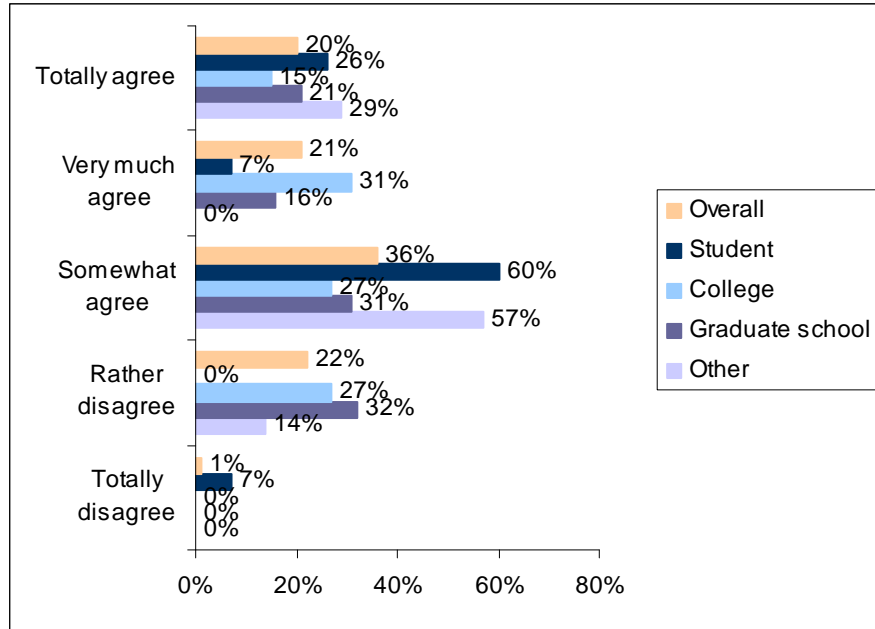




**Figure 55**

**I like ethical companies even though I'm not a fierce defender of ecology**

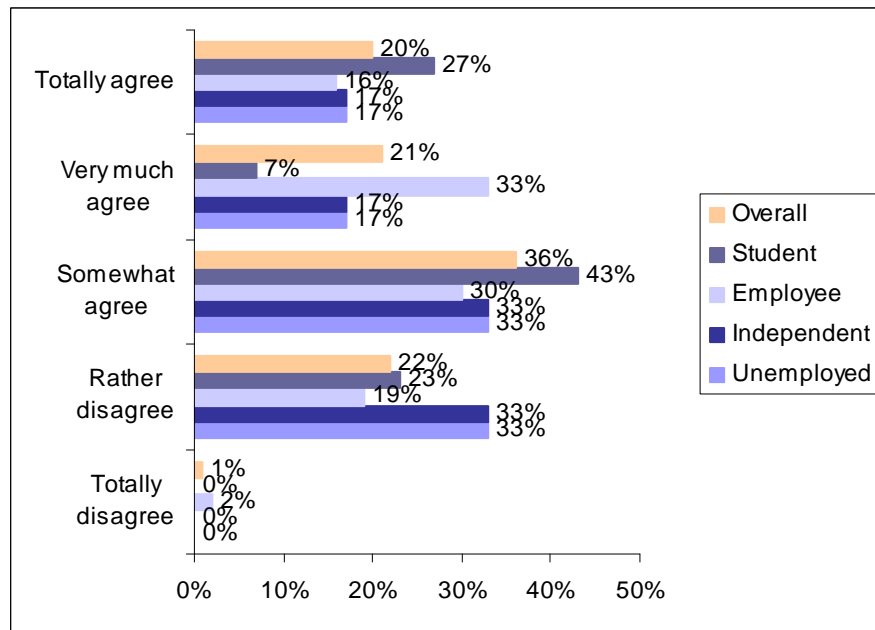
**Education levels**



**Figure 56**

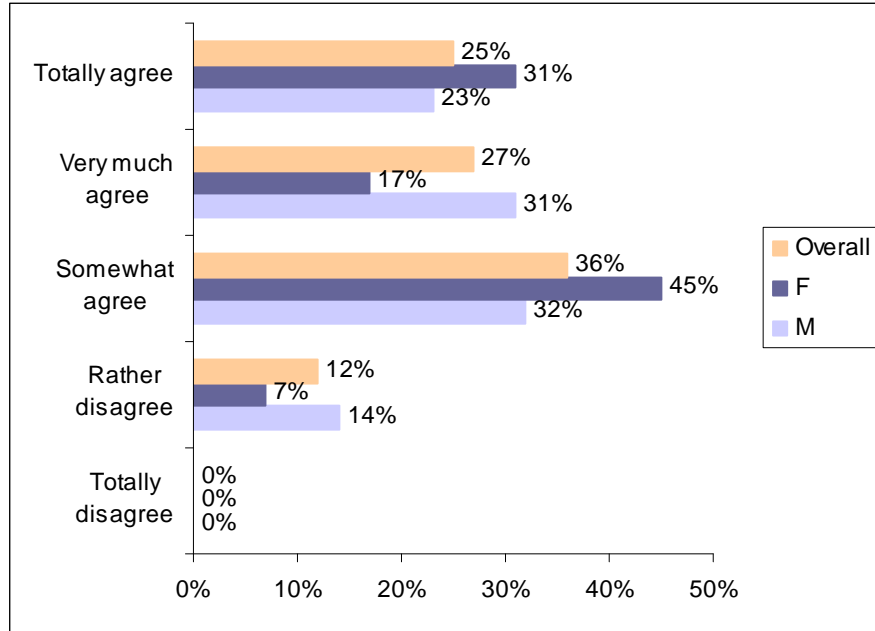
**I like ethical companies even though I'm not a fierce defender of ecology**

**Occupations**



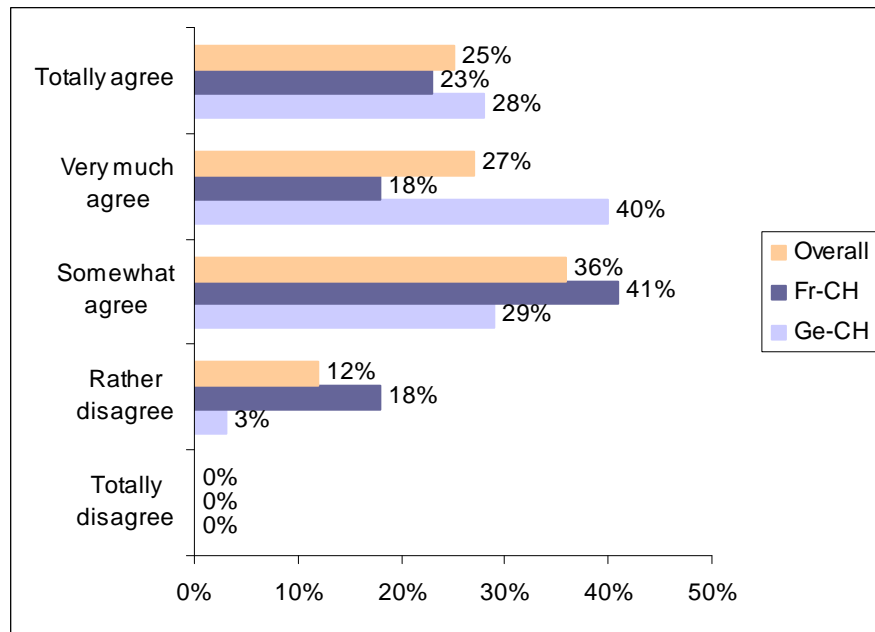
**Figure 57**

**Ethical companies stick to my principles and values better  
Genders**

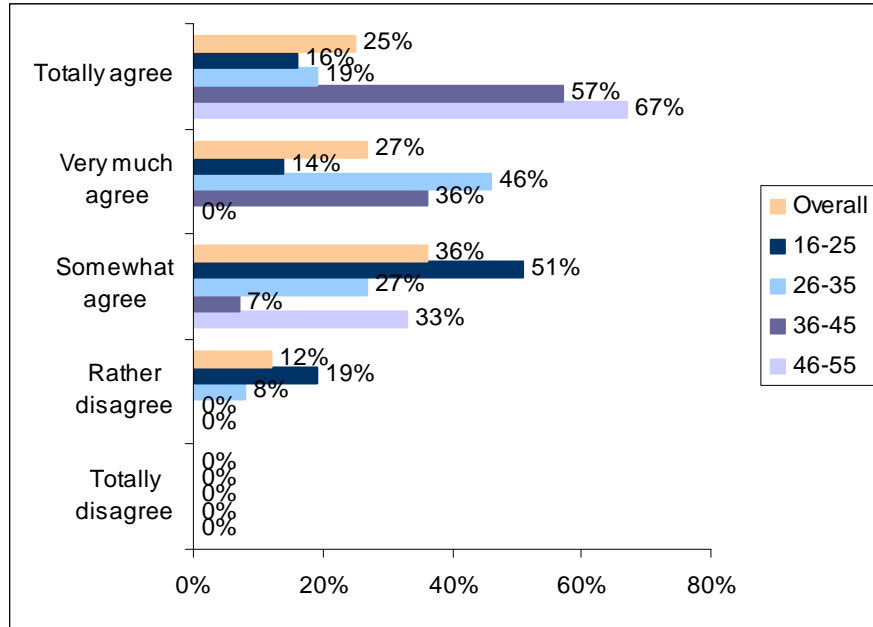


**Figure 58**

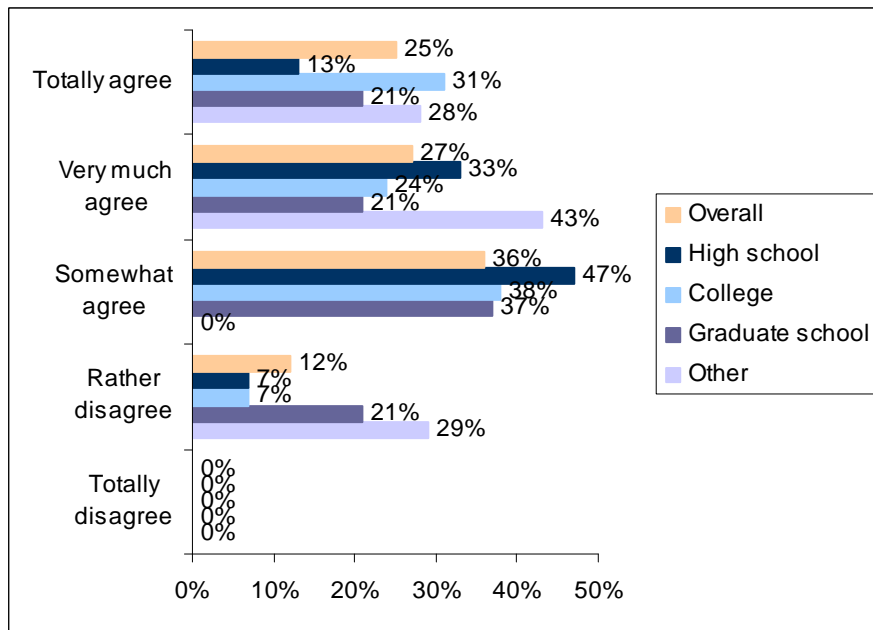
**Ethical companies stick to my principles and values better  
Education levels**



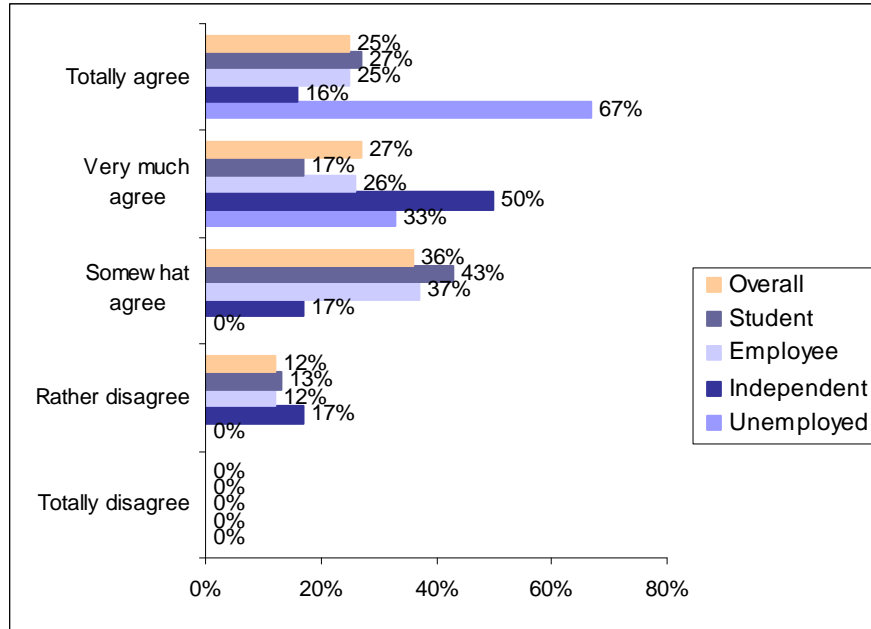
**Figure 59**  
**Ethical companies stick to my principles and values better**  
**Age groups**



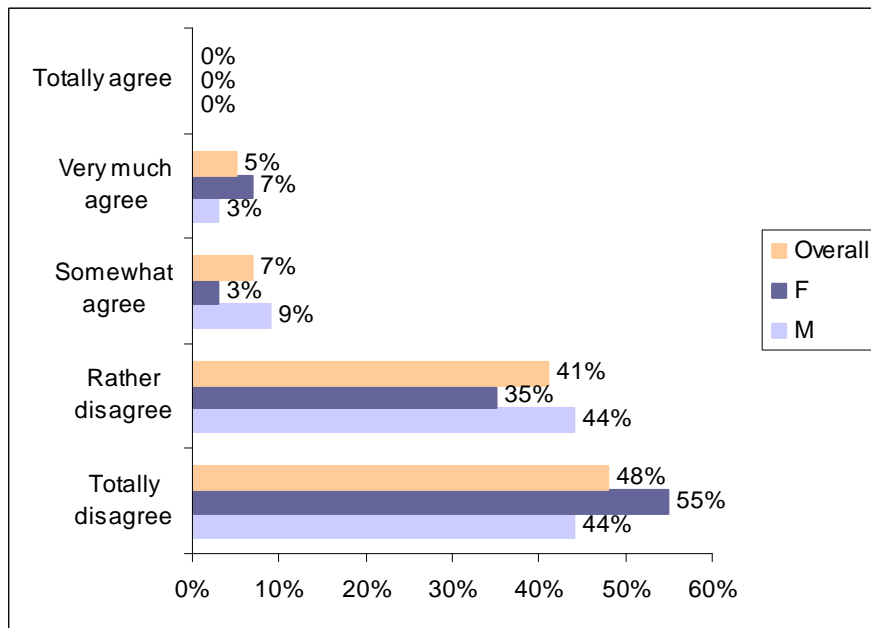
**Figure 60**  
**Ethical companies stick to my principles and values better**  
**Education levels**



**Figure 61**  
**Ethical companies stick to my principles and values better**  
**Occupations**

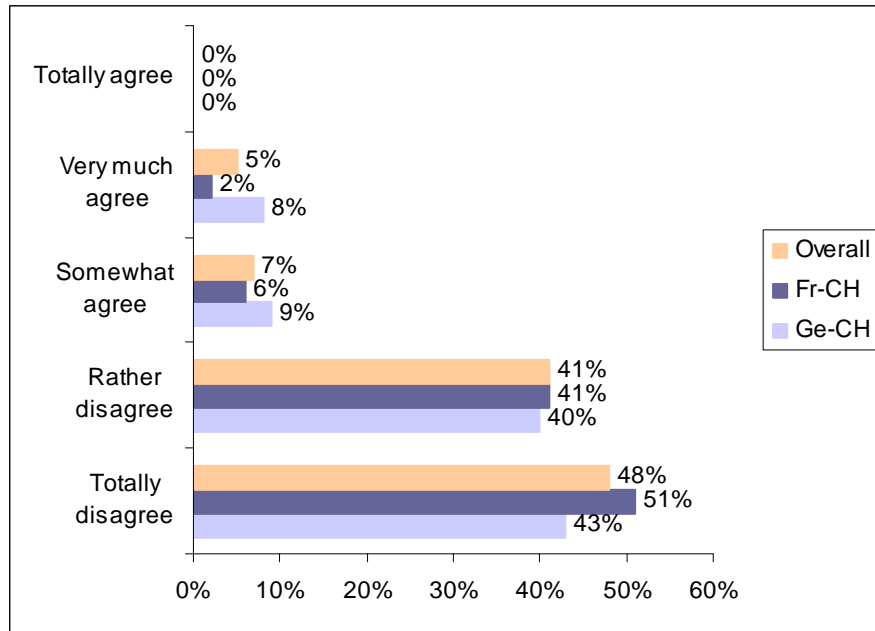


**Figure 62**  
**There is no difference between an ethical company and a classical one**  
**Genders**



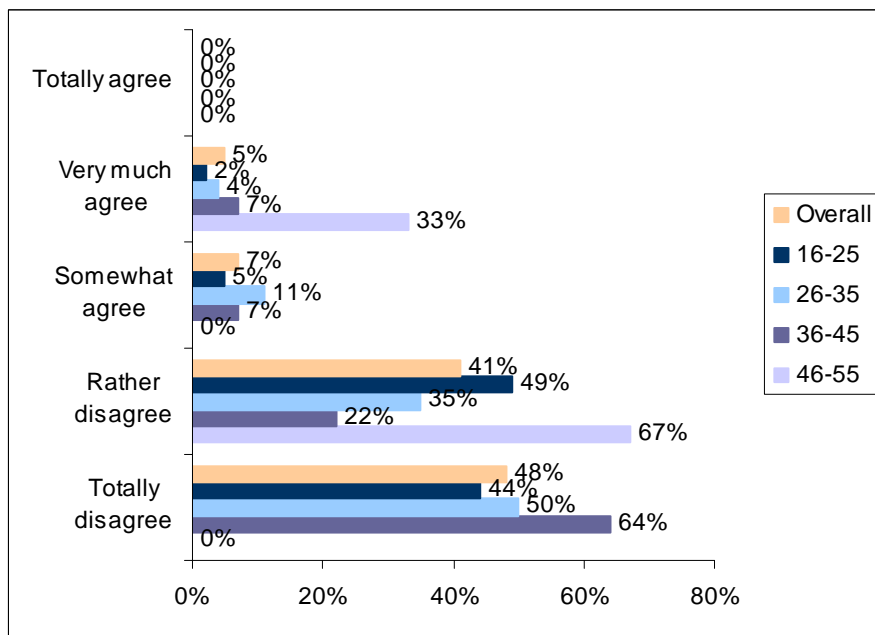
**Figure 63**

**There is no difference between an ethical company and a classical one**  
**Linguistic regions**



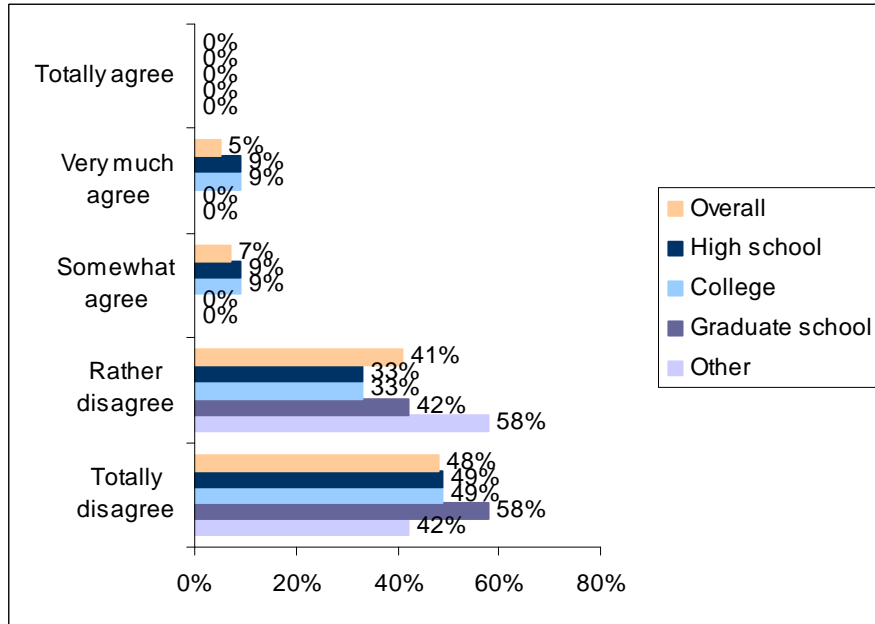
**Figure 64**

**There is no difference between an ethical company and a classical one**  
**Age groups**



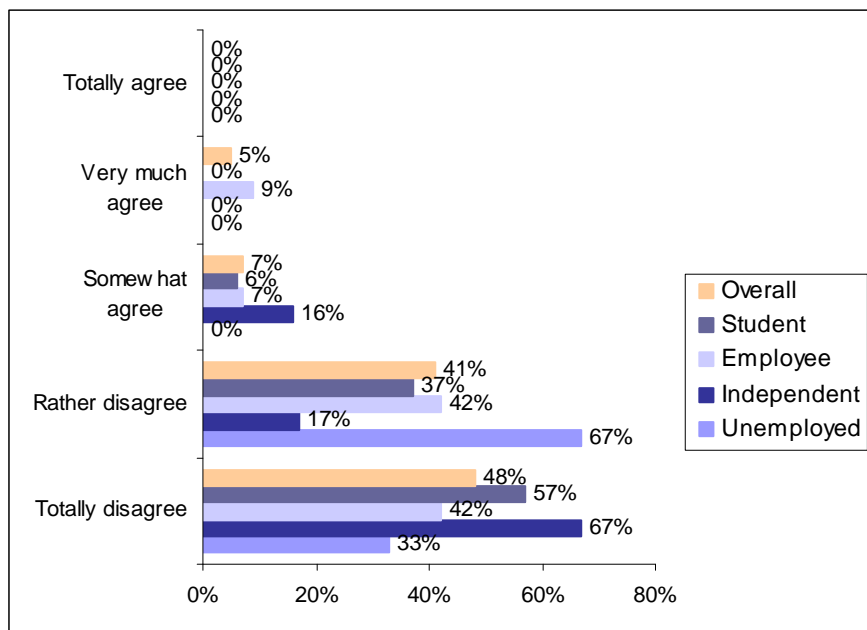
**Figure 65**

**There is no difference between an ethical company and a classical one**  
**Education levels**



**Figure 66**

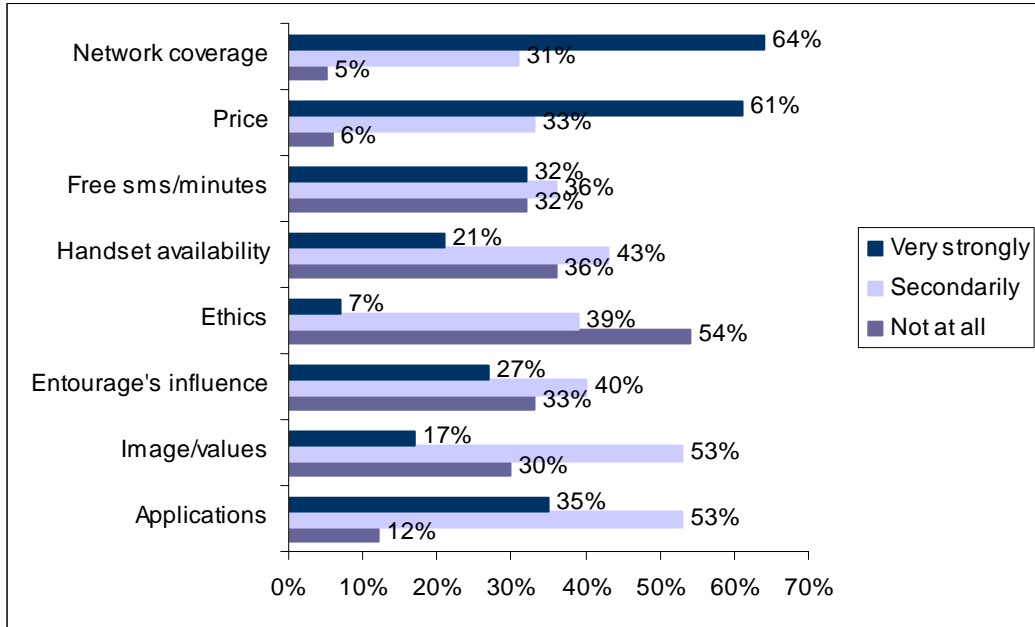
**There is no difference between an ethical company and a classical one**  
**Occupations**



