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Perception of written and graphic warning indications and attitudes concerning the tobacco tax increase

Factsheet of the research report 2011

Tobacco Monitoring Switzerland – Swiss Survey of Tobacco Consumption



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Tobacco Monitoring Switzerland (TMS) - Swiss Survey of Tobacco Consumption

The TMS was developed on behalf of the Swiss Federal Office of Public Health by the Department of Psychology, Social and Health Psychology, University of Zurich (Prof. Dr. Rainer Hornung, Dr. Roger Keller and Theda Radtke) and Hans Krebs, Kommunikation und Publikumsforschung, Zurich. The data collections were conducted by LINK International Research and Consulting, Lucerne. Since 2004 the Tobacco Monitoring Switzerland was funded by the Tobacco Prevention Fund.

The Tobacco Monitoring Switzerland (TMS) was a representative, continuous survey of tobacco consumption among 14- to 65-year-olds in Switzerland. Since January 2001, four times a year a new sample of 2 500 persons was taken (i.e. 10 000 participants annually). The survey was conducted using standardized telephone interviews in German, French and Italian.

The research instrument consisted of a basic module and several add-on modules. The basic module served as a means of collecting key data on tobacco consumption (e.g. type and frequency of tobacco consumption, willingness to cease smoking) and on demographics. These questions were asked in every survey wave. The add-on modules could be added to the basic module for one or more survey wave (e.g. questions on second-hand smoke, harm reduction).

In the Tobacco Monitoring Survey sampling was done using a two-stage random-random sampling technique (random selection at the household and person levels). In order to have a sufficient number of people in some characteristic groups that are small but important for tobacco prevention (young people, pregnant women and mothers of small children), 14-24 year old men and women 14-44 years of age were oversampled. Residents of the French- and Italian-speaking regions of Switzerland were also overrepresented in the sample in order to ensure a sufficiently large sample for each language region in Switzerland. The 2 500 telephone interviews, conducted four times per year, were made up of 1 426 interviews in the German-speaking region, 711 interviews in the French-speaking region and 363 interviews in the Italian-speaking region of Switzerland. After the plausibility check, the weighting of the data followed. The weighting corrects distortions in the sample, so that it correctly represents the population.

The Tobacco Monitoring Switzerland data collection ended in the 4th quarter of 2010. Beginning in January 2011, the data collection concerning tobacco consumption is conducted within the framework of Suchtmonitoring Schweiz, a survey that assesses epidemiological data concerning the problematic use of other addictive substances (e.g. alcohol, cannabis, pharmaceutical drugs) and other addictions (e.g. internet addiction).

For further information please visit our homepage: www.tabakmonitoring.ch

This factsheet contains selected information concerning two thematic aspects:

The first part (chapter 1) provides information on the perception of written and graphic warning indications on cigarette packets, as well as smoker's readiness to call the phone number printed on cigarette packets, catered to people who wish to quit smoking.

The second part (chapter 2) of this factsheet is concerned with the attitudes towards and the acceptance of increases of the tobacco tax.

The data was obtained within the framework of the Tobacco Monitoring Switzerland, a representative, continuous survey of tobacco consumption among 14- to 65-year-olds in Switzerland.

Important results:

- 26% of the 14- to 65-year-old smokers indicate that they «often» or «always» pay attention to the written warning indications.
- 20% of the smokers discuss the written warning indications «occasionally» and 7% «often» or «very often» with other people.
- 8% of the interviewed smokers indicate to smoke less due to the written warning indications.
- 47% of the smokers have already seen the advice phone number, catered to people who wish to quit smoking.
- A large proportion of people have already seen the graphic warning indications before the legal implementation in January 2010 (2nd quarter 2009: 50%). In the 4th quarter 2010 this rate was as high as 76%.
- The majority of the Swiss resident population agree with the implementation of graphic warning indications (4th quarter 2010: 61% estimate it as «rather good» or «very good»).
- Both smokers and non-smokers believe that the graphic warning indications neither keep the non-smokers from smoking nor motivate the smokers to quit smoking.
- 36% of the 14- to 65-year-olds are very and 23% rather for the increase in tobacco tax from 7.20 CHF to 8.10 CHF.
- Daily smoking adolescents react the strongest to the question of tobacco tax increase and reject it the most.

1 Written and graphic warning indications

1.1 Background

Since January 2010 all tobacco producers are required to print graphic warning indications on tobacco products sold in Switzerland, as an addition to the bigger written warning indications, implemented in May 2006 for cigarette packets and in May 2007 for all tobacco products.

Futhermore, the rate of tar, nicotine and carbon monoxide contained in the tobacco products needs to be indicated on the packets. The Swiss Tobacco regulation from the 27th of October 2004 and the Eidgenössisches Departement des Inneren [EDI] regulation concerning combined warning indications from the 10th of December 2007 are the legal basis for the implementation of the warning indications.

Since January 2008 all tobacco producers are required to print the advice phone number 0848 000 181, catered to people that wish to quit smoking, on their tobacco products. The graphic warning indications comprise three series with 14 pictures, which are exchanged every 2 years to ensure the attention of consumers (EDI, 2008).

1.2 Goals of the warning indications

The warning indications are intended to inform smokers about the risks of tobacco consumption, motivate them to quit smoking, and prevent non-smokers from smoking (BAG, n.d.).

A large body of evidence suggests the effectiveness of the graphic and written warning indications (cf. Christiansen, Stander & Töppich, 2004; Hammond, Fong, McDonald, Cameron & Brown, 2003; Hammond, Fong, McNeill, Borland & Cummings, 2006; Peterson & Lieder, 2006; Trasher et al., 2010; White, Webster & Wakefield, 2008). Nevertheless, some studies found contradictory results concerning the warning indications (cf. Hammond, Fong, McDonald, Brown & Cameron, 2004; Willemsen, 2005). Willemsen (2005) found that many smokers react with disgust and fear to the warning indications and a not negligible amount of smokers exhibits avoidance and defense reactions.

1.3 Cigarette packets' design

Combined warning indications

The combined warning indications comprise a written warning indication, a colored graphic warning indication and a visual reference to the smoke-stop phone number. Figure 1 depicts the 14 different combined warning indications on Swiss tobacco products (EDI, 2008).

 <p>© European Community</p> <p>Wenn Sie rauchen, sterben Sie früher. Fumer, c'est vivre moins longtemps. I fumatori muoiono prima.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	 <p>© European Community</p> <p>Rauchen verursacht tödlichen Lungenkrebs. Fumer provoque le cancer mortel du poumon. Il fumo provoca cancro mortale ai polmoni.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	 <p>© European Community</p> <p>Rauchen in der Schwangerschaft schadet Ihrem Kind. Fumer pendant la grossesse nuit à la santé de votre enfant. Fumare in gravidanza fa male al bambino.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	 <p>© European Community</p> <p>Schützen Sie Kinder – Rauchen Sie nicht in ihrer Anwesenheit! Protégez les enfants: ne fumez pas en leur présence. Proteggi i bambini – non fumare in loro presenza.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>
 <p>© European Community</p> <p>Rauchen macht sehr schnell abhängig. Fumer crée une forte dépendance. Il fumo crea un'elevata dipendenza.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	 <p>© European Community</p> <p>Rauchen führt zu Krebs der Mundhöhle. Fumer provoque le cancer de la cavité buccale. Il fumo provoca il cancro della cavità boccale.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	 <p>© European Community</p> <p>Rauchen lässt Ihre Haut altern. Fumer provoque un vieillissement de la peau. Il fumo invecchia la pelle.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	 <p>© European Community</p> <p>Rauchen kann das Spermium schädigen und schränkt die Fruchtbarkeit ein. Fumer peut altérer le sperme et réduit la fertilité. Il fumo può danneggiare lo sperma e diminuisce la fertilità.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>
 <p>© European Community</p> <p>Rauch enthält Benzol, Nitrosamine, Formaldehyd und Blausäure. La fumée contient du benzène, des nitrosamines, du formaldéhyde et du cyanure d'hydrogène. Il fumo contiene benzene, nitrosamine, formaldeide e acido cianidrico.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	 <p>© European Community</p> <p>Rauchen kann zu Durchblutungsstörungen führen und verursacht Impotenz. Fumer peut diminuer l'afflux sanguin et provoque l'impotence. Il fumo può ridurre la circolazione sanguigna e causa impotenza.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	 <p>© European Community</p> <p>Hier finden Sie Hilfe, um das Rauchen aufzugeben: 0848 000 181/www.rauchenschadet.ch. Faites-vous aider pour arrêter de fumer: 0848 000 181/www.fumercafaldumal.ch. Fatti aiutare a smettere di fumare: 0848 000 181/www.fumarefamale.ch.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	 <p>© European Community</p> <p>Wer das Rauchen aufgibt, verringert das Risiko tödlicher Herz- und Lungenerkrankungen. Arrêter de fumer réduit les risques de maladies cardiaques et pulmonaires mortelles. Smettere di fumare riduce il rischio di malattie cardiovascolari e polmonari mortali.</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>
<p>Das Risiko, einen Schlaganfall zu bekommen, ist ungefähr 50% höher bei Rauchern als bei Nichtrauchern. Rauchen führt zu Verstopfung der Blutgefäße und verursacht Herzinfarkte und Hirnschläge. Vous courez 50% plus de risques d'avoir une crise cardiaque qu'un non-fumeur. Fumer bouche les artères et provoque des crises cardiaques et des attaques cérébrales. Il rischio di colpo apoplettico è di circa 50% superiore tra i fumatori che tra i non fumatori. Il fumo ostruisce le arterie e provoca infarti e ictus.</p> <p>© European Community</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>	<p>Rauchen ist eine ernste Nikotinabhängigkeit; haben Sie keine Angst, um Hilfe zu bitten. Medizinische Fachpersonen helfen Ihnen, das Rauchen aufzugeben. Fumer entraîne une dépendance à la nicotine. N'ayez pas peur de demander de l'aide. Des spécialistes dans le domaine médical vous aident à arrêter de fumer. Fumare è una dipendenza seria alla nicotina; non avere paura di chiedere aiuto. Specialisti del settore medico possono aiutarvi a smettere di fumare.</p> <p>© European Community</p> <p>✓ Rauchstopplinie/Ligne stop-tabac/ Linea stop tabacco 0848 000 181</p>		

Figure 1: The first series of combined warning indications; Pictures: © European Community

1.4 Results

1.4.1 Written warning indications

Since the 3rd quarter of 2005 all smokers were asked how often they paid attention to the written warning indications on cigarette packets.