**Figure 67**

**How did you consider these factors when choosing your operator?**

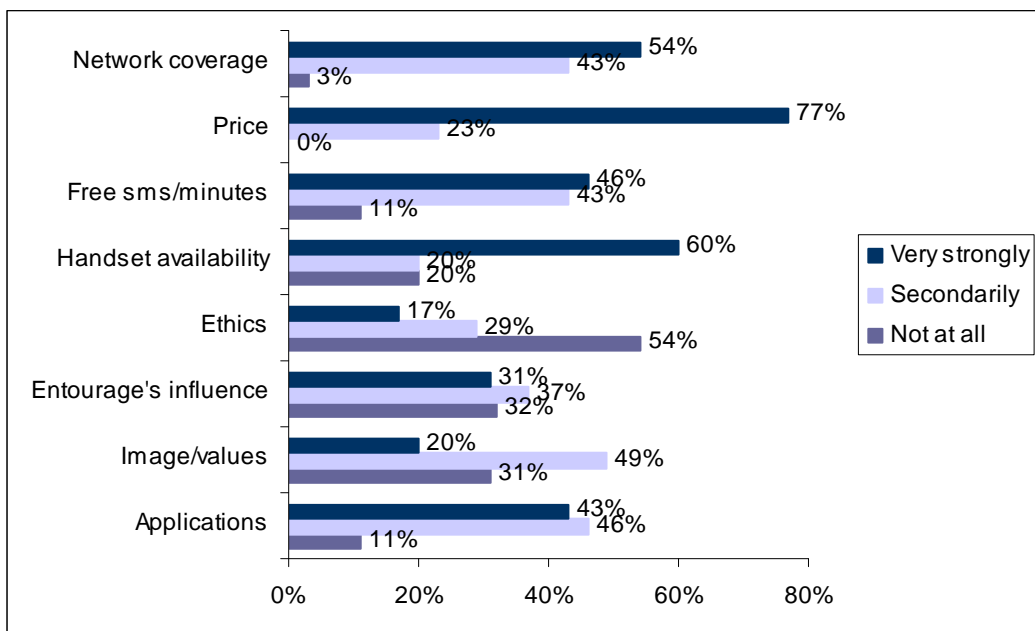
**Men**



**Figure 68**

**How did you consider these factors when choosing your operator?**

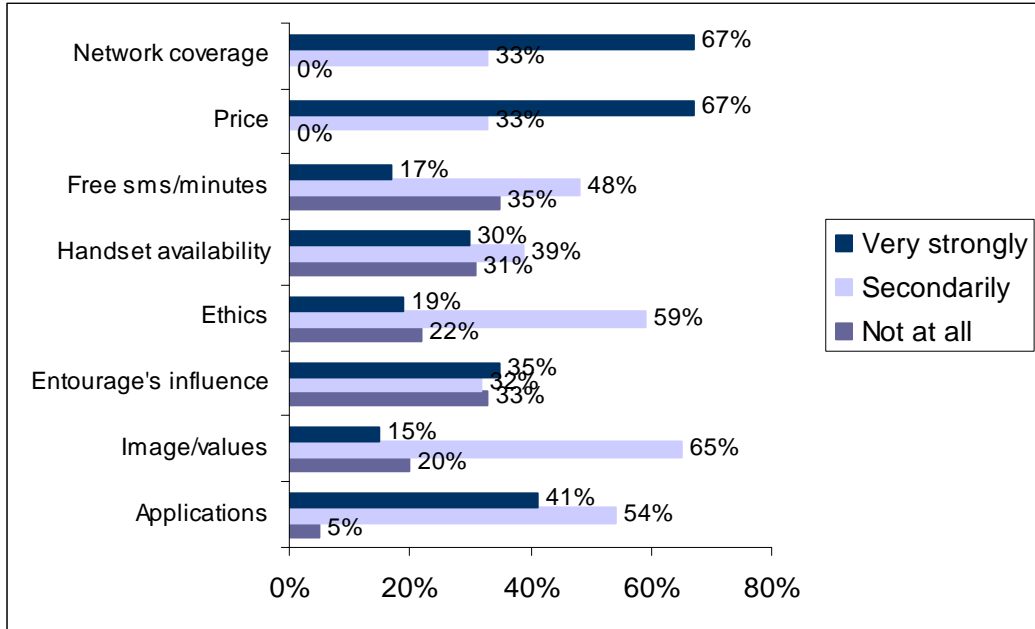
**Women**



**Figure 69**

**How did you consider these factors when choosing your operator?**

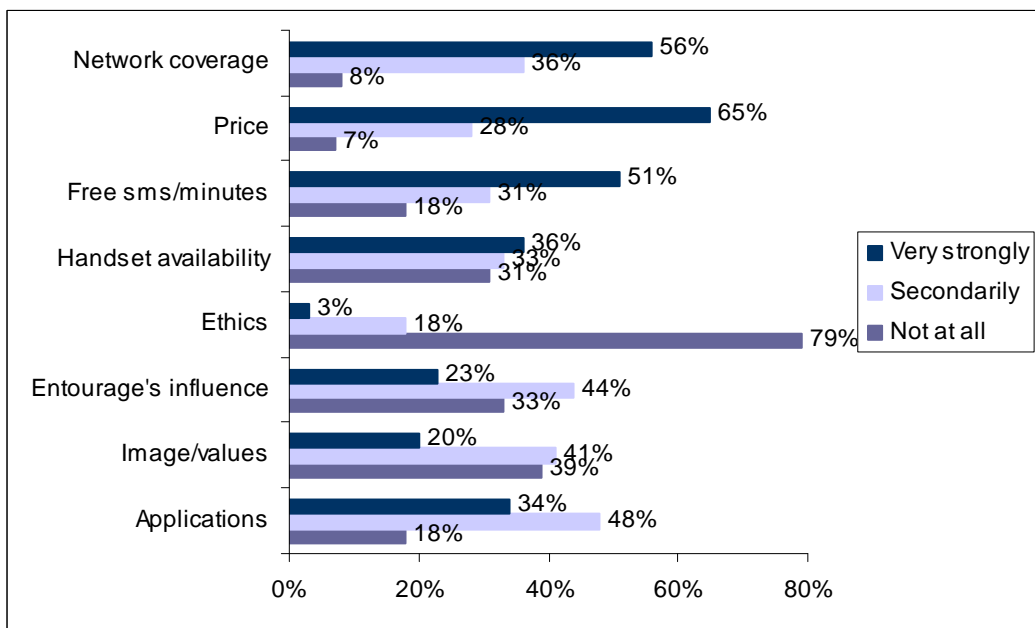
**Swiss German**



**Figure 70**

**How did you consider these factors when choosing your operator?**

**Swiss French**

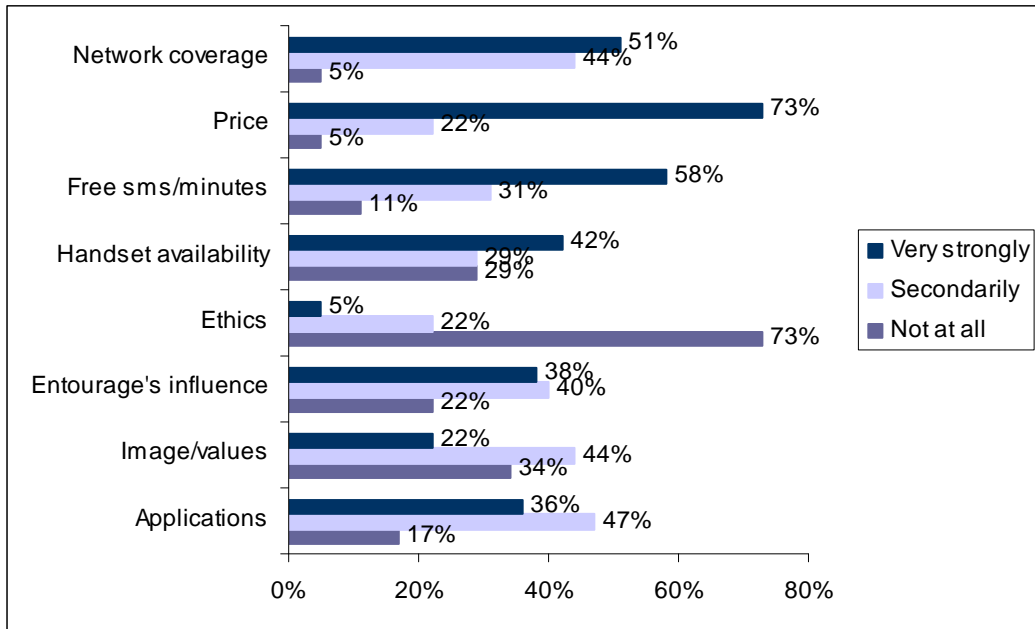




**Figure 71**

**How did you consider these factors when choosing your operator?**

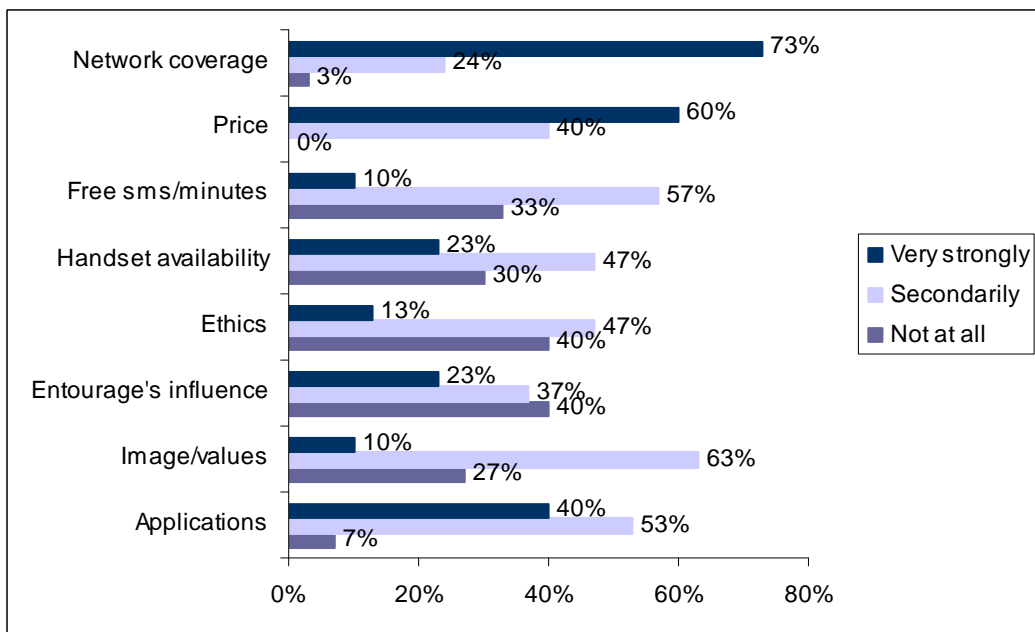
**16-25**



**Figure 72**

**How did you consider these factors when choosing your operator?**

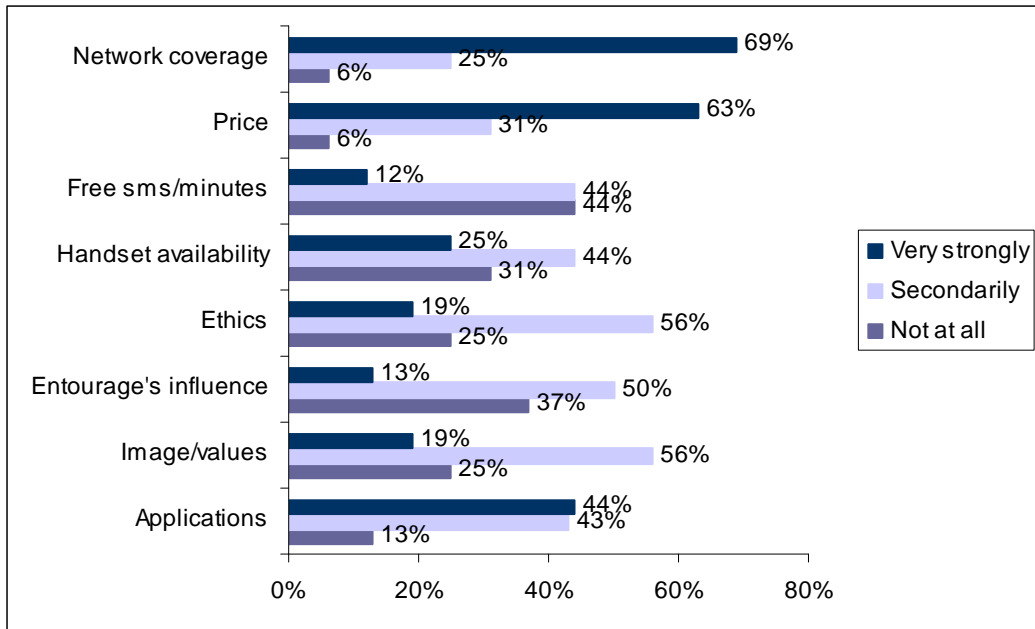
**26-35**



**Figure 73**

**How did you consider these factors when choosing your operator?**

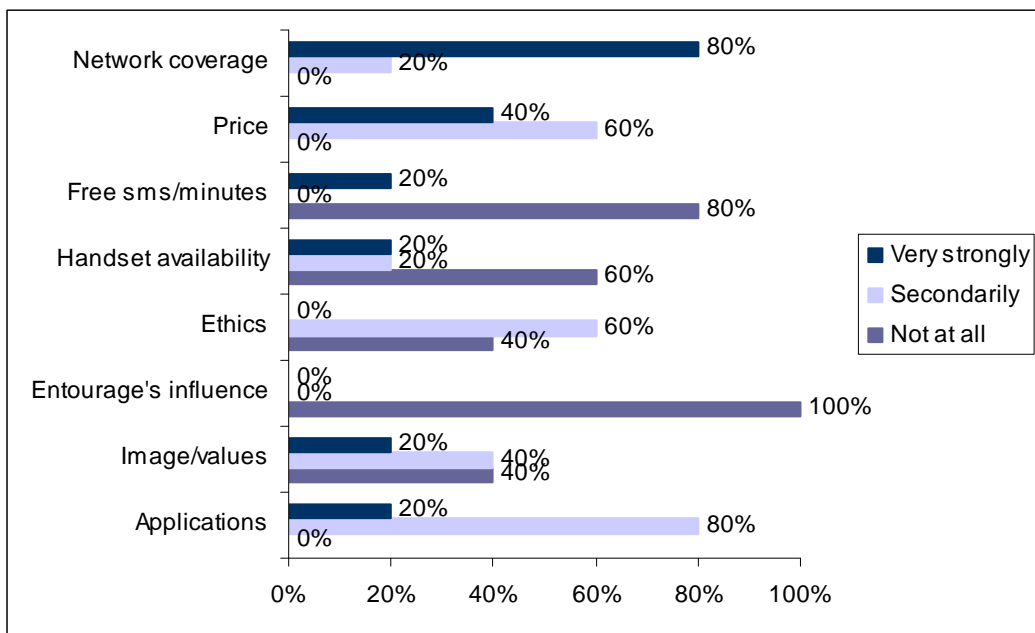
**36-45**



**Figure 74**

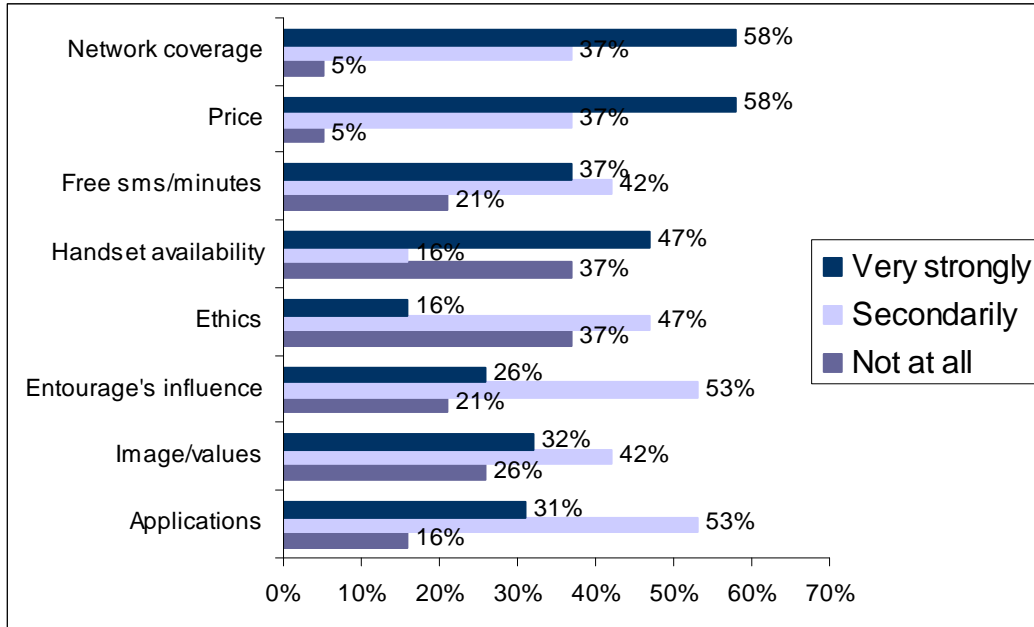
**How did you consider these factors when choosing your operator?**

**46-55**



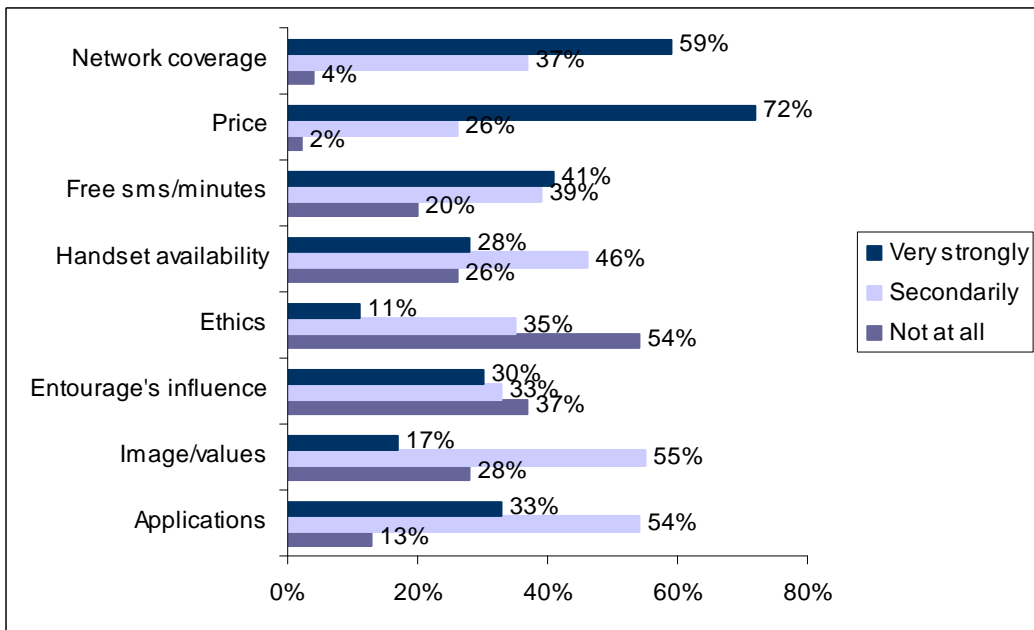
**Figure 75**

**How did you consider these factors when choosing your operator?  
High school**



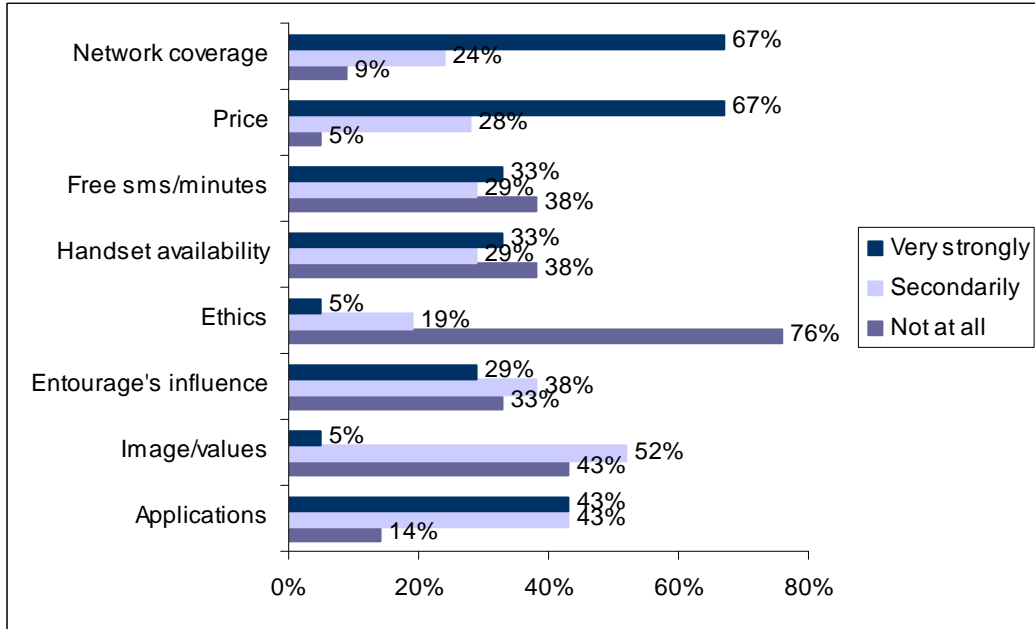
**Figure 76**

**How did you consider these factors when choosing your operator?  
College**



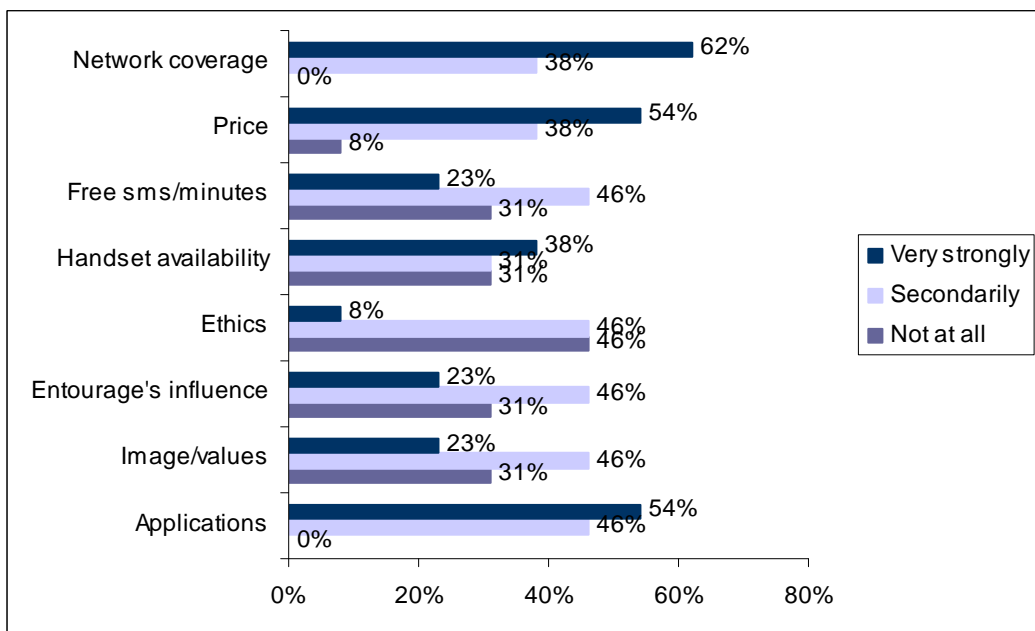
**Figure 77**

**How did you consider these factors when choosing your operator?  
Graduate school**



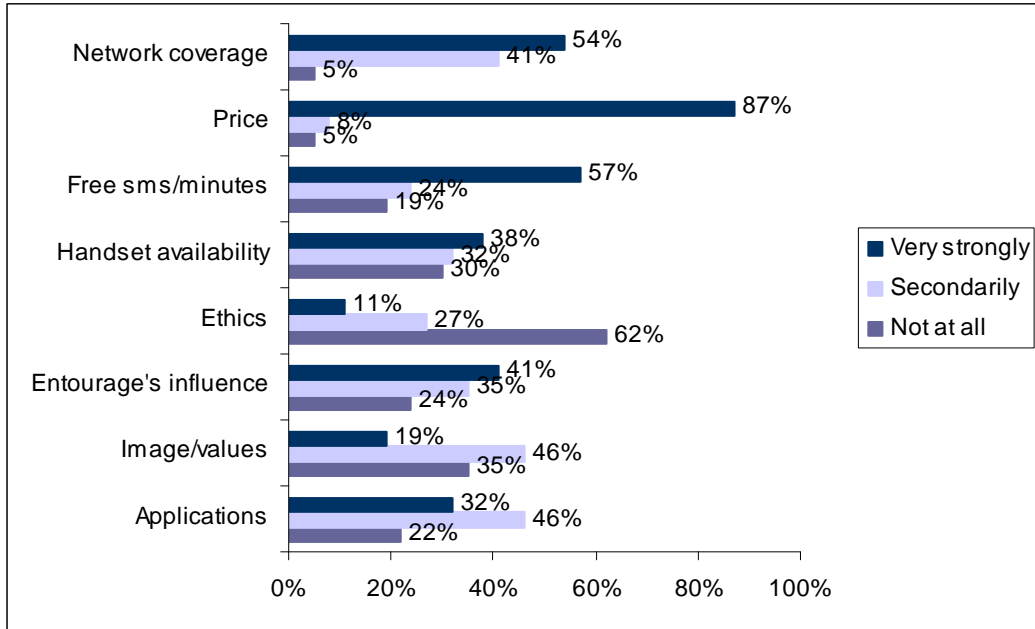
**Figure 78**

**How did you consider these factors when choosing your operator?  
Other**



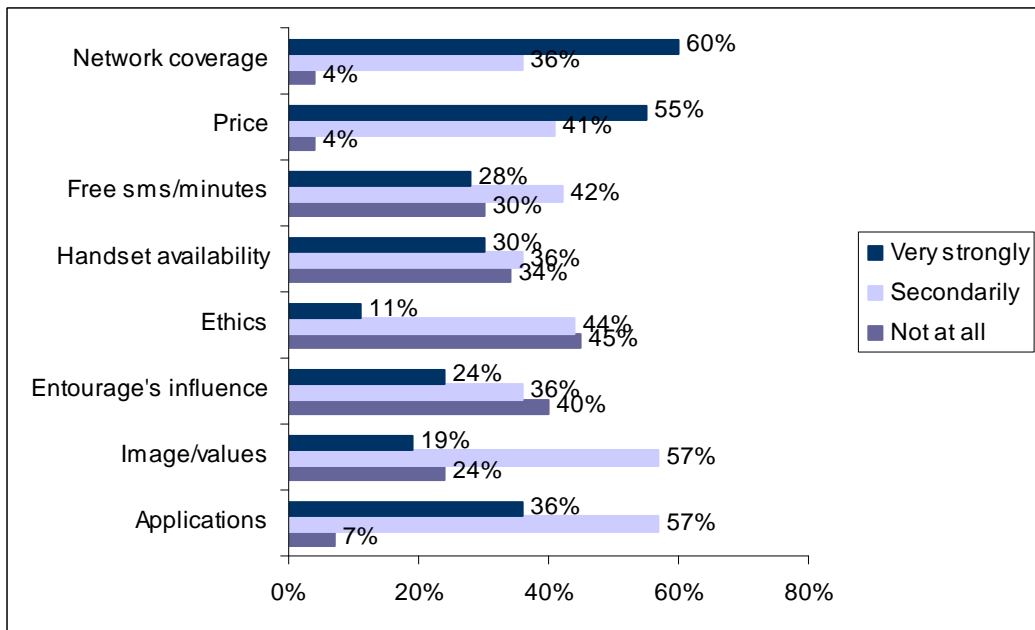
**Figure 79**

**How did you consider these factors when choosing your operator?  
Students**



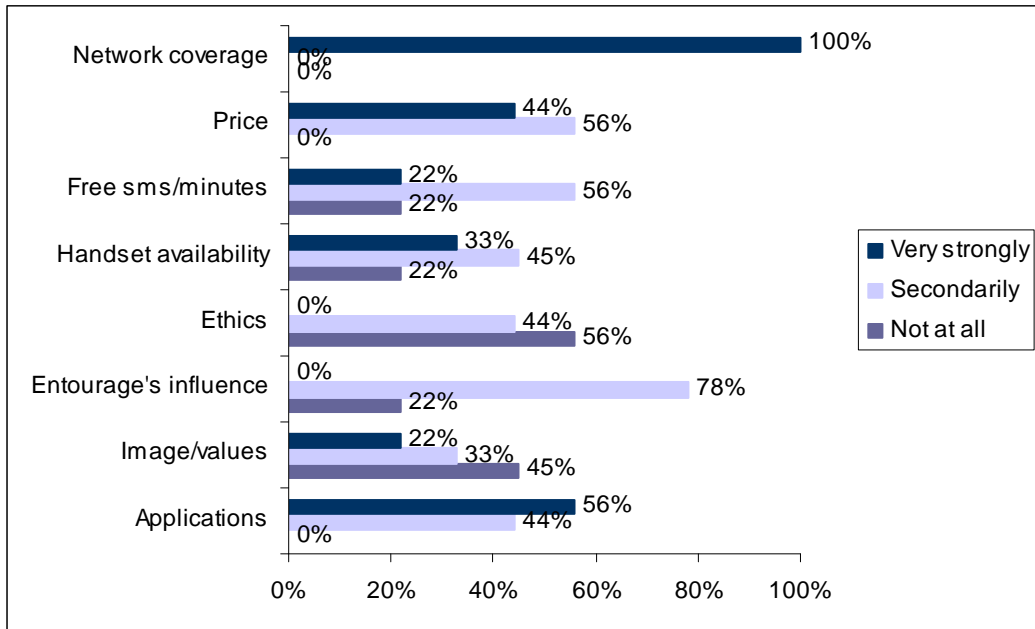
**Figure 80**

**How did you consider these factors when choosing your operator?  
Employees**



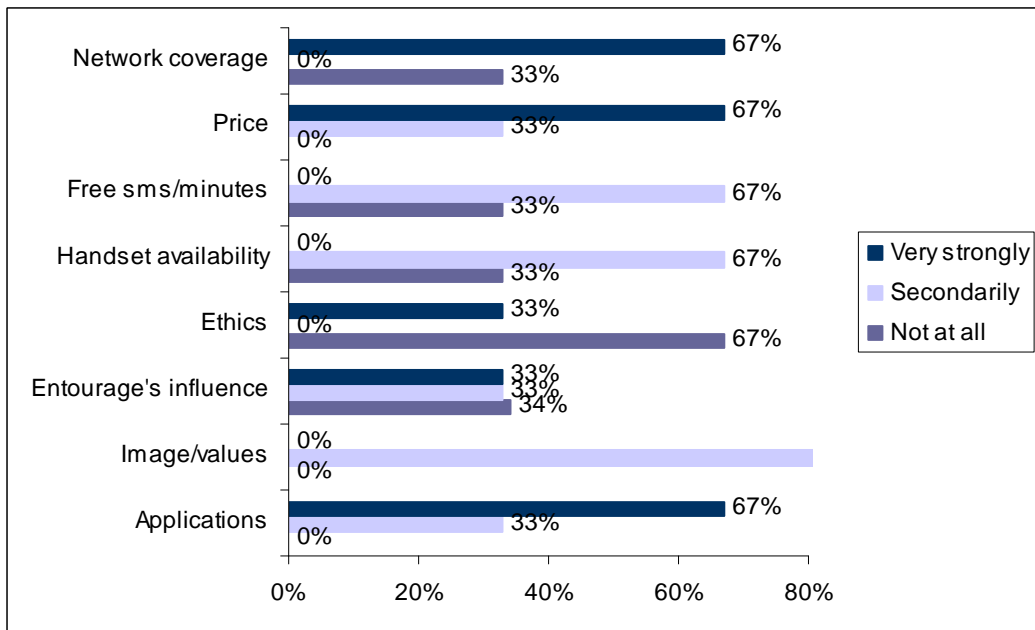
**Figure 81**

**How did you consider these factors when choosing your operator?  
Independent**

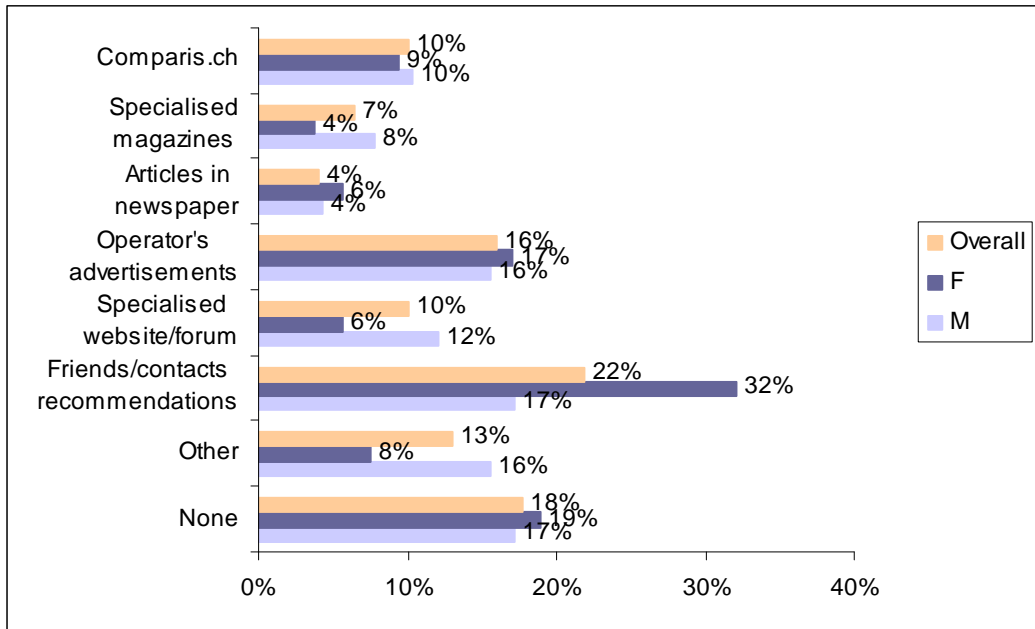


**Figure 82**

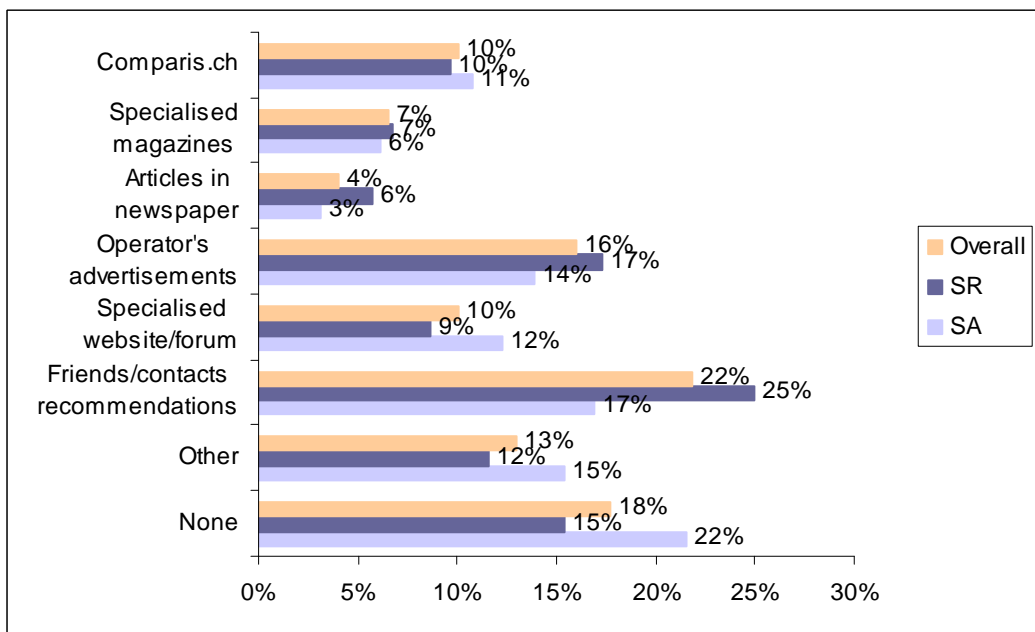
**How did you consider these factors when choosing your operator?  
Unemployed**



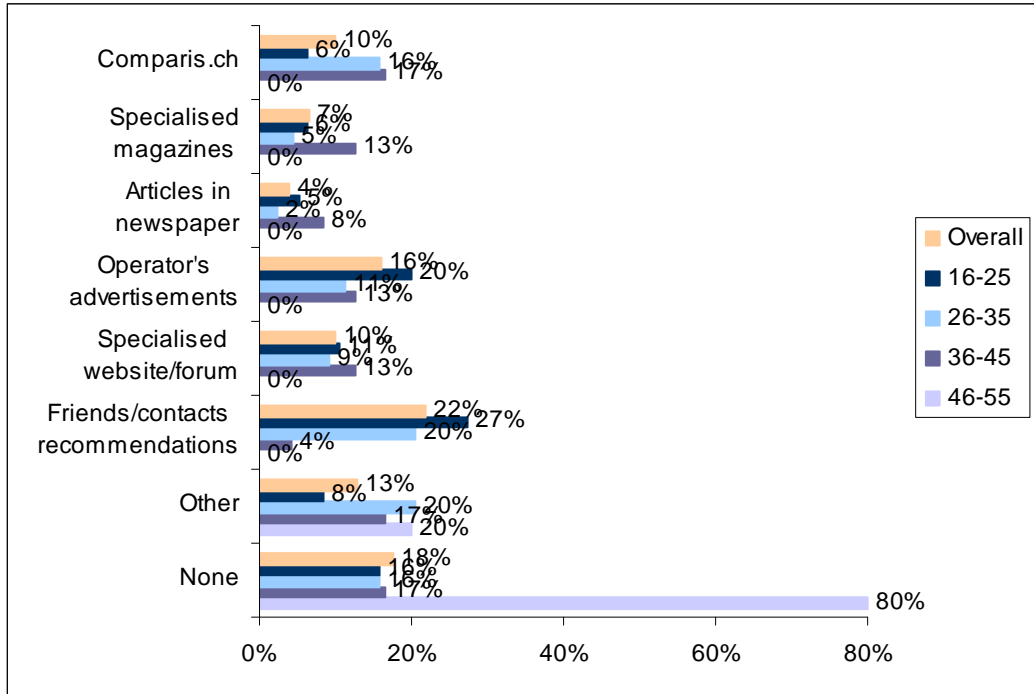
**Figure 83**  
**What means of comparison did you use?**  
**Genders**



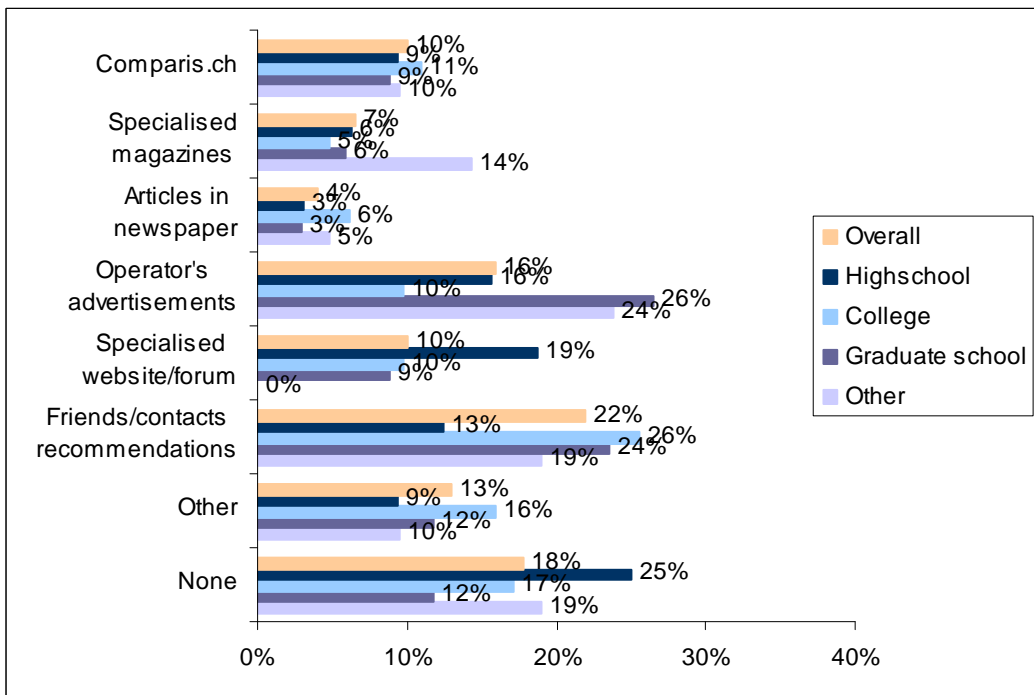
**Figure 84**  
**What means of comparison did you use?**  
**Linguistic regions**



**Figure 85**  
**What means of comparison did you use?**  
**Age groups**

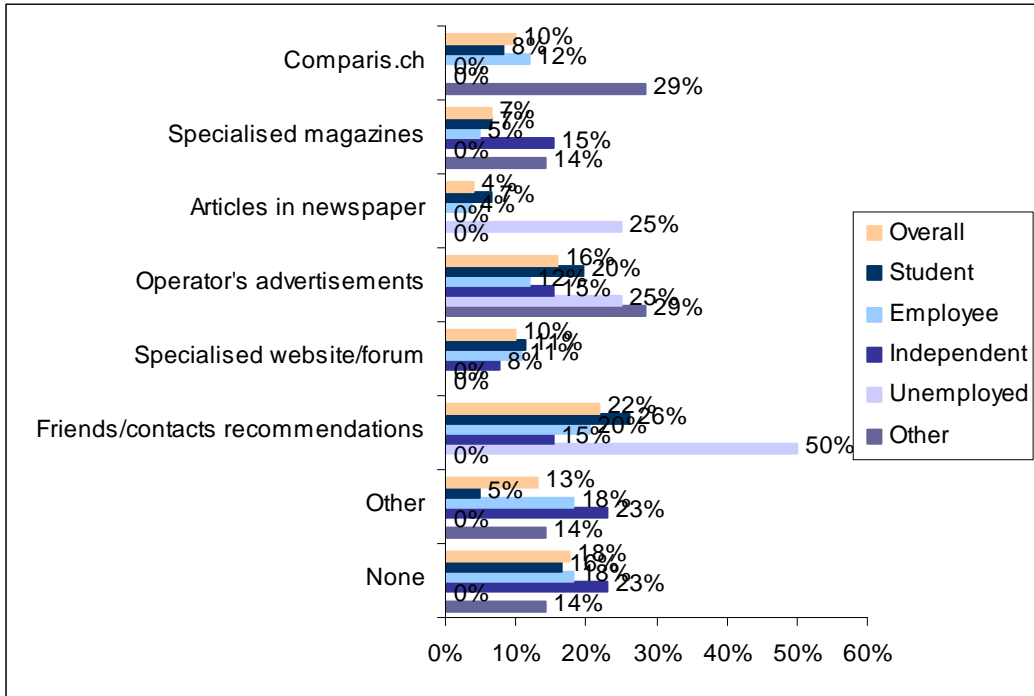


**Figure 86**  
**What means of comparison did you use?**  
**Education levels**

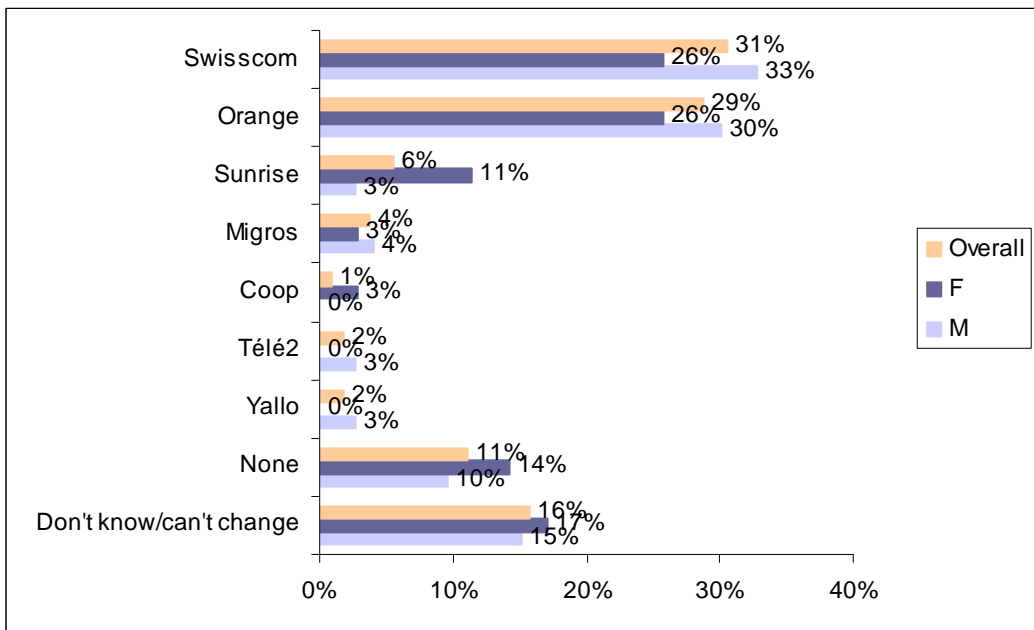




**Figure 87**  
**What means of comparison did you use?**  
**Occupations**

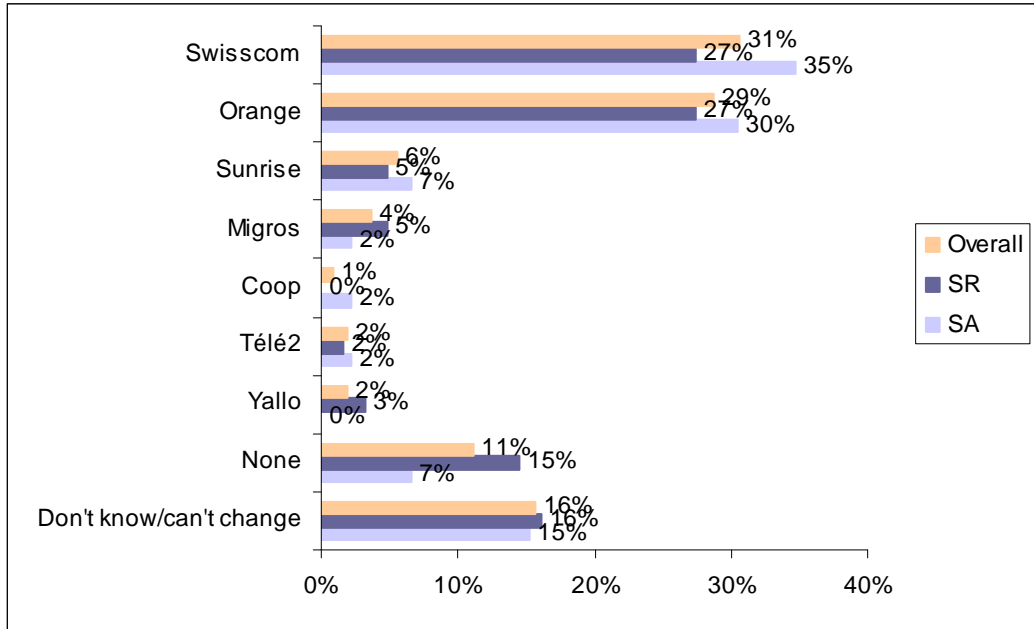


**Figure 88**  
**If you had to change your operator, who would you go for?**  
**Genders**



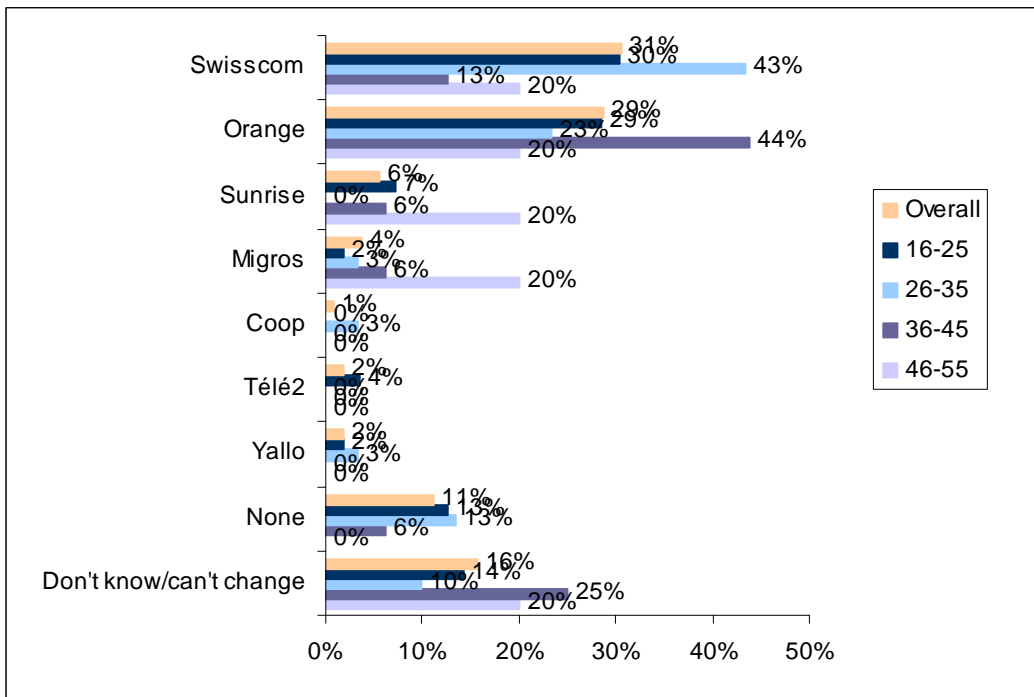
**Figure 89**

**If you had to change your operator, who would you go for?**  
**Linguistic regions**



**Figure 90**

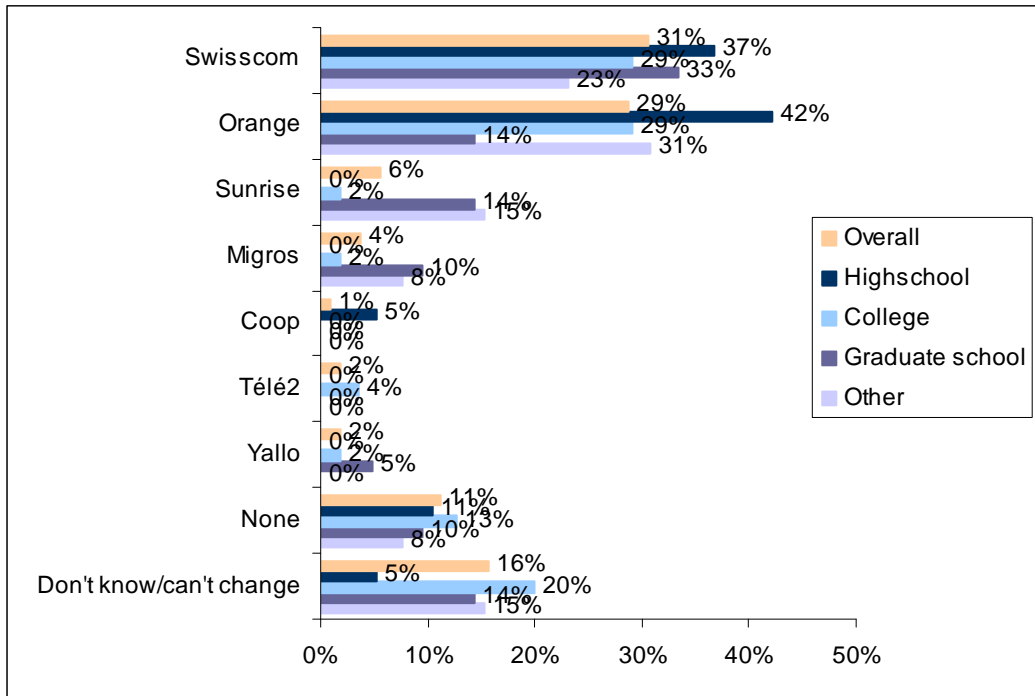
**If you had to change your operator, who would you go for?**  
**Age groups**



**Figure 91**

**If you had to change your operator, who would you go for?**

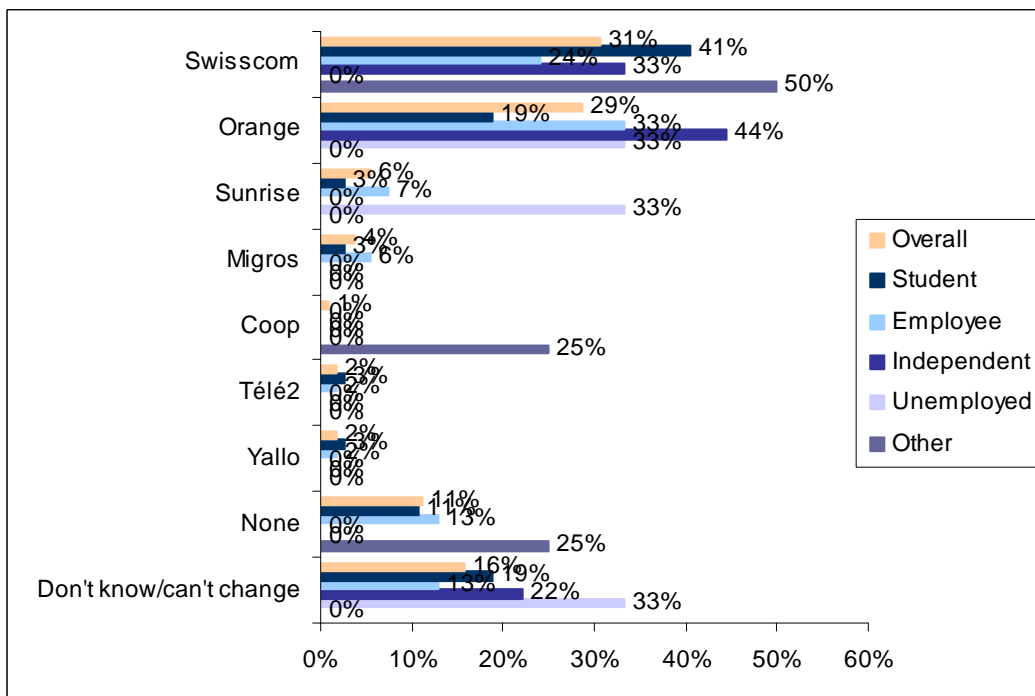
**Education levels**



**Figure 92**

**If you had to change your operator, who would you go for?**

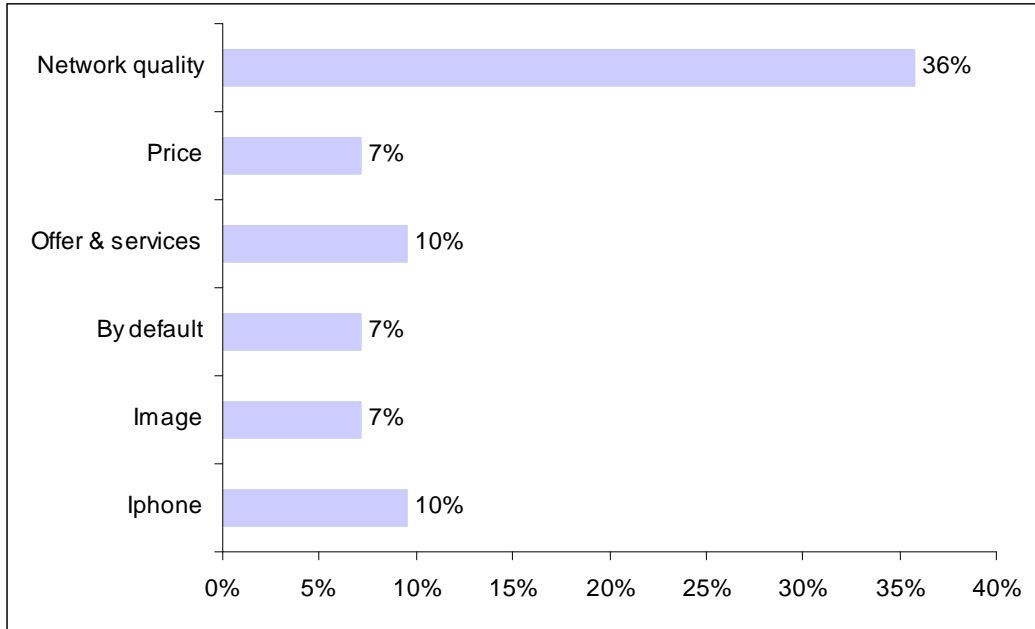
**Occupations**



**Figure 93**

**If you had to change your operator, who would you go for?**

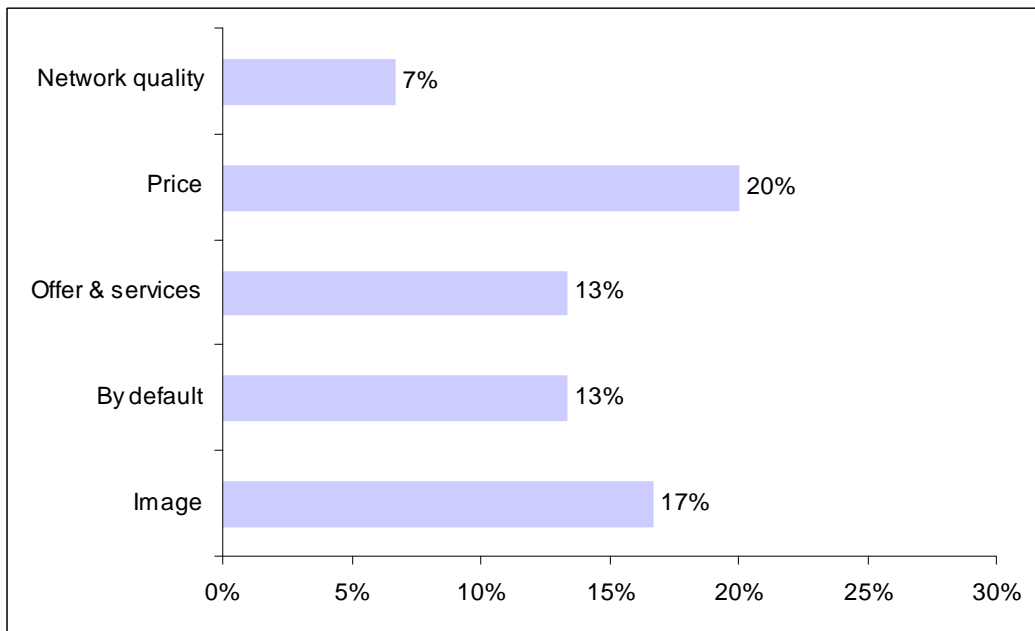
**Swisscom**



**Figure 94**

**If you had to change your operator, who would you go for?**

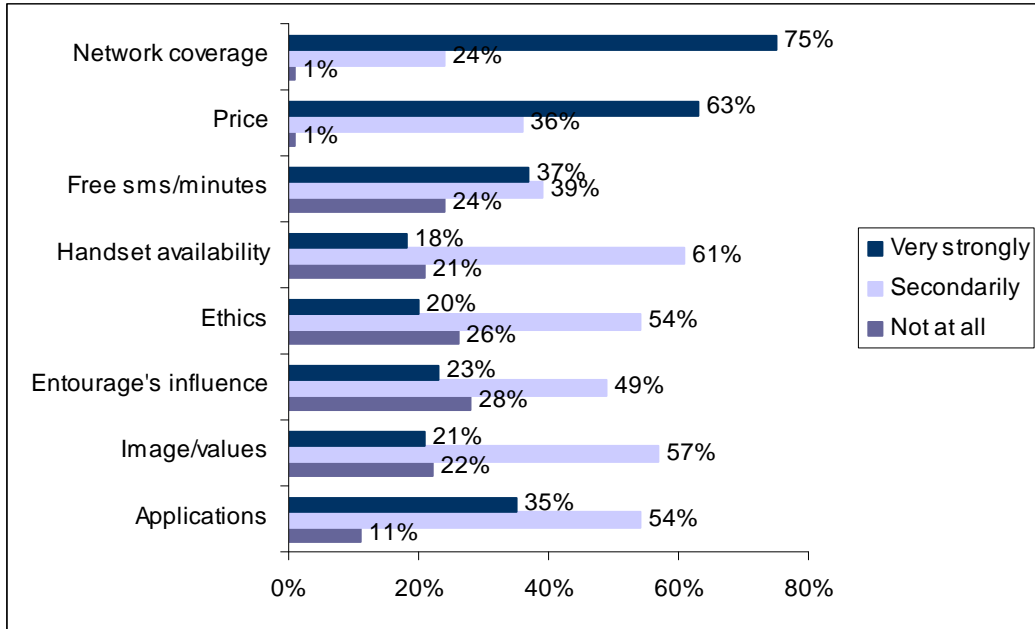
**Orange**



**Figure 95**

**How would you consider these elements when making your choice?**

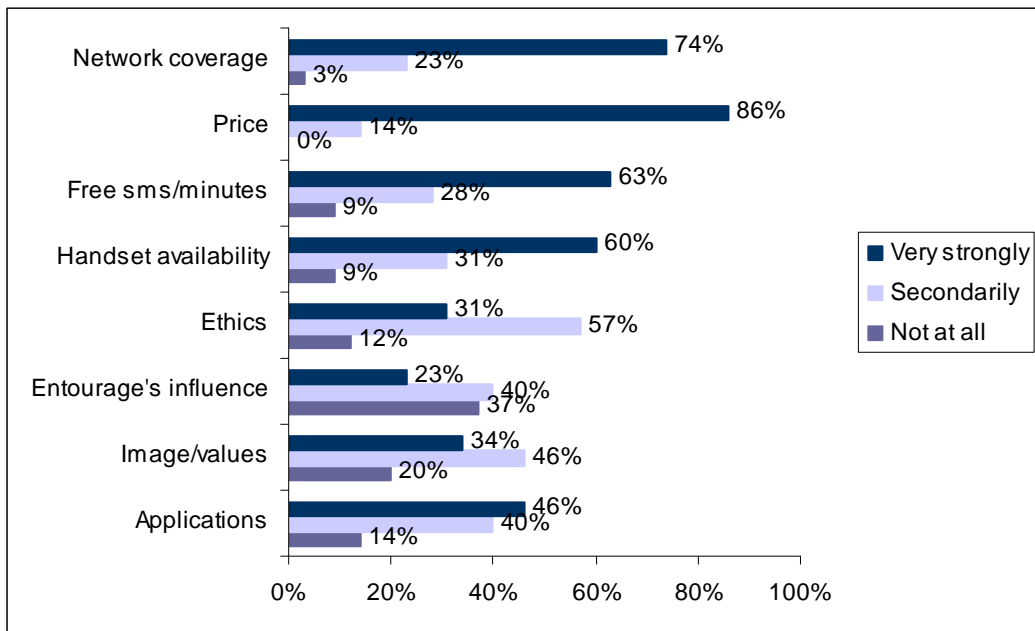
**Men**



**Figure 96**

**How would you consider these elements when making your choice?**

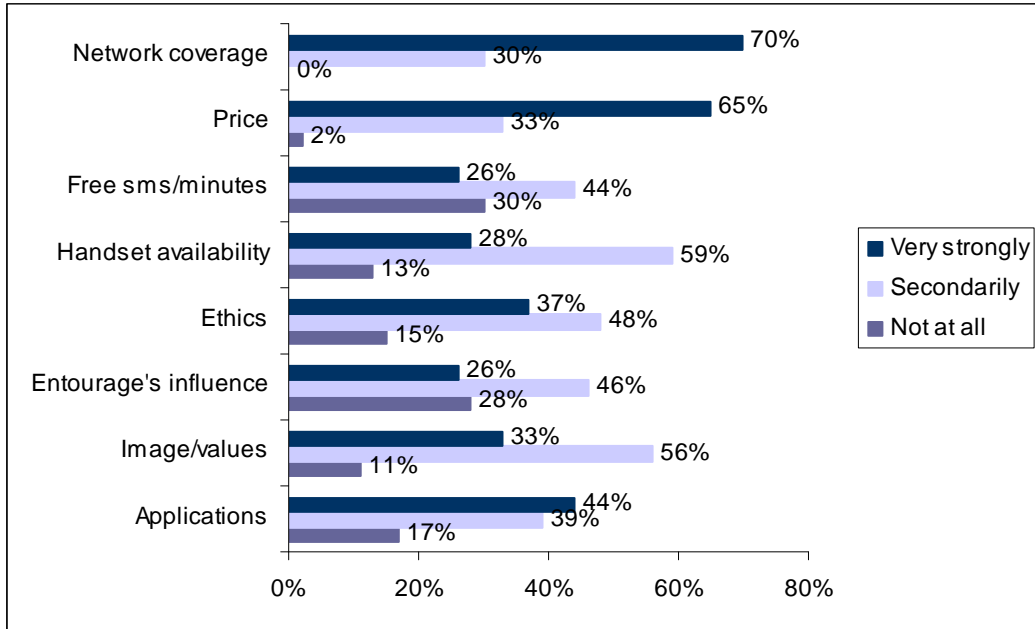
**Women**



**Figure 97**

**How would you consider these elements when making your choice?**

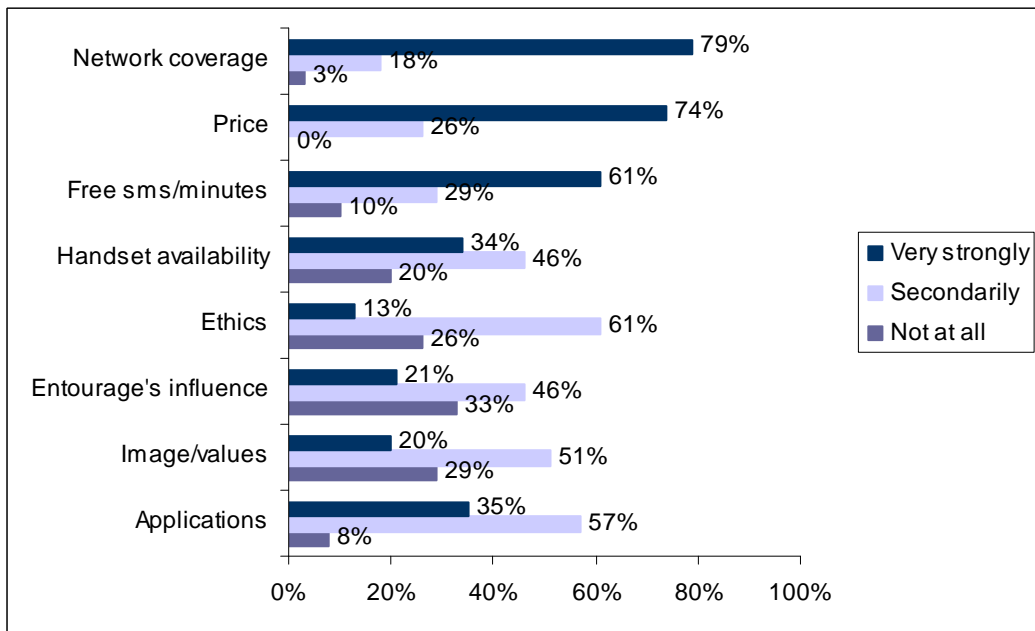
**Swiss German**



**Figure 98**

**How would you consider these elements when making your choice?**

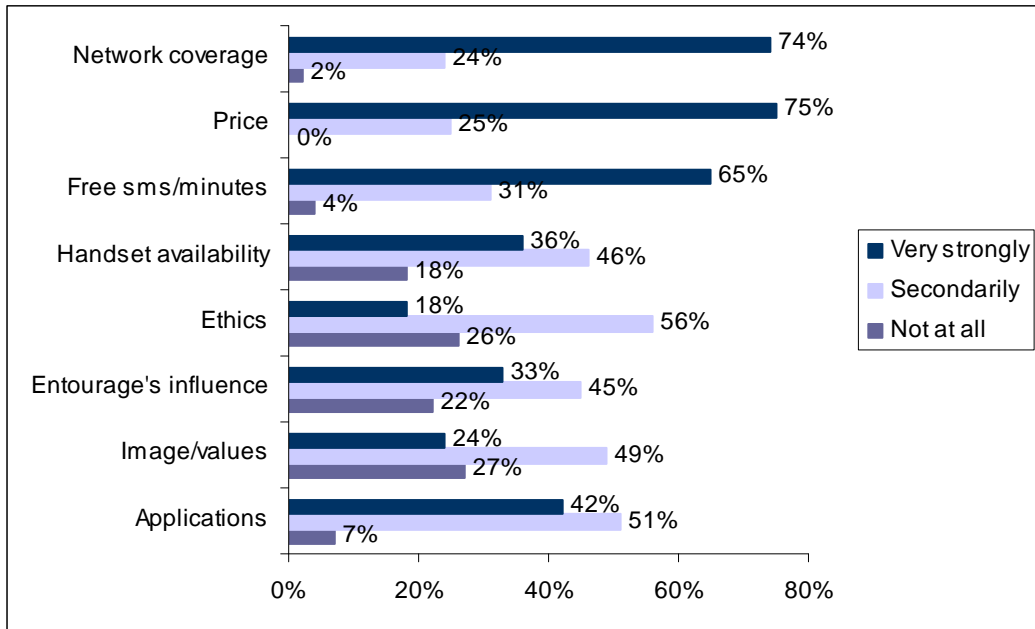
**Swiss French**



**Figure 99**

**How would you consider these elements when making your choice?**

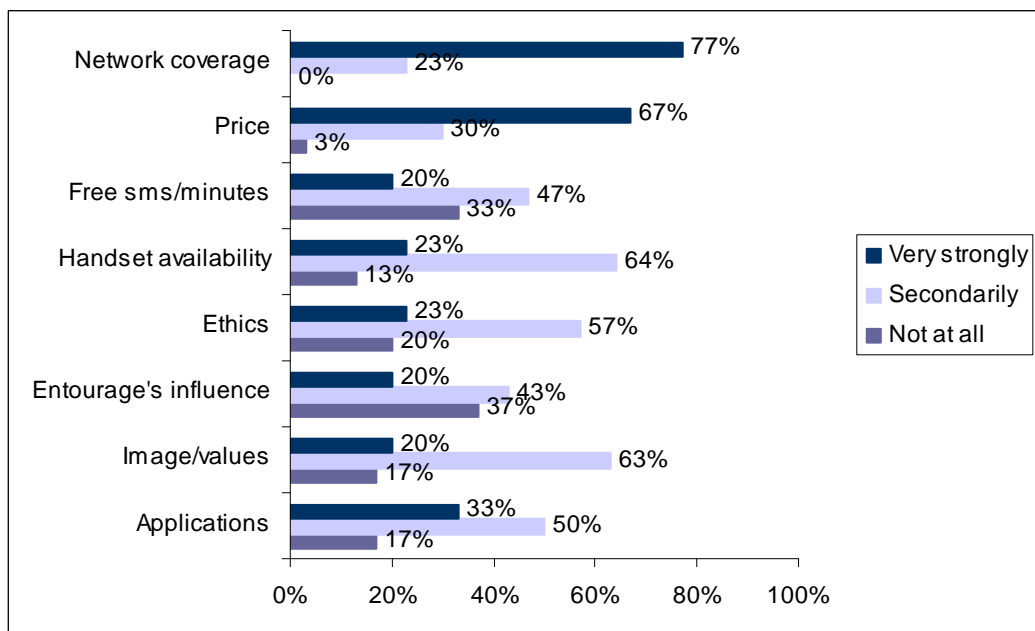
**16-25**



**Figure 100**

**How would you consider these elements when making your choice?**

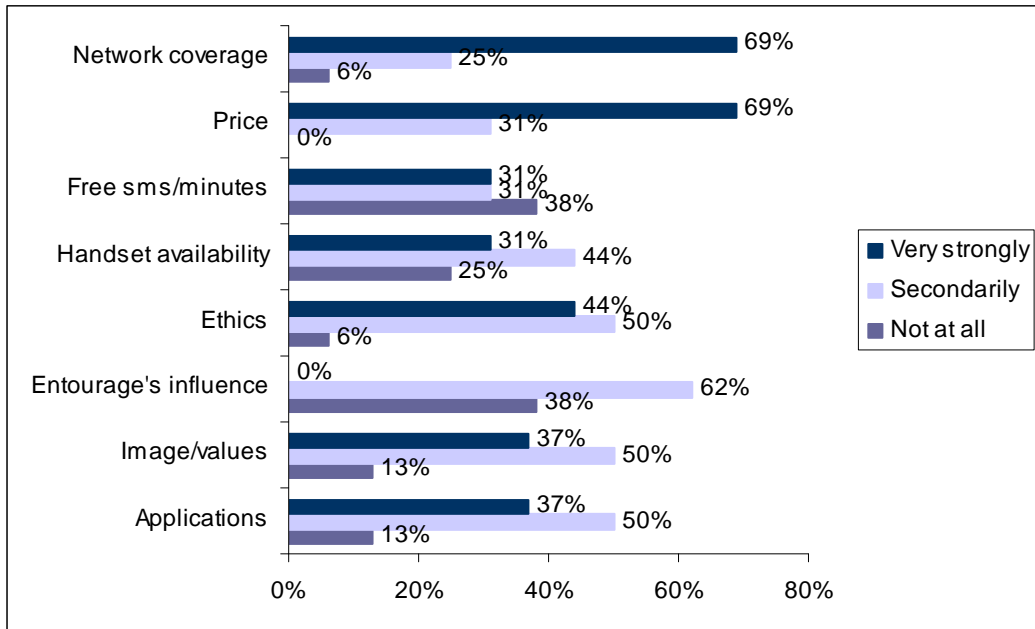
**26-35**



**Figure 101**

**How would you consider these elements when making your choice?**

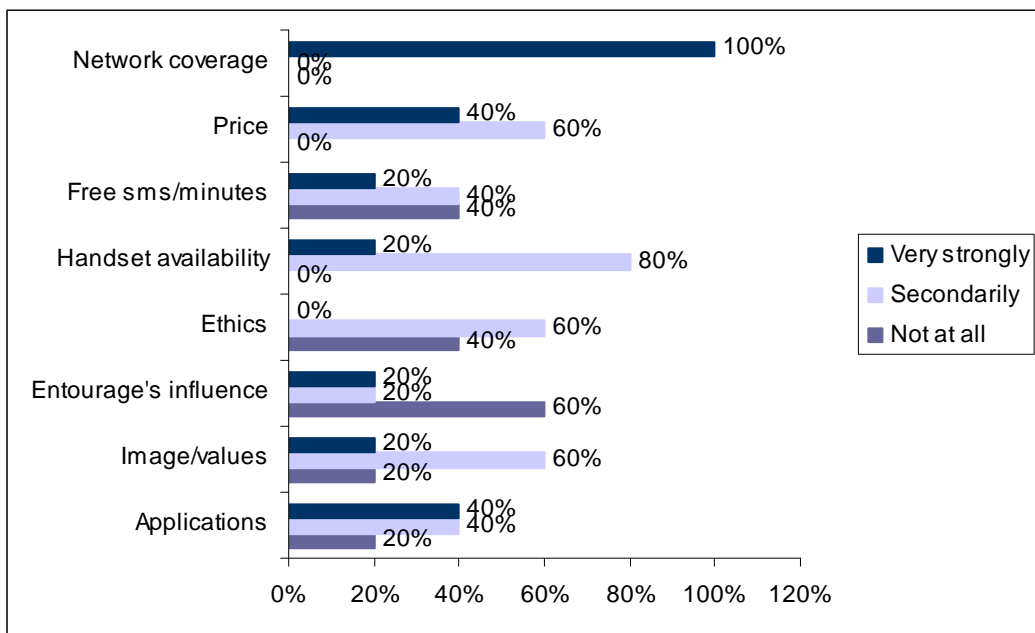
**36-45**



**Figure 102**

**How would you consider these elements when making your choice?**

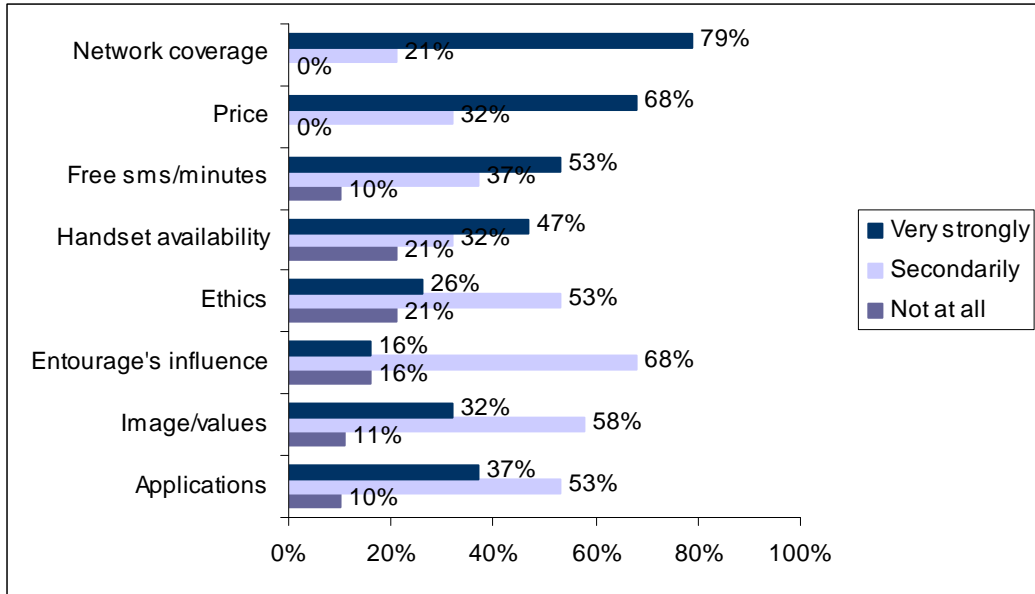
**46-55**





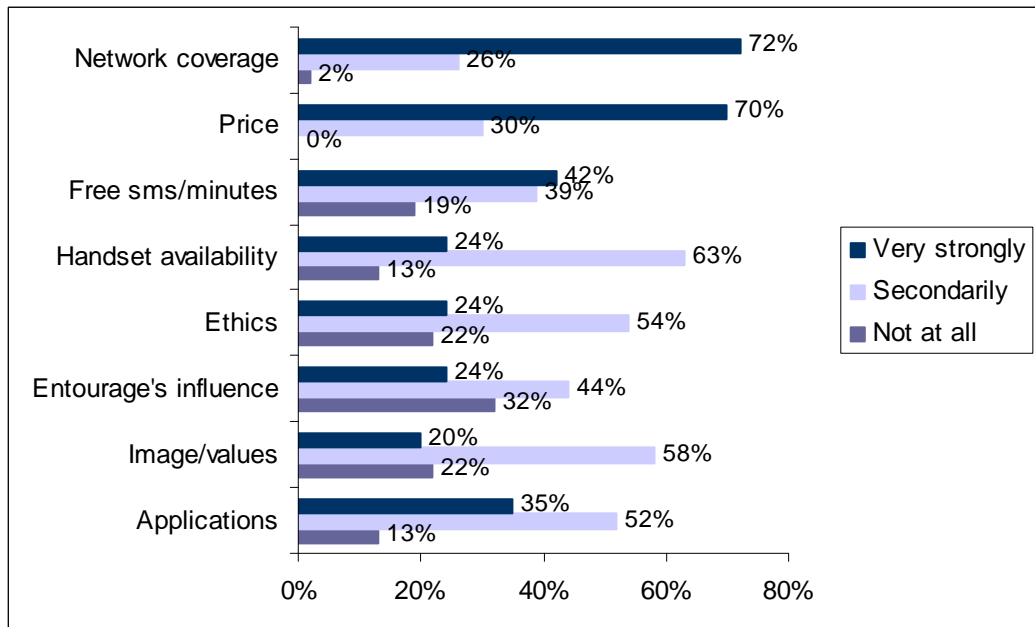
**Figure 103**

**How would you consider these elements when making your choice?  
High school**



**Figure 104**

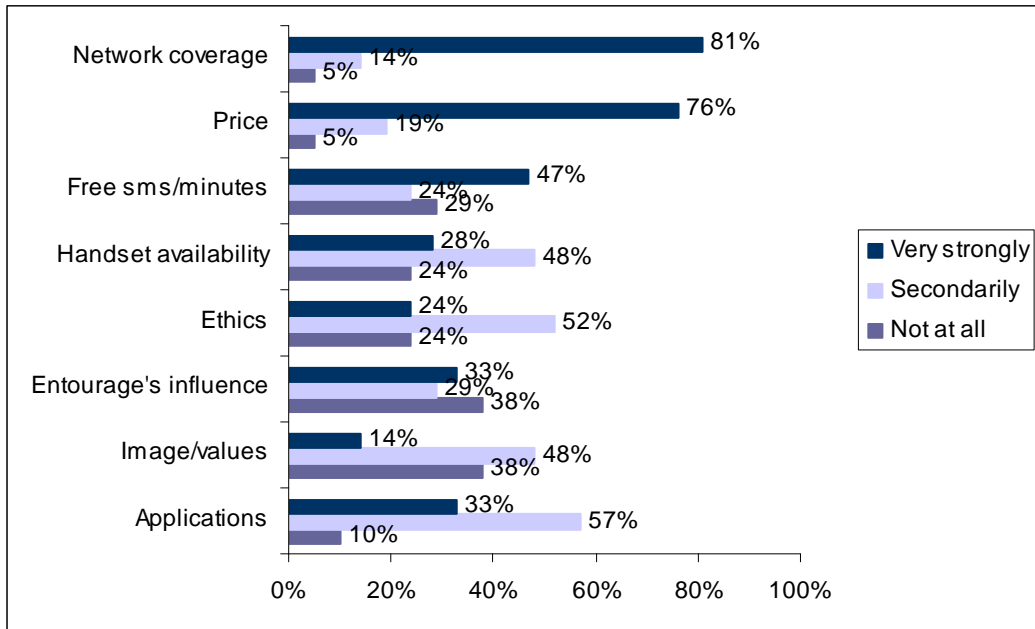
**How would you consider these elements when making your choice?  
College**



**Figure 105**

**How would you consider these elements when making your choice?**

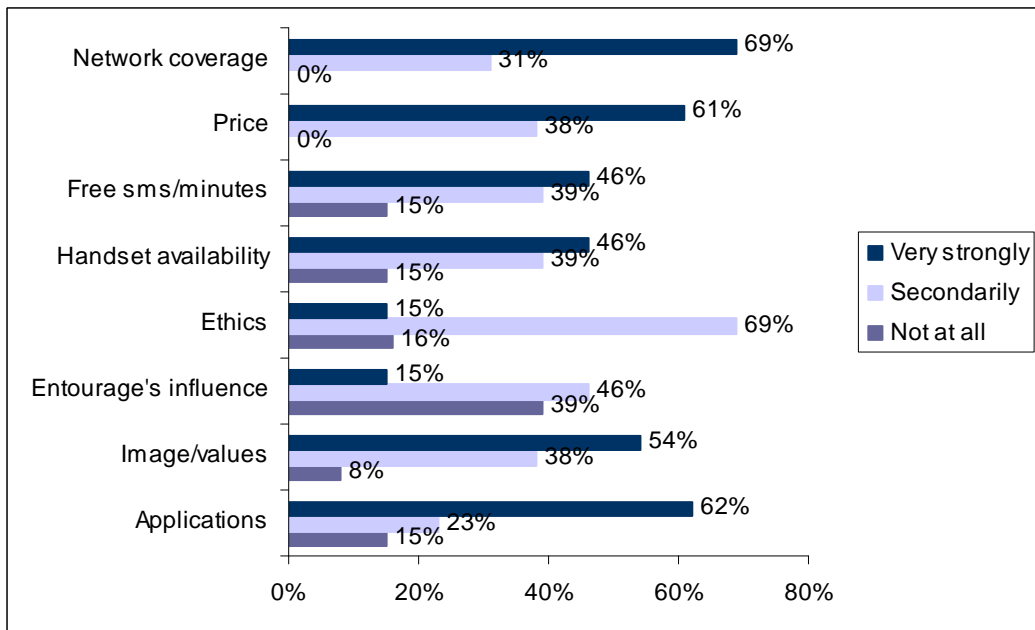
**Graduate school**



**Figure 106**

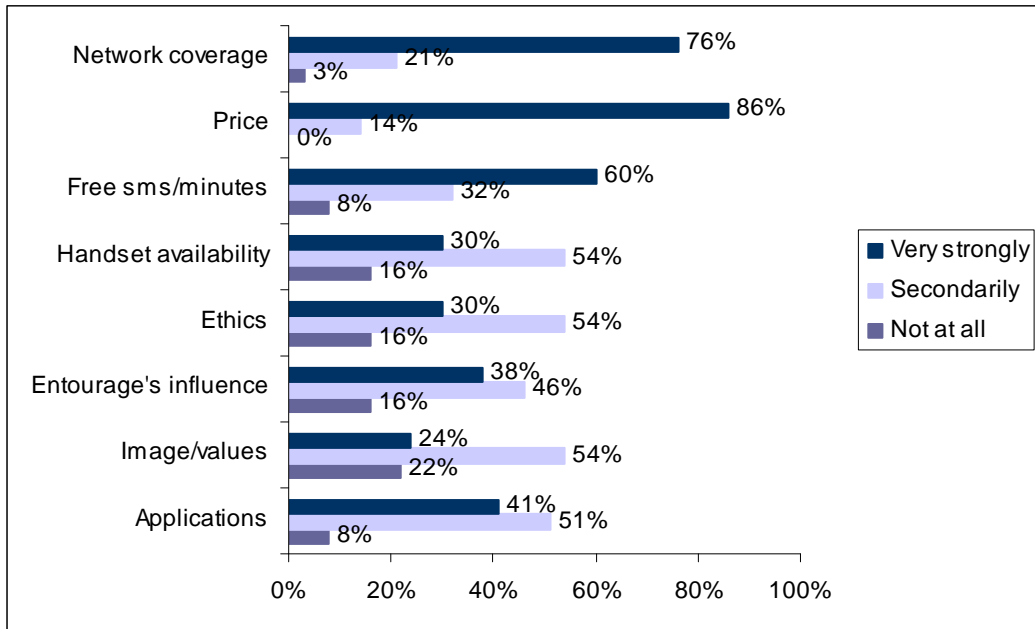
**How would you consider these elements when making your choice?**

**Other**



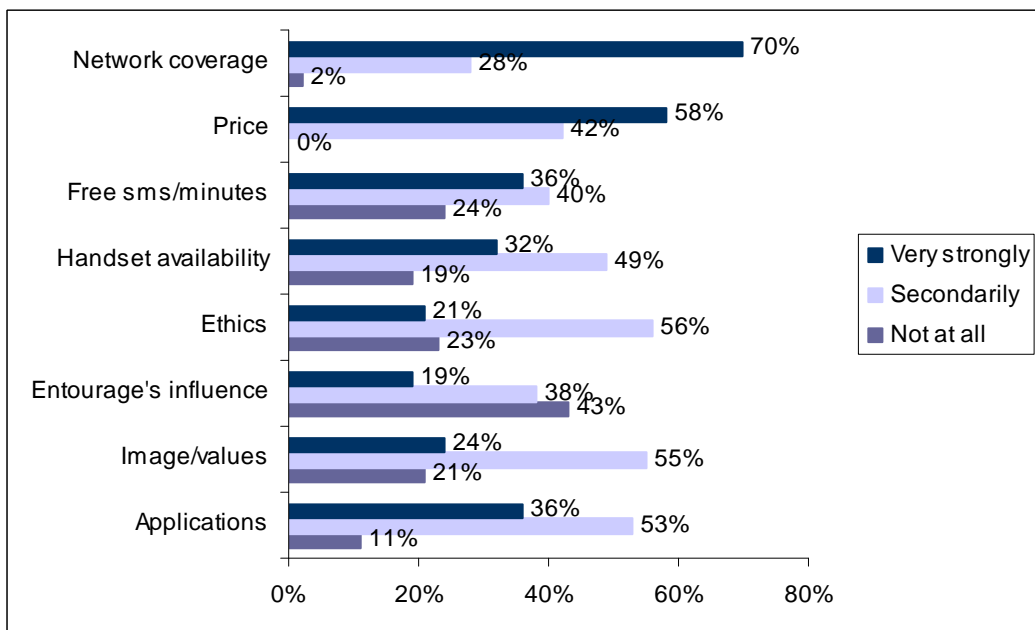
**Figure 107**

**How would you consider these elements when making your choice?  
Students**



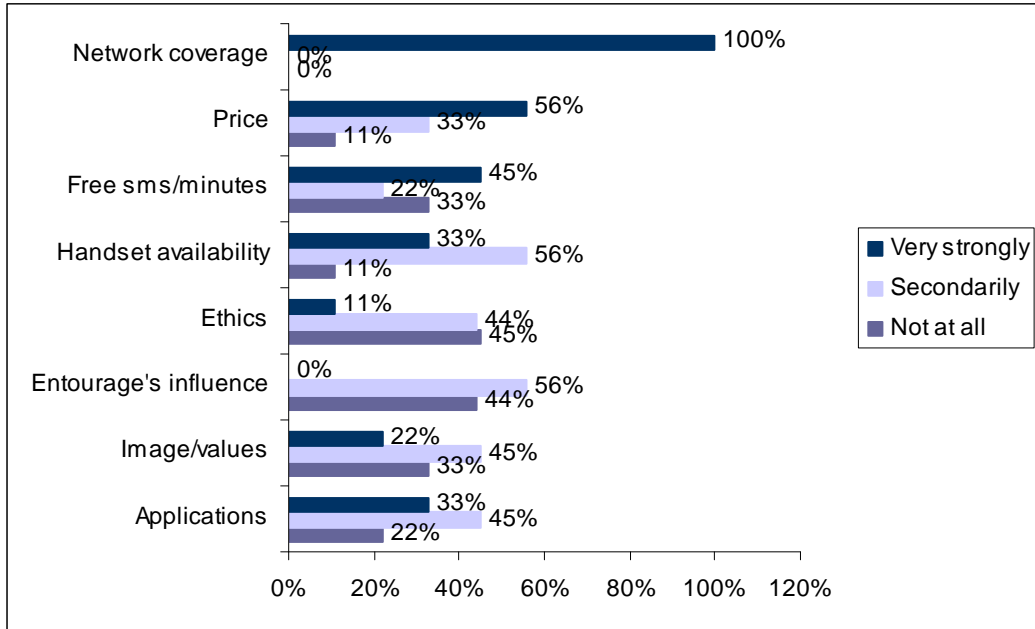
**Figure 108**

**How would you consider these elements when making your choice?  
Employees**



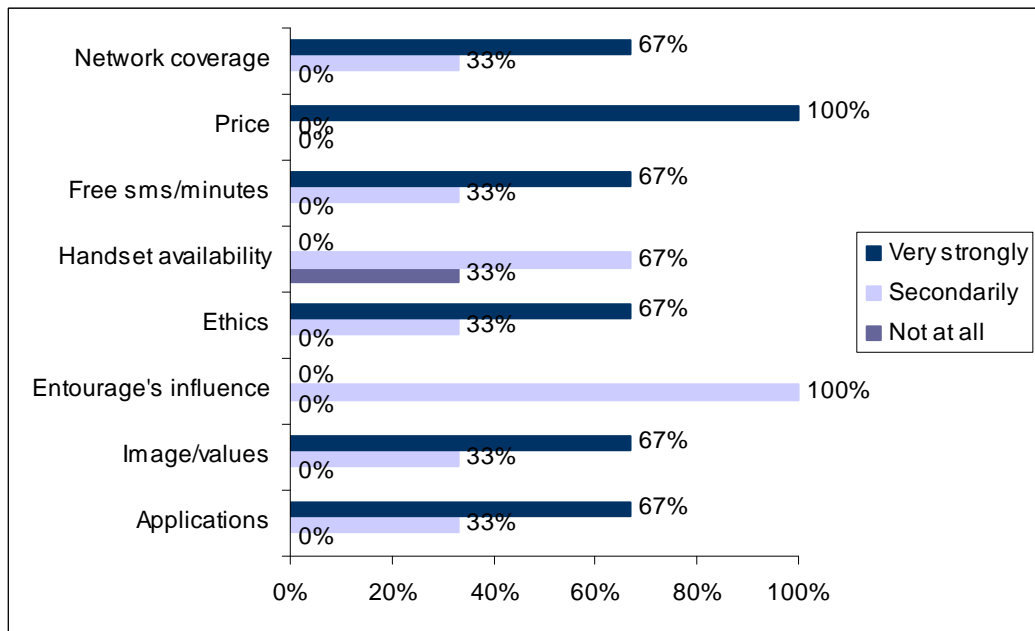
**Figure 109**

**How would you consider these elements when making your choice?  
Independent**

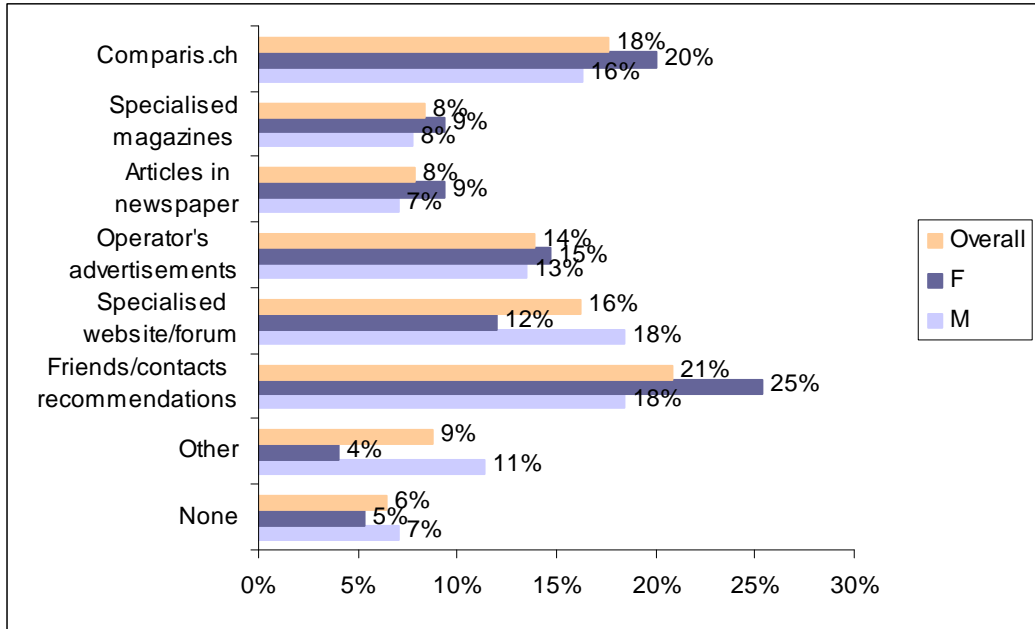


**Figure 110**

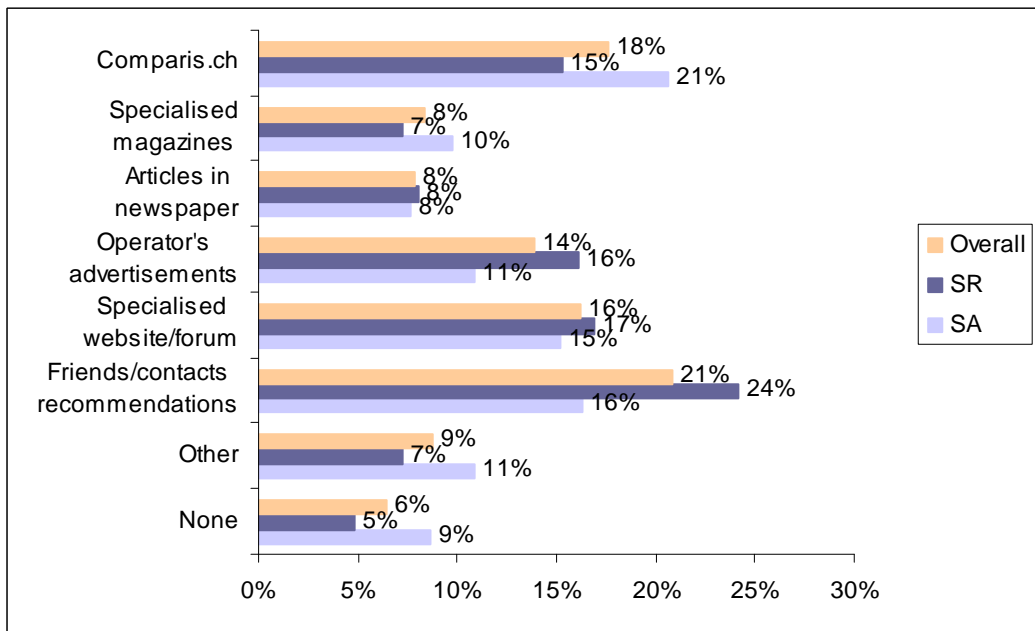
**How would you consider these elements when making your choice?  
Unemployed**



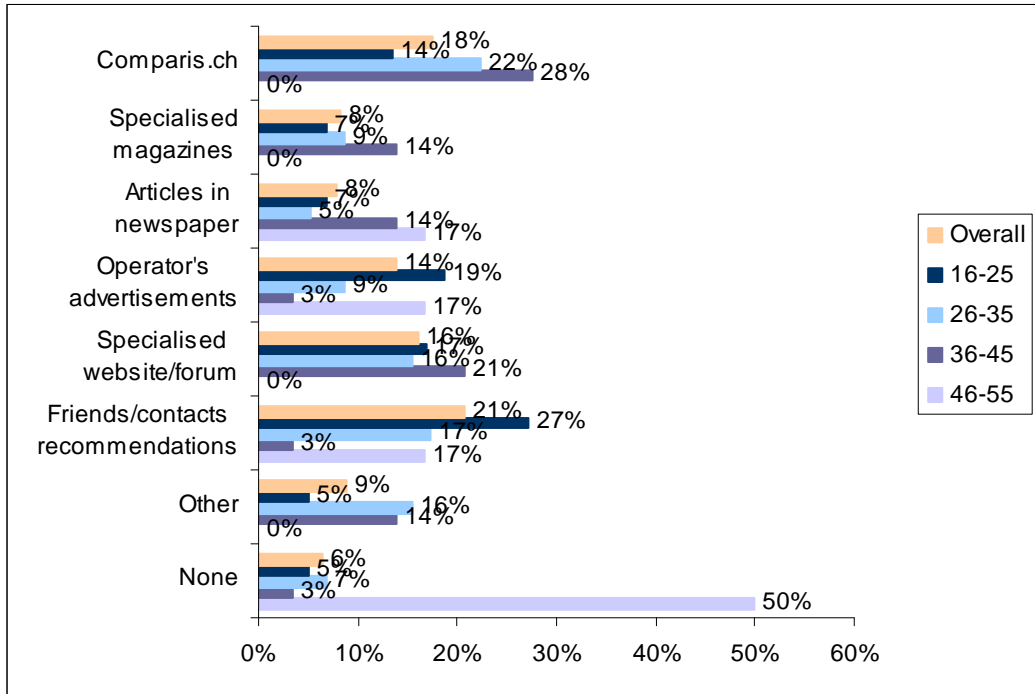
**Figure 111**  
**What means of comparison would you use?**  
**Genders**



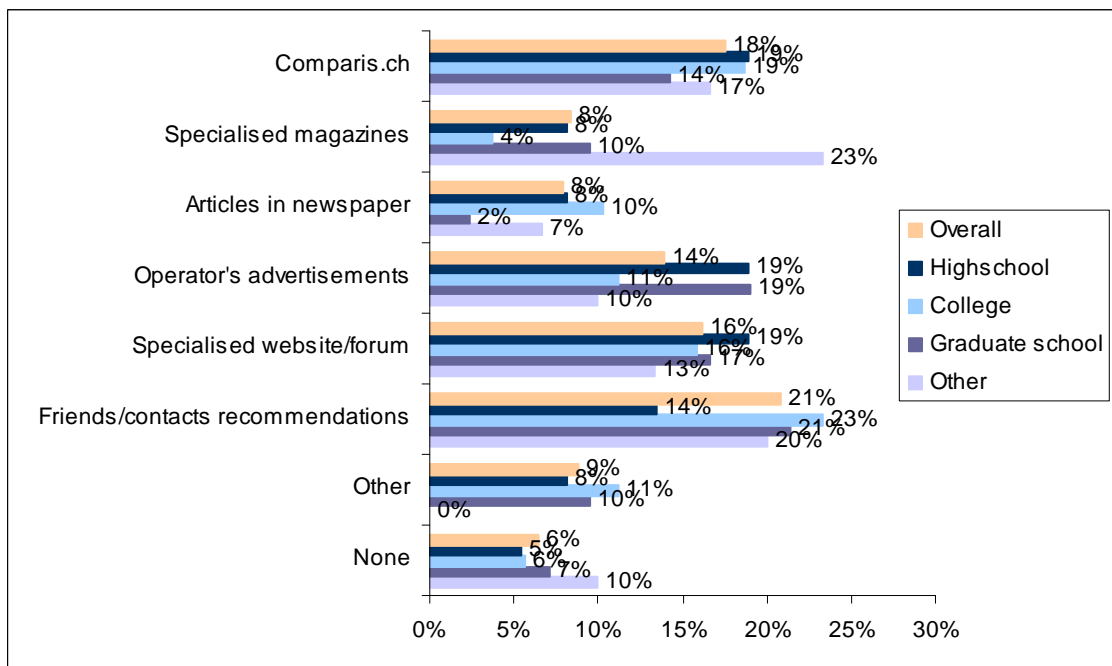
**Figure 112**  
**What means of comparison would you use?**  
**Linguistic regions**



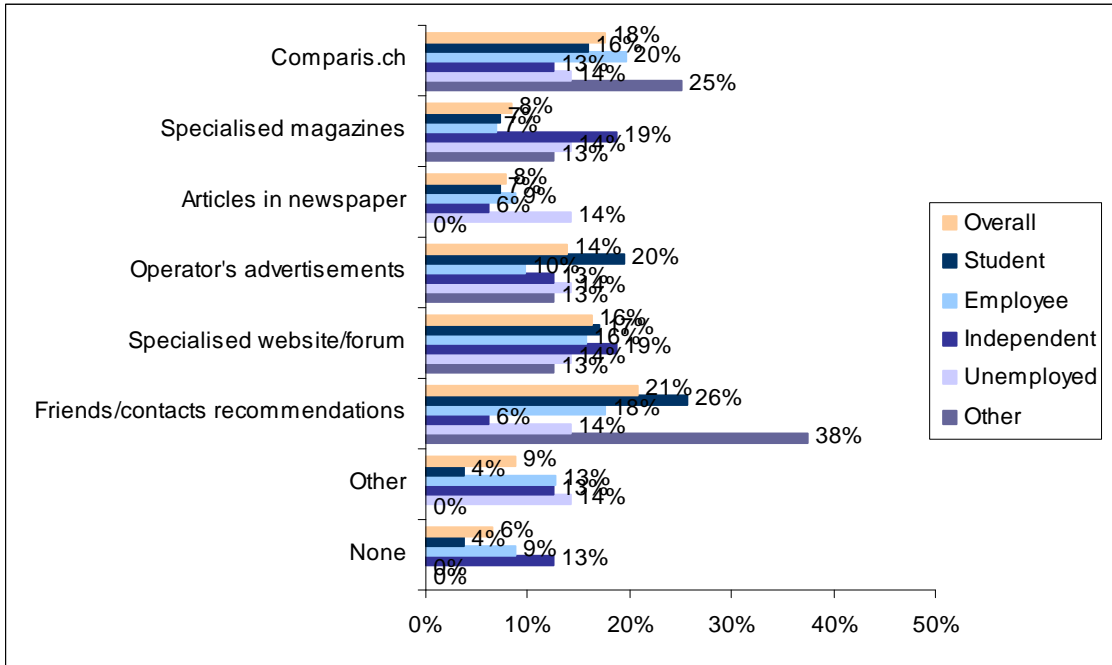
**Figure 113**  
**What means of comparison would you use?**  
**Age groups**



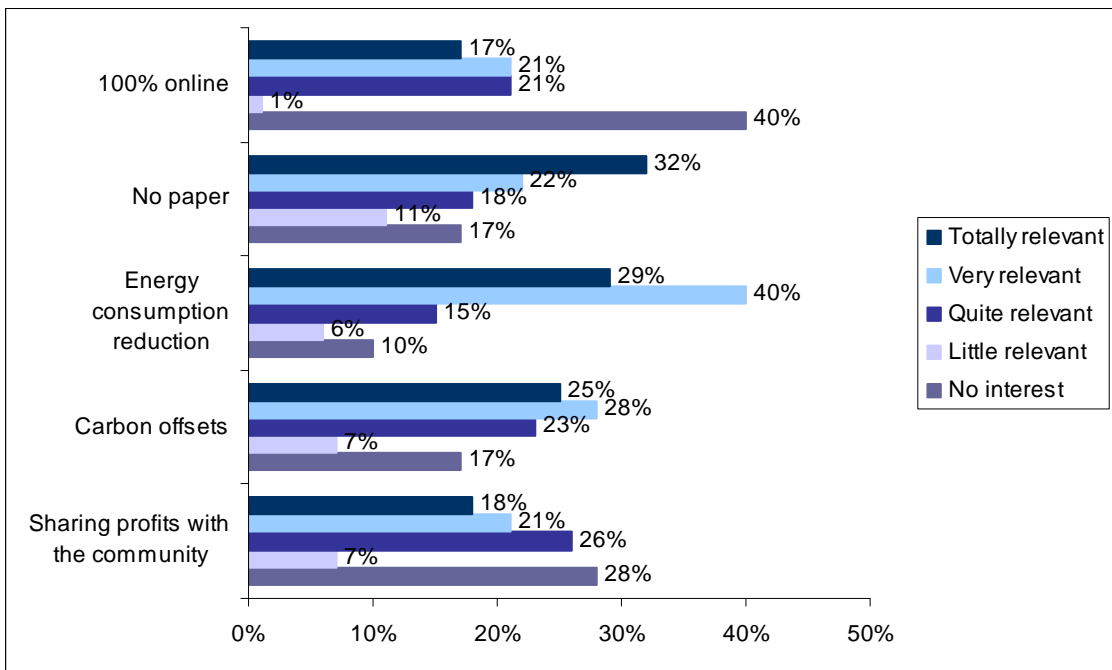
**Figure 114**  
**What means of comparison would you use?**  
**Education levels**



**Figure 115**  
**What means of comparison would you use?**  
**Occupations**



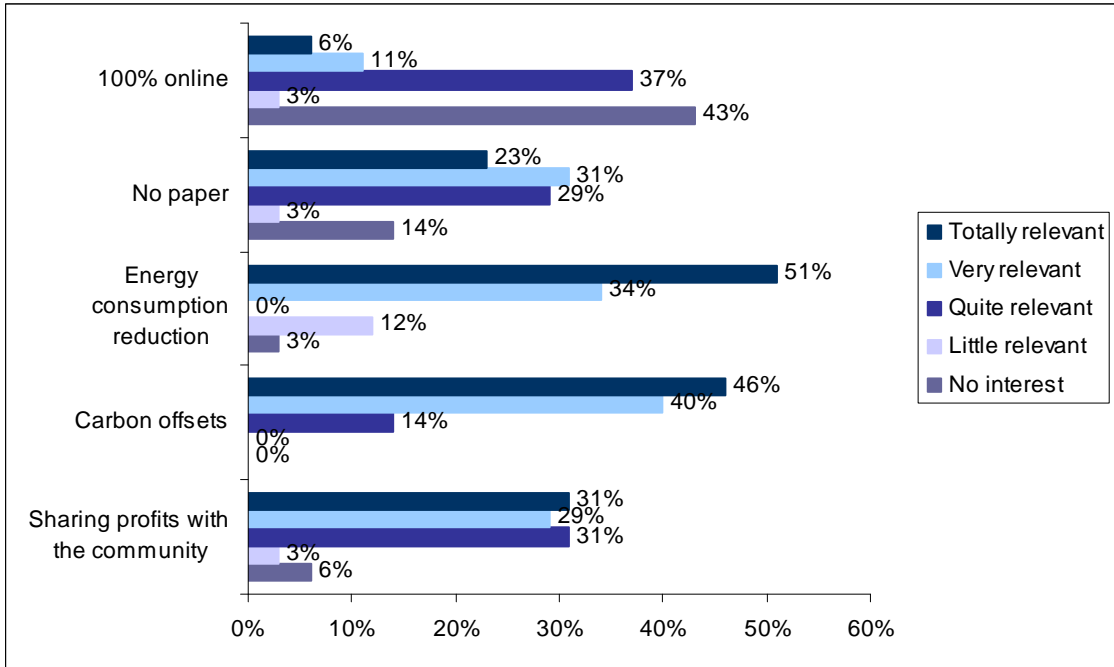
**Figure 116**  
**How do you value the components of this ethical operator?**  
**Men**



**Figure 117**

**How do you value the components of this ethical operator?**

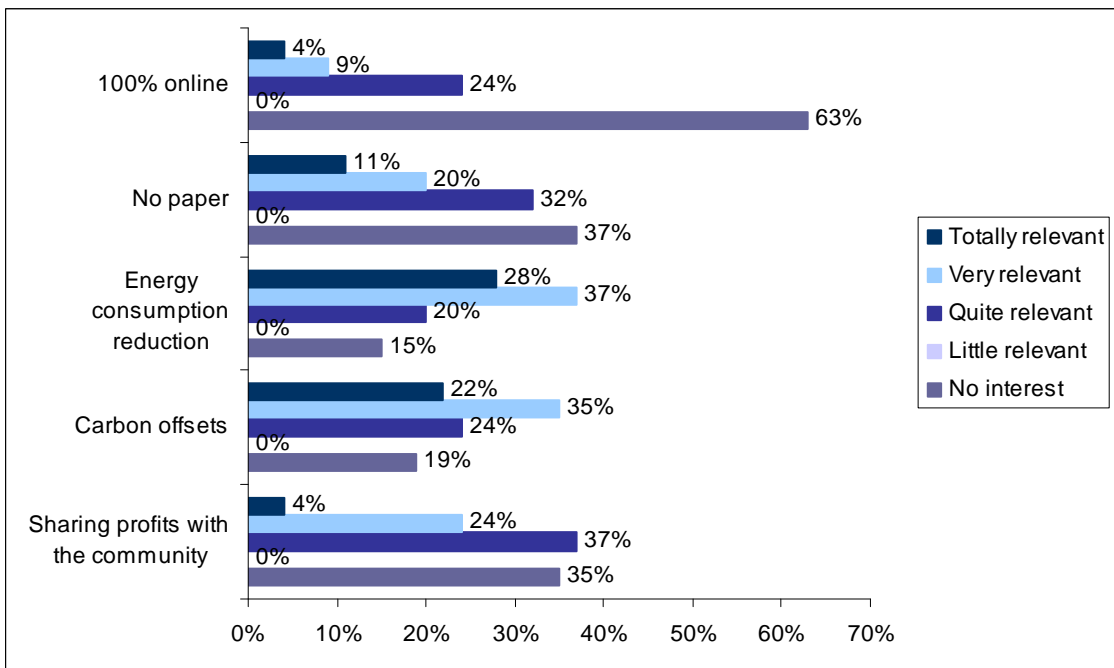
**Women**



**Figure 118**

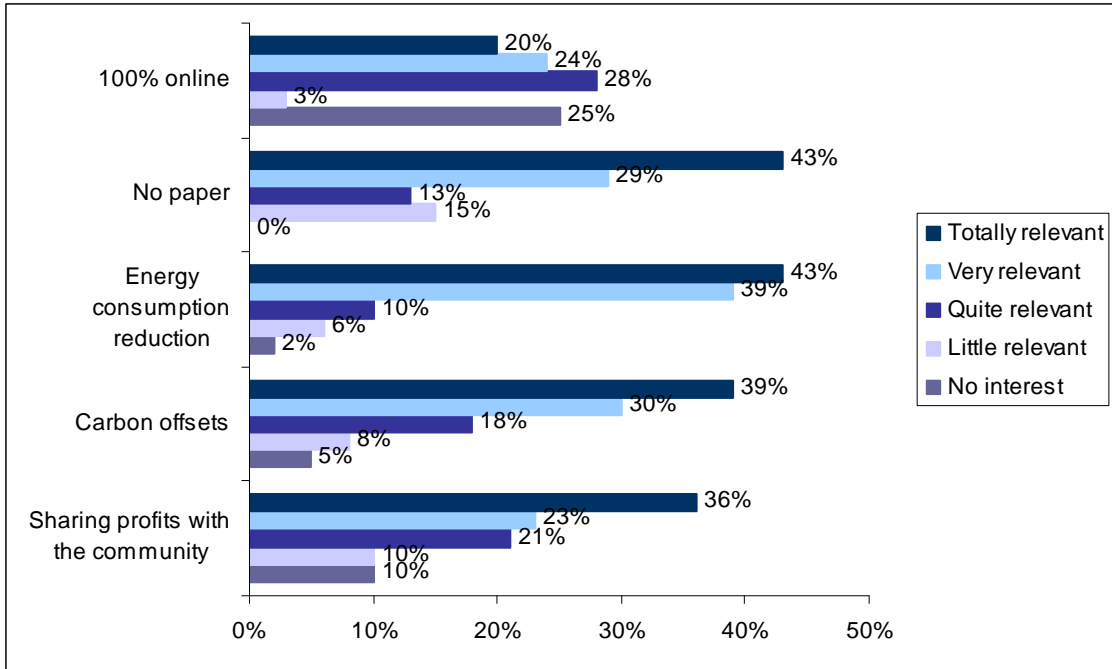
**How do you value the components of this ethical operator?**

**Swiss German**

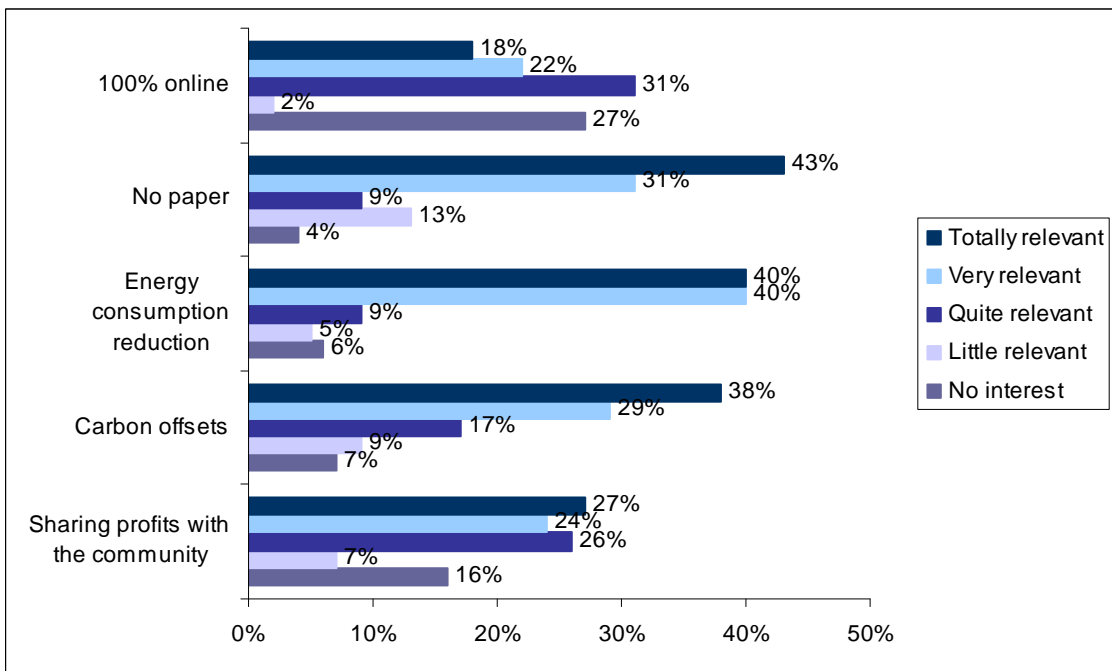




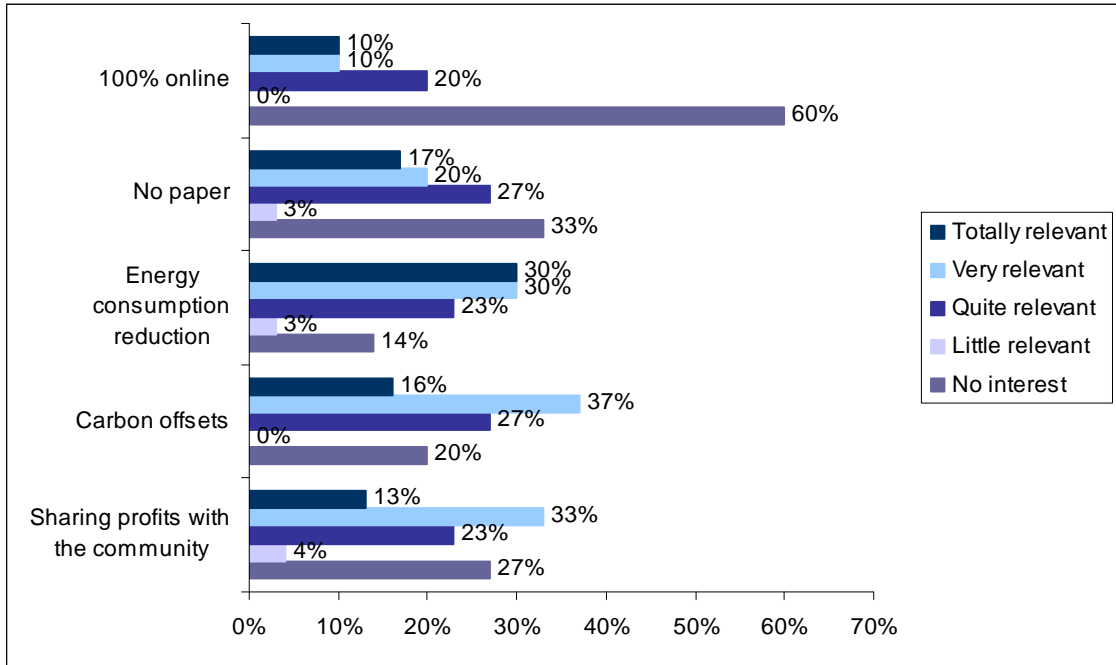
**Figure 119**  
**How do you value the components of this ethical operator?**  
**Swiss French**



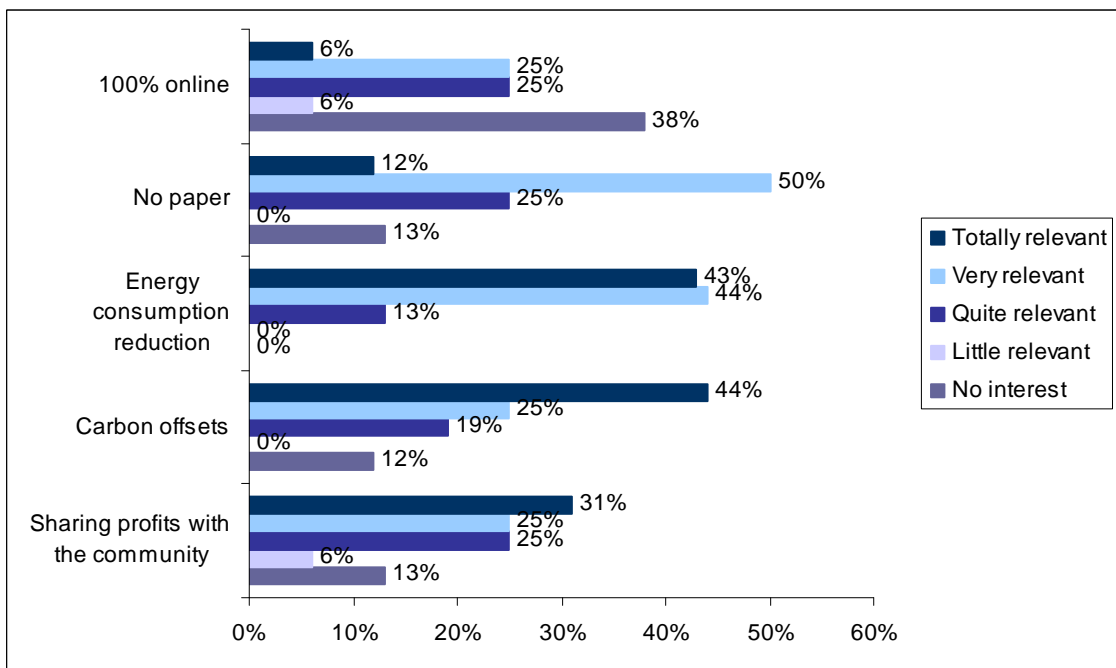
**Figure 120**  
**How do you value the components of this ethical operator?**  
**16-25**



**Figure 121**  
**How do you value the components of this ethical operator?**  
**26-35**



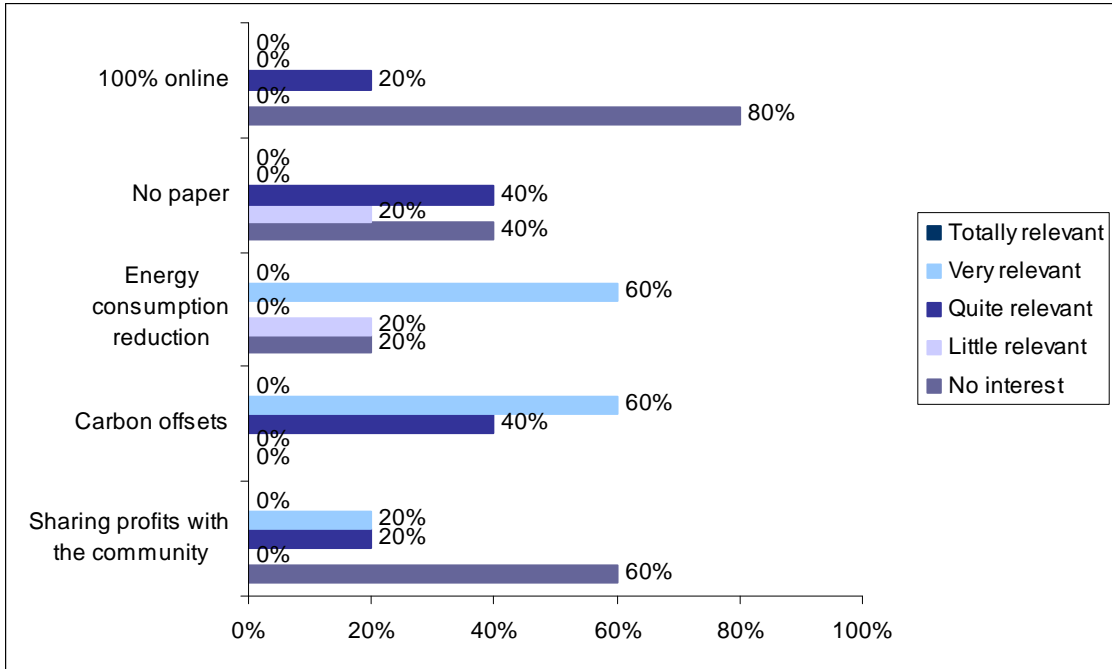
**Figure 122**  
**How do you value the components of this ethical operator?**  
**36-45**



**Figure 123**

**How do you value the components of this ethical operator?**

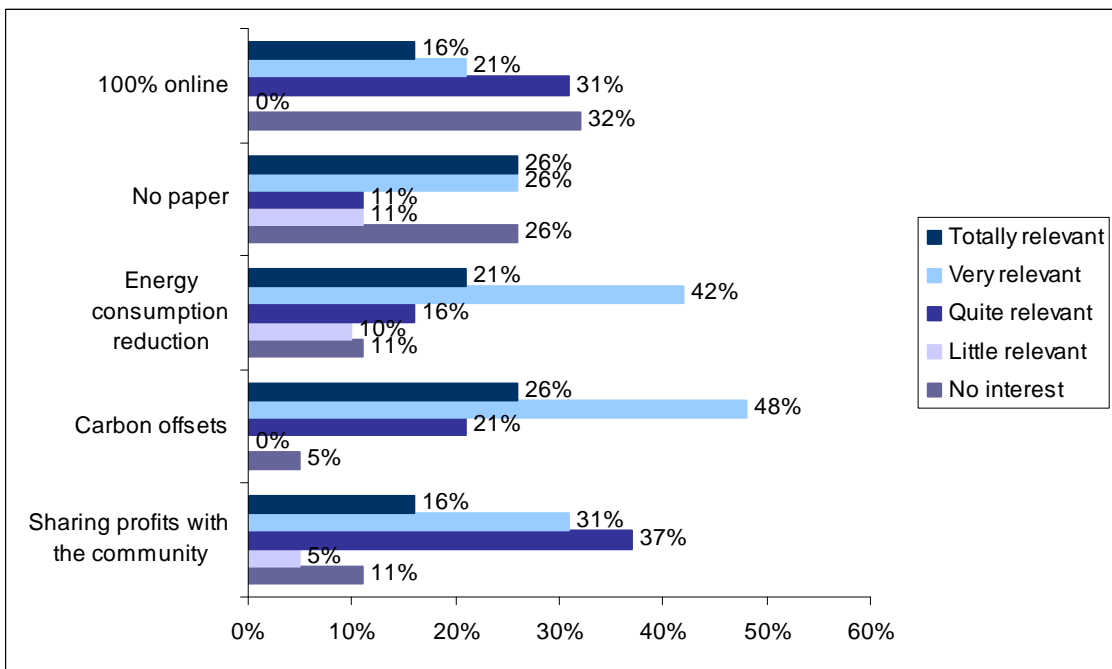
**46-55**



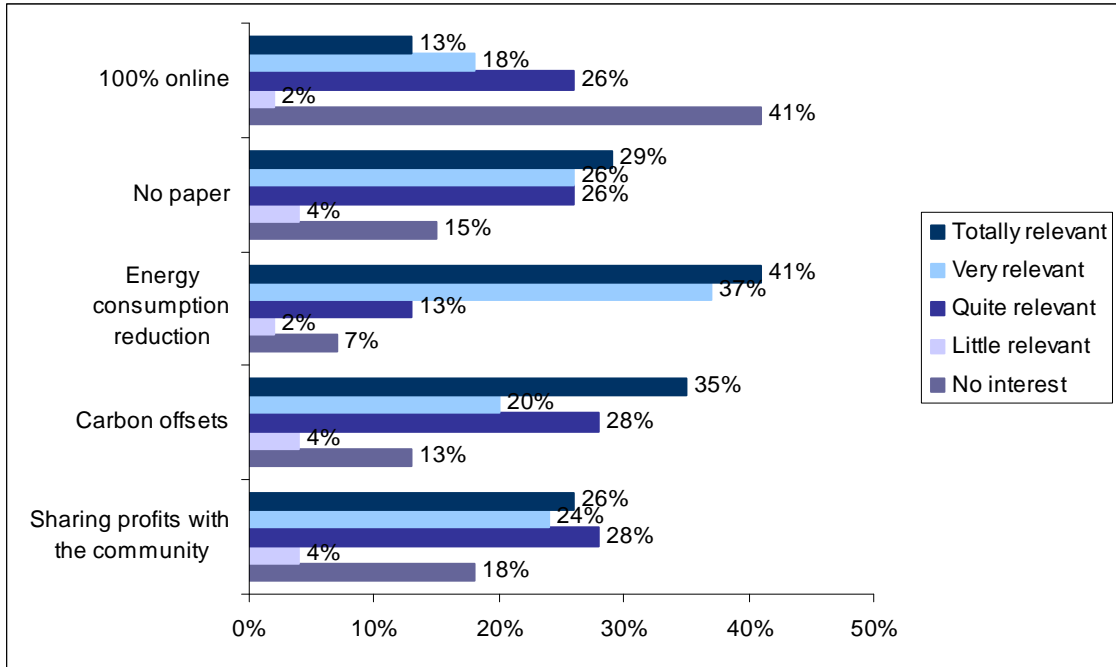
**Figure 124**

**How do you value the components of this ethical operator?**

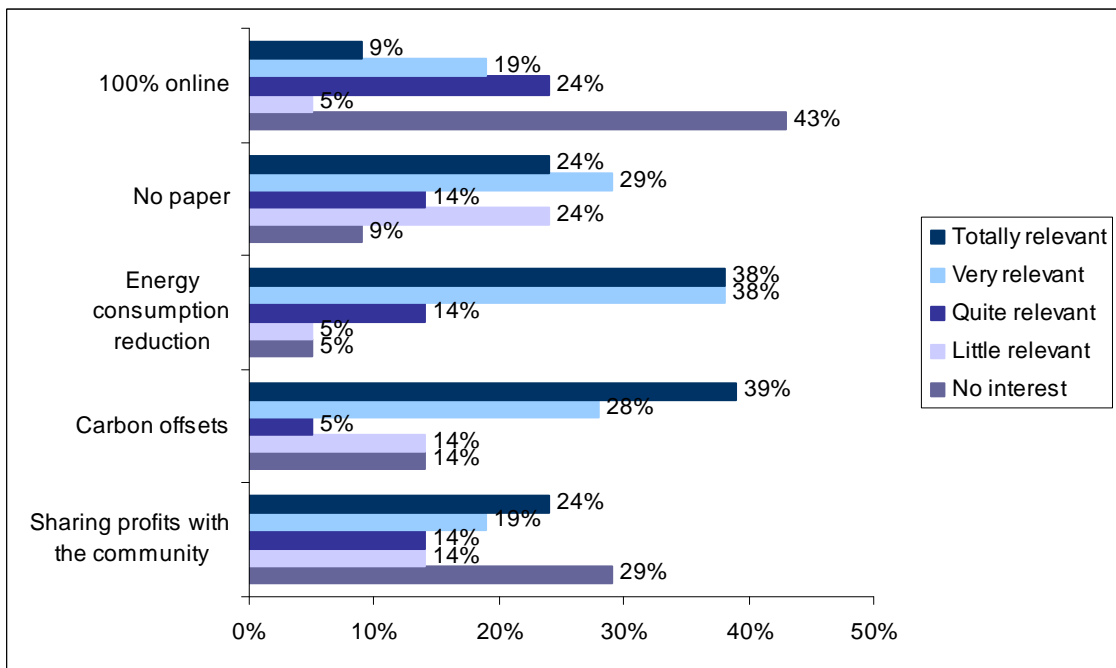
**High school**



**Figure 125**  
**How do you value the components of this ethical operator?**  
**College**



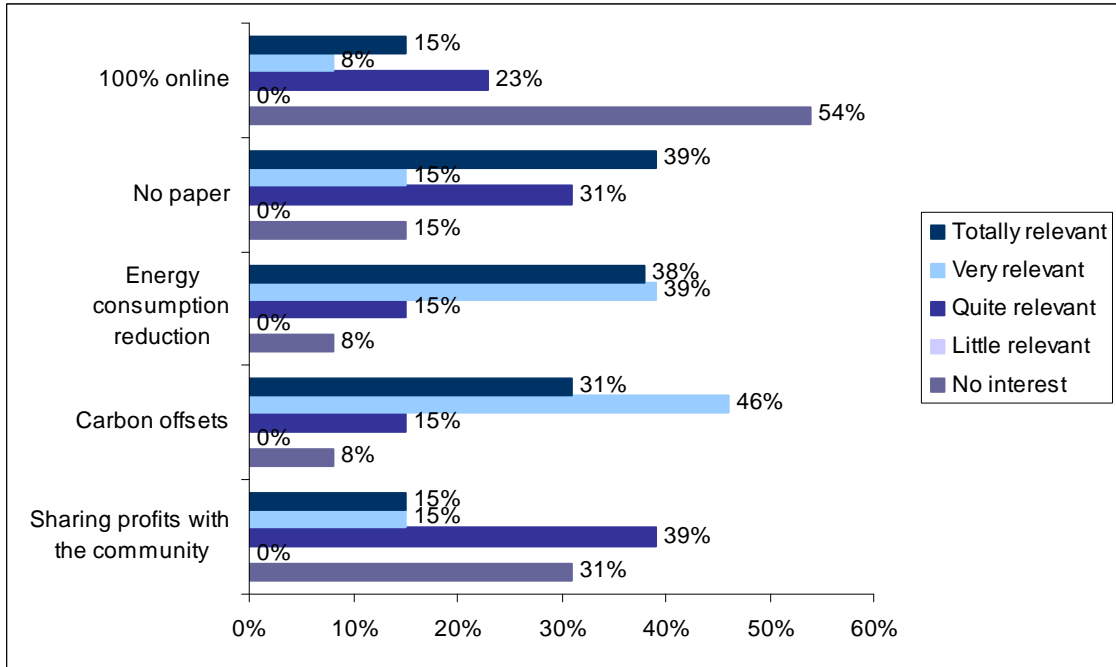
**Figure 126**  
**How do you value the components of this ethical operator?**  
**Graduate school**



**Figure 127**

**How do you value the components of this ethical operator?**

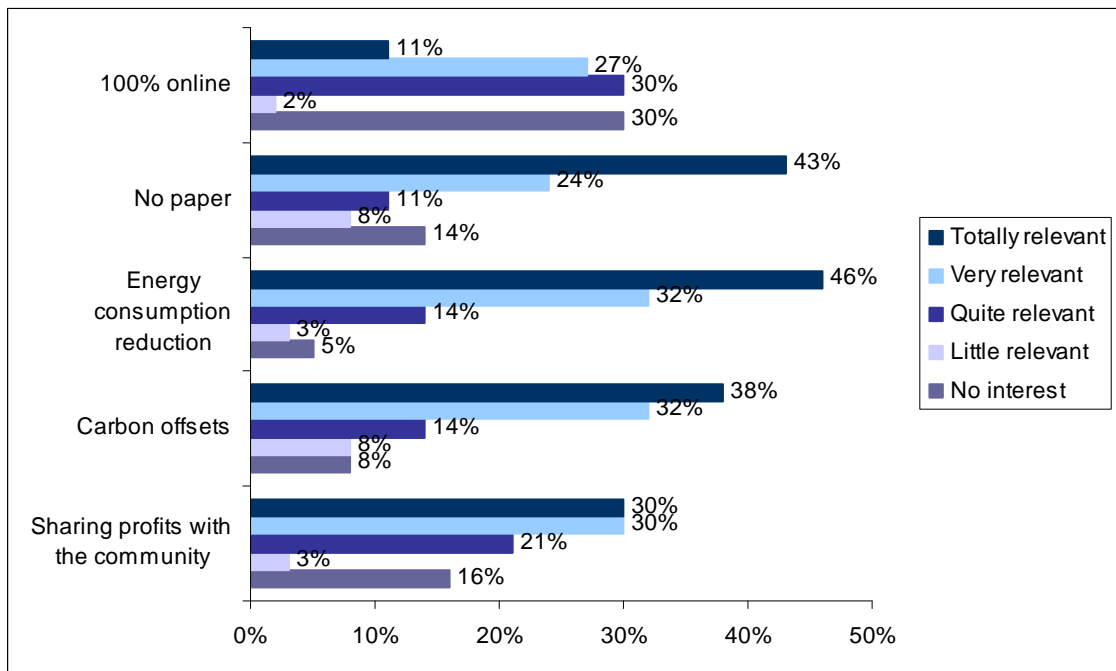
**Other**



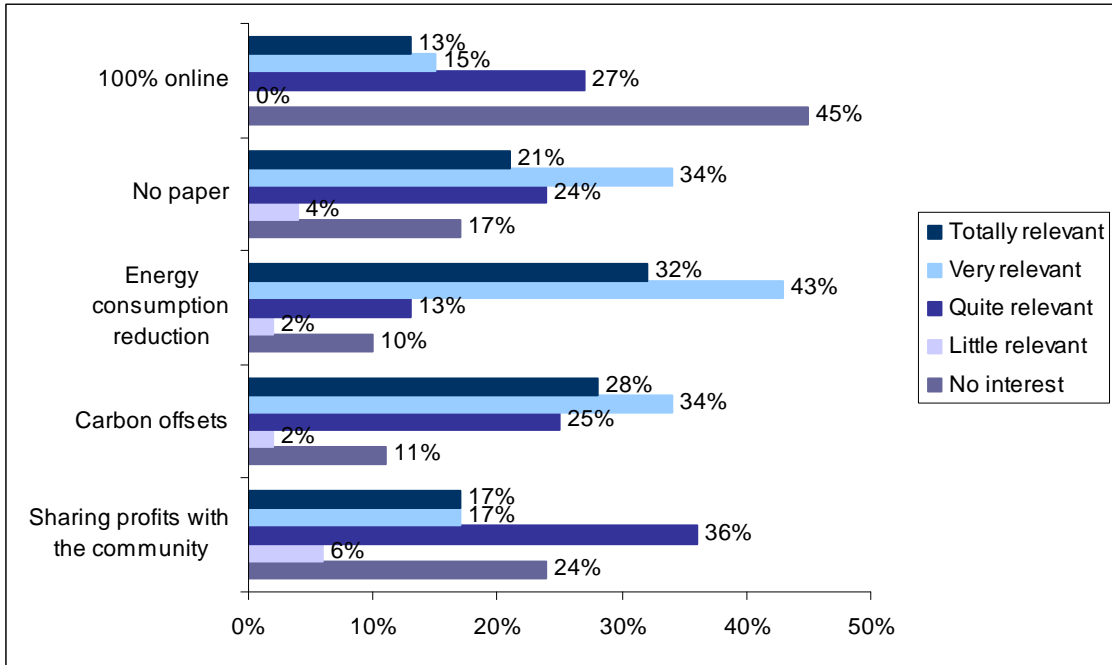
**Figure 128**

**How do you value the components of this ethical operator?**

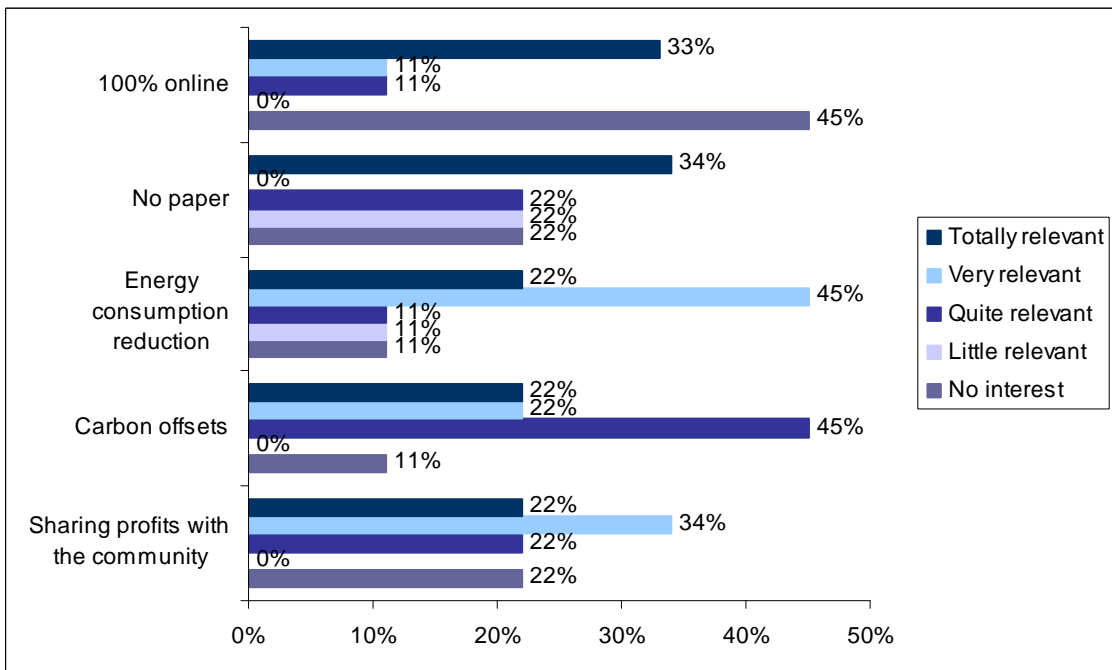
**Students**



**Figure 129**  
**How do you value the components of this ethical operator?**  
**Employees**

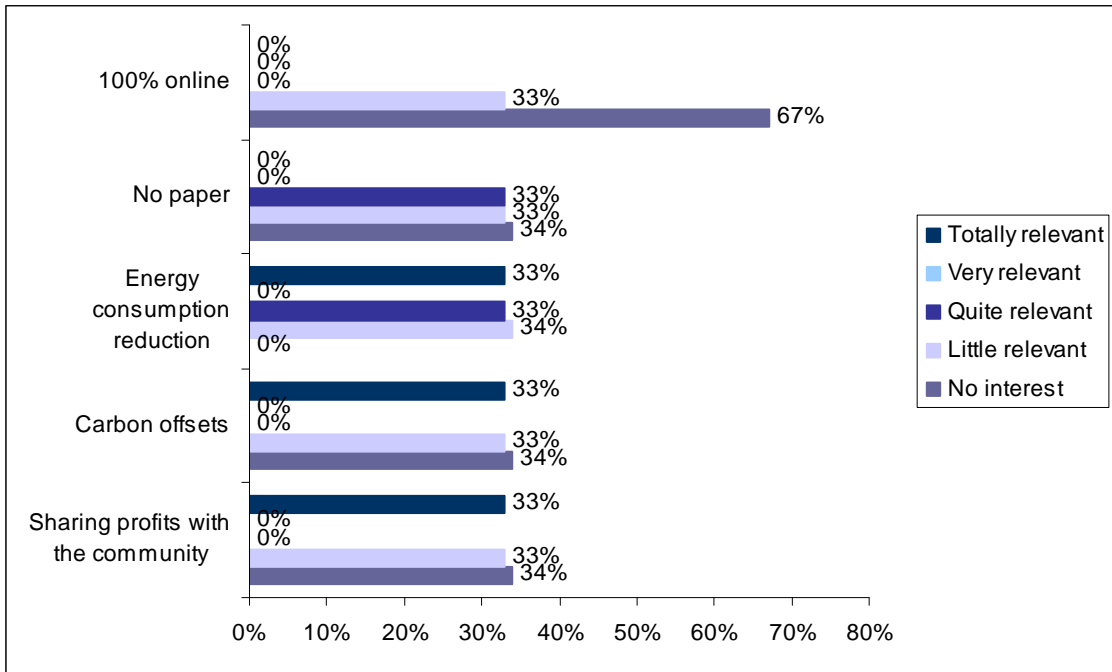


**Figure 130**  
**How do you value the components of this ethical operator?**  
**Independent**



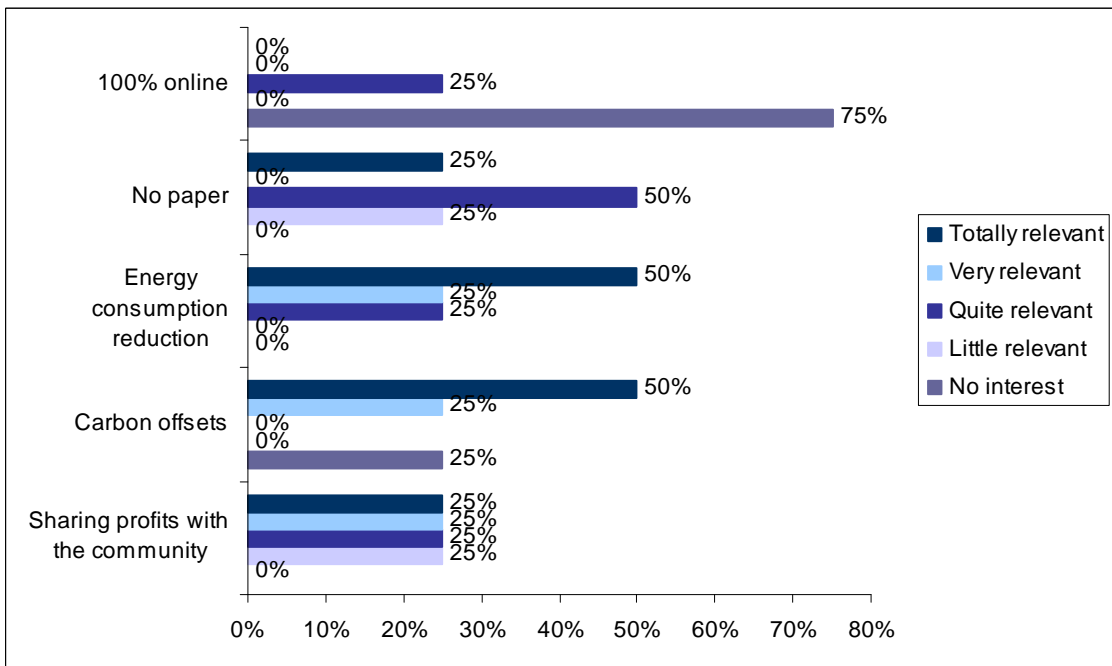
**Figure 131**

**How do you value the components of this ethical operator?  
Unemployed**

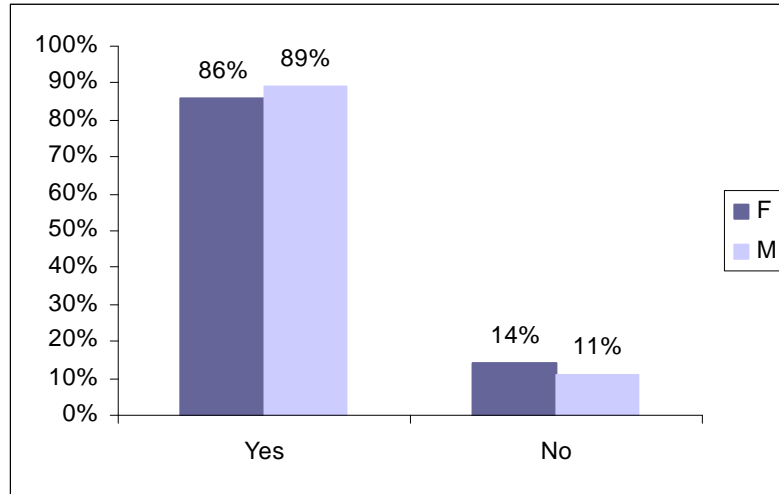


**Figure 132**

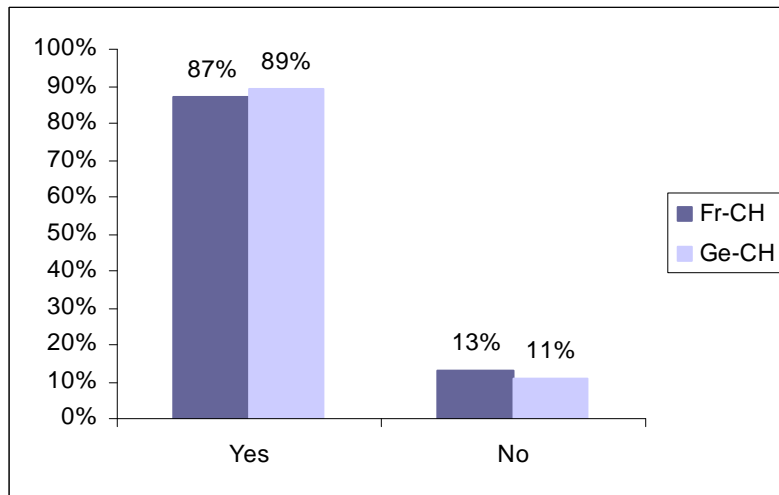
**How do you value the components of this ethical operator?  
Other**



**Figure 133**  
**Are you satisfied with your current operator?**  
**Genders**

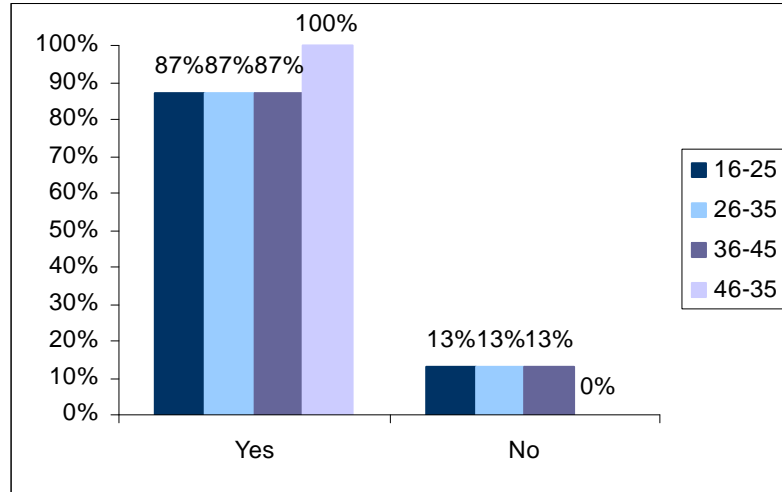


**Figure 134**  
**Are you satisfied with your current operator?**  
**Linguistic regions**

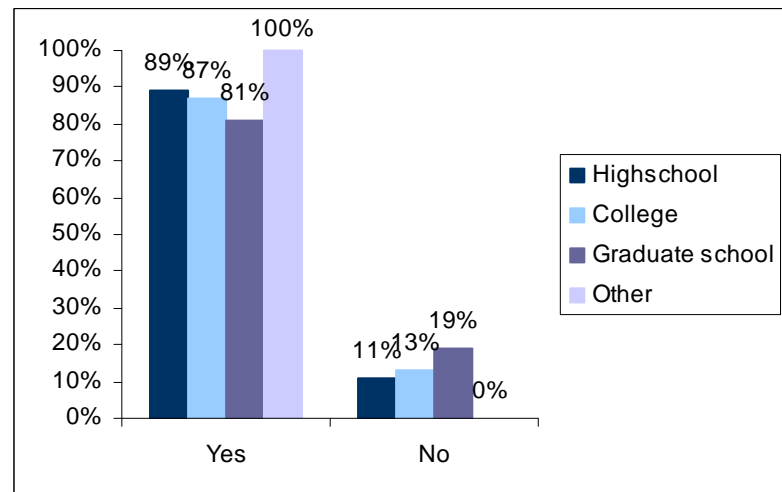




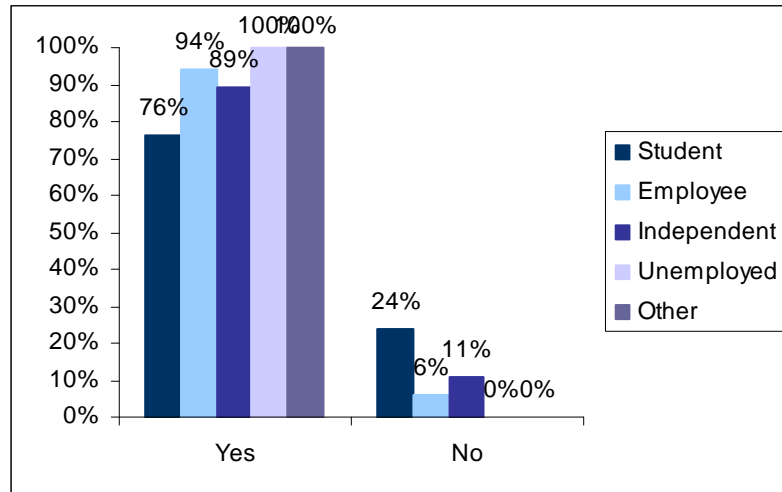
**Figure 135**  
**Are you satisfied with your current operator?**  
**Age groups**



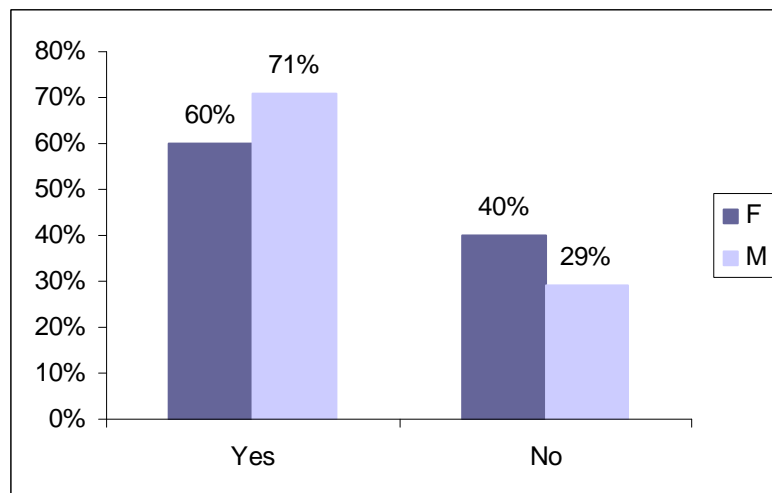
**Figure 136**  
**Are you satisfied with your current operator?**  
**Education levels**



**Figure 137**  
**Are you satisfied with your current operator?**  
**Occupations**



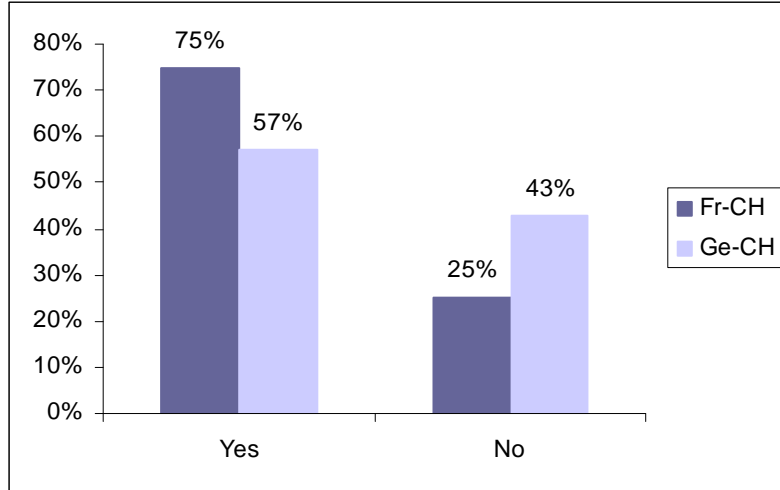
**Figure 138**  
**Would you leave your operator if an offer looking more interesting showed up?**  
**Genders**



**Figure 139**

**Would you leave your operator if an offer looking more interesting showed up?**

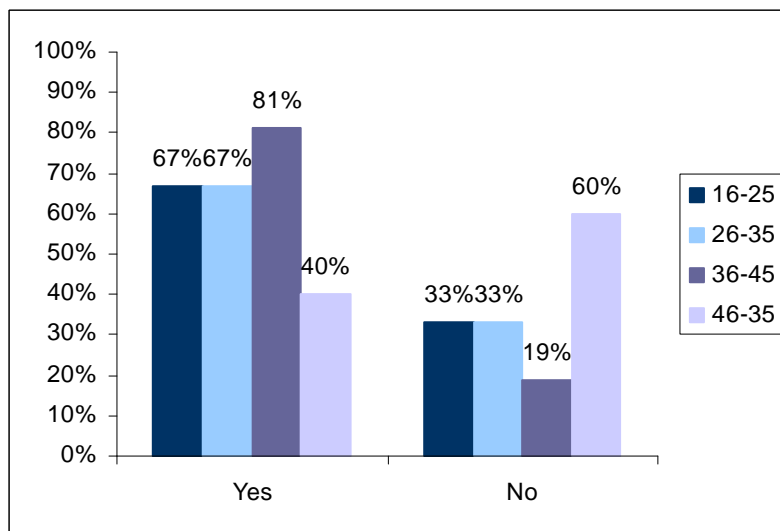
**Linguistic regions**



**Figure 140**

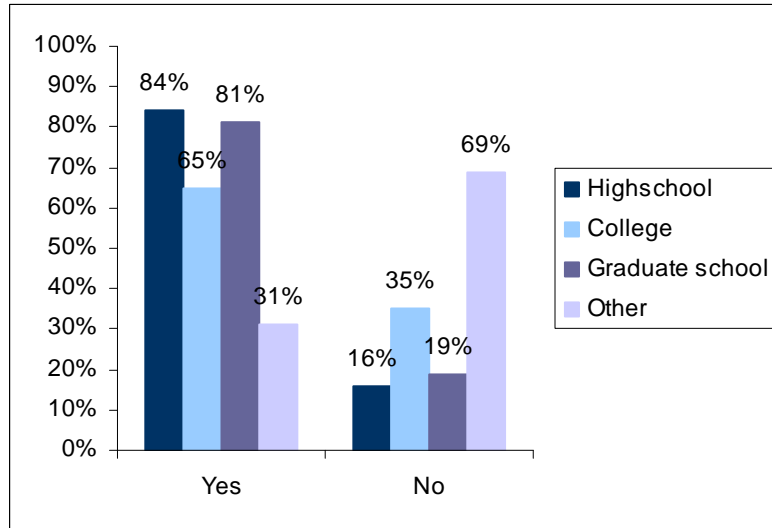
**Would you leave your operator if an offer looking more interesting showed up?**

**Age groups**



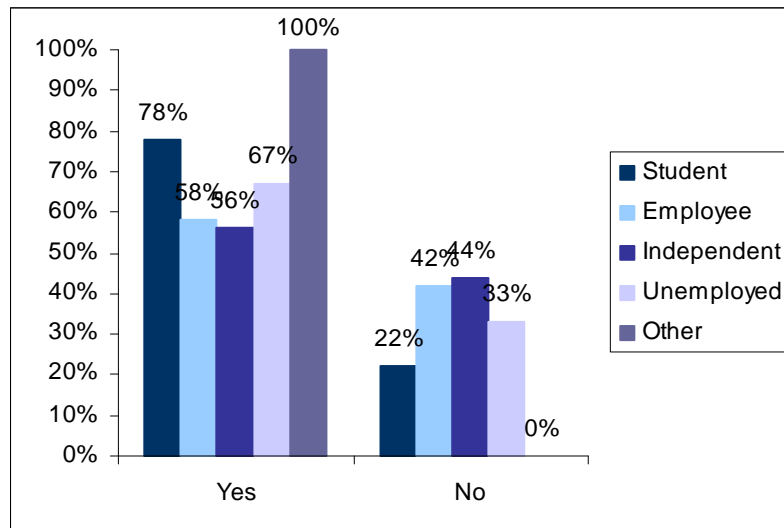
**Figure 141**

**Would you leave your operator if an offer looking more interesting showed up?**  
**Education levels**



**Figure 142**

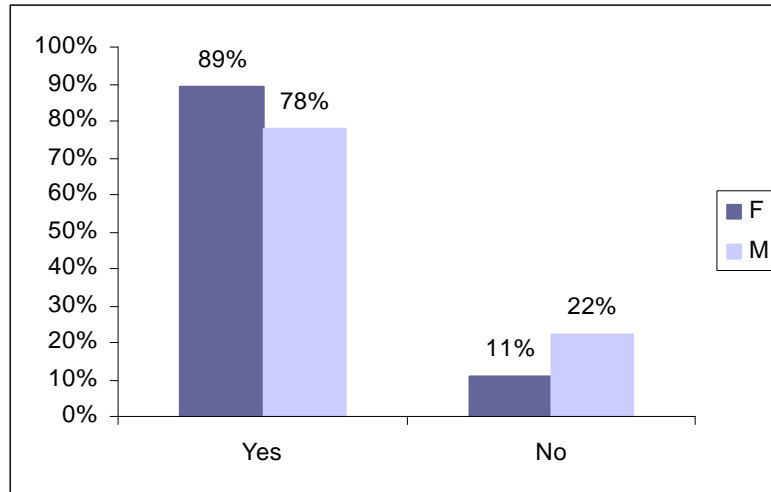
**Would you leave your operator if an offer looking more interesting showed up?**  
**Occupations**



**Figure 143**

**Under identical conditions (tariffs, services etc.), would you leave your current operator and go for an ethical operator?**

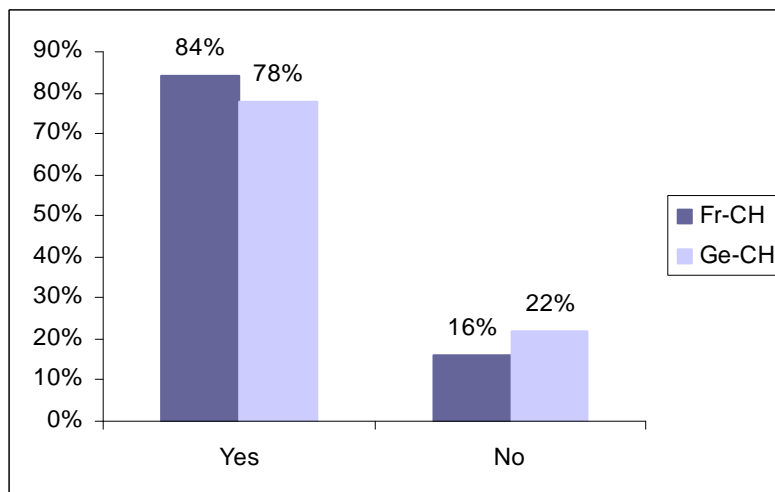
**Genders**



**Figure 144**

**Under identical conditions (tariffs, services etc.), would you leave your current operator and go for an ethical operator?**

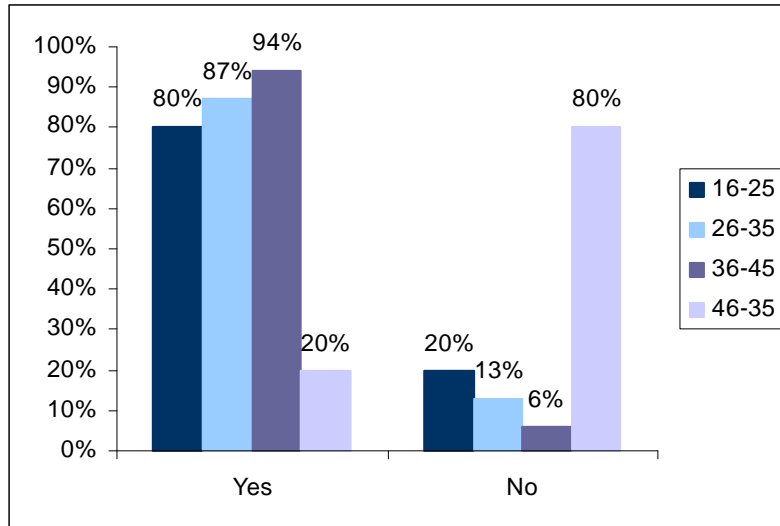
**Linguistic regions**



**Figure 145**

**Under identical conditions (tariffs, services etc.), would you leave your current operator and go for an ethical operator?**

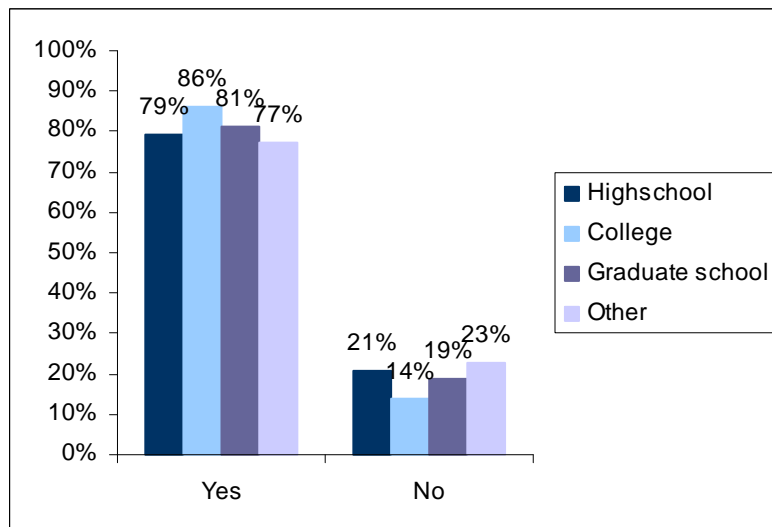
**Age groups**



**Figure 146**

**Under identical conditions (tariffs, services etc.), would you leave your current operator and go for an ethical operator?**

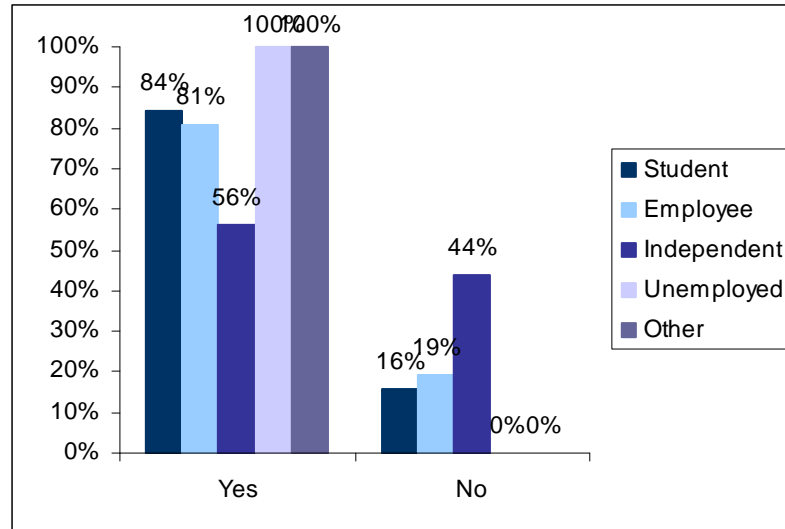
**Education levels**



**Figure 147**

**Under identical conditions (tariffs, services etc.), would you leave your current operator and go for an ethical operator?**

**Occupations**



## Appendix 3 Articles

Figure 148  
Article on Internet-Briefing.ch

**INTERNET-BRIEFING.CH**  
WHERE WEB PIONEERS MEET



**Internet Briefing**  
Mitglieder  
Mitglied werden  
Testimonials  
Programm  
AGB  
Forum / Artikel  
Kontakt  
Call for Speakers  
Sponsoren  
Rückblick 2005

**Inhalt**  
Links  
Archiv  
Über uns

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Allgemein  
Apple  
Banking-Group  
Barcamp  
Blogcamp  
Blogging  
Collaboration  
Content  
Management  
Design & Usability  
Development  
E-Business Strategie  
E-Commerce  
eCommerce  
eGovernment

Suchen:

### Ökologische Mobiltelefonie

von Reto Hartinger



[Aurélien Robert](#), ein Student aus Genf und CEO von [Noo Touch](#) macht eine Diplomarbeit über den Handymarkt und Ökologie bzw ethischen Konsum. Bitte unterstützt ihn doch, ich war nach 20 Sekunden mit dem Ausfüllen fertig. Ok, ich habe ja kein Handy - bei Euch wird das länger dauern :-)

Link zum Fragebogen: <http://etude.telefonie.sgizmo.com>

 [vigo this!](#) —  [save to del.icio.us](#)

—  [TRACKBACK URI](#)

Dieser Eintrag ([Permalink](#)) wurde am Montag, Oktober 22nd, 2007 um 11:39 AM von Reto Hartinger geschrieben und unter [Allgemein](#), [Mobile](#), [Telekommunikation](#) abgelegt.



**Figure 149**  
**Article on eMeidi**

Montag, Oktober 22, 2007

## Ökologische Telefonie

[Link zu diesem Artikel](#)

Meine Leser sind gebeten, eine Umfrage eines Studenten der Geneva School of Business Administration über "Ökologische Telefonie" auszufüllen:

[Umfrage](#)

Ansprechpartner ist [Robert Aurélien](#).

---

Labels: [Studium](#)

---

[1 Kommentare](#) | [neuen Kommentar verfassen](#)

**think eMeidi**

[zur Startseite](#)

Ein Weblog über IT, Apple Macintosh, mein Studium, meine Arbeit als PC-Supporter und Web-Developer, die Schweiz, den Kanton Bern, die Gemeinde Neuenegg, das Jungsein (oder doch lieber: Älter werden?) und zu Guter letzt auch über Politik.

[XML](#) [Abonnieren](#)

### Vorherige Artikel

Eine benutzerfreundlichere Übersicht finden Sie in meinem [Blog-Kalender](#).

[Hostpoint übernimmt Sunrise-Hosting](#)

**Figure 150**  
**Article on nachhaltigBeobachtet**



The screenshot shows the website 'nachhaltigBeobachtet' with the subtitle 'Beobachtungen und Erfahrungen zum Thema Nachhaltigkeit'. The navigation bar includes 'Blog', 'Bilder', 'Bücher', 'Dossiers', 'Suchen', 'Schlagworte', 'Über mich', and 'Kontakt'. The left sidebar lists categories like 'All', 'Überlegungen', 'Beobachtungen', and 'Besprechungen', along with a 'Meistgelesen' section. The main content area features the article title 'Brauchen wir einen ökologischen Mobilfunkanbieter?' by Reto Stauss, dated 25.10.2007. The article text discusses the challenges of creating an eco-friendly mobile service provider in Switzerland, mentioning the trade-off between sustainability and electromagnetic radiation. A small image of a sunset is included, with the source 'Quelle: pixnio.de' noted below it. The article concludes with a call to action for a survey and lists tags: 'Unternehmen', 'Elektromog', and 'Elektro-magnetische Strahlung'.