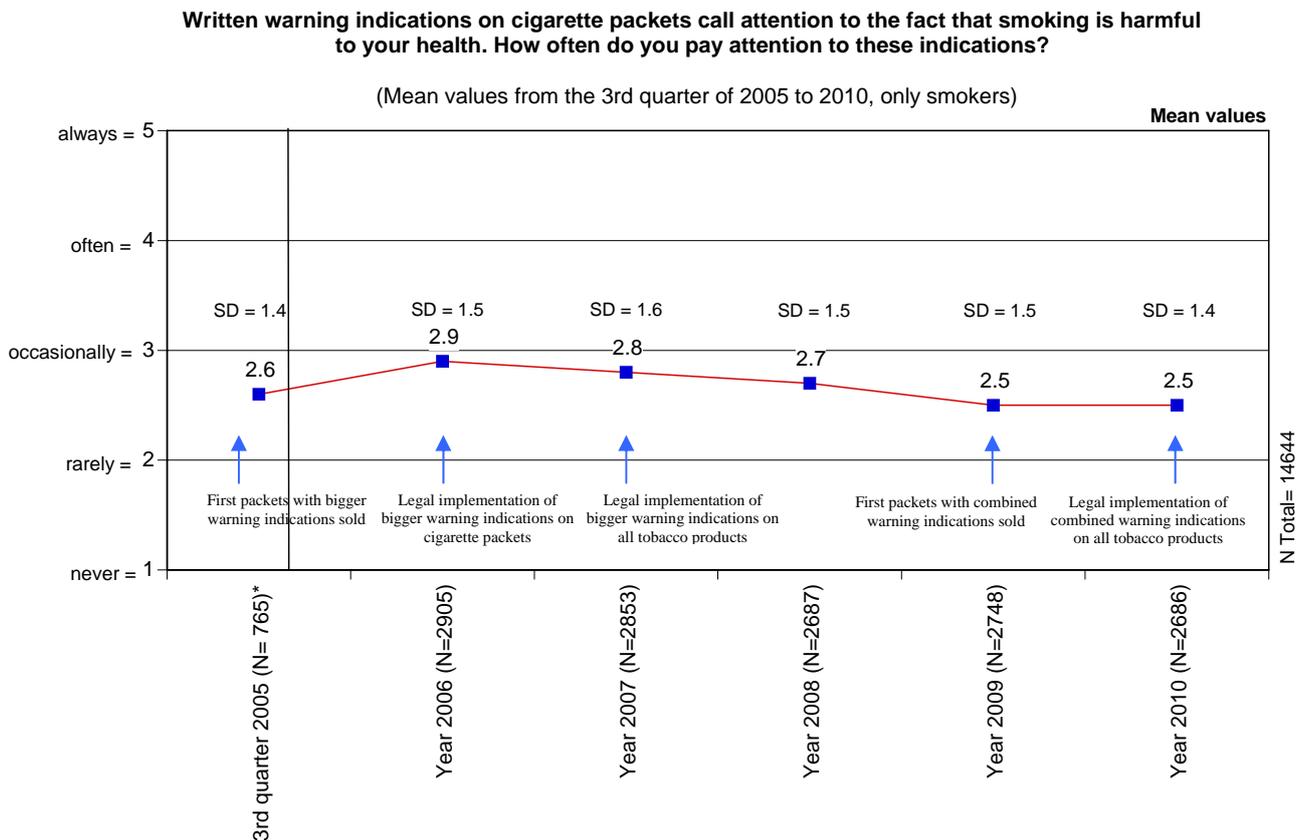


Figure 2: Mean value of attention paid to written warning indications, separated by year, only smokers were asked. Note. SD = standard deviation. *The 3rd quarter 2005 is added as reference rate, since at this moment the bigger warning indications were not legally implemented yet. However, it is important to note the small sample size and the increased error margins.

Figure 2 indicates how often the 14- to 65-year-old Swiss resident population paid attention to the written warning indications. In the 3rd quarter 2005 the mean value was 2.6 (SD = 1.4) on the 5-point scale from «never» («never» = 1) to «always» («always» = 5). In comparison with the preceding years, no significant increase of the mean values is notable.

In Figure 3 the rate of attention paid to the written warning indications is presented in percent. Compared to 2006, the percental rate of smokers that «always» pays attention to the written warning indications has decreased in 2010 from 23% to 15%. Simultaneously, the rate of «never»- or «rarely» has increased.

How often do you pay attention to written warning indications on cigarette packets?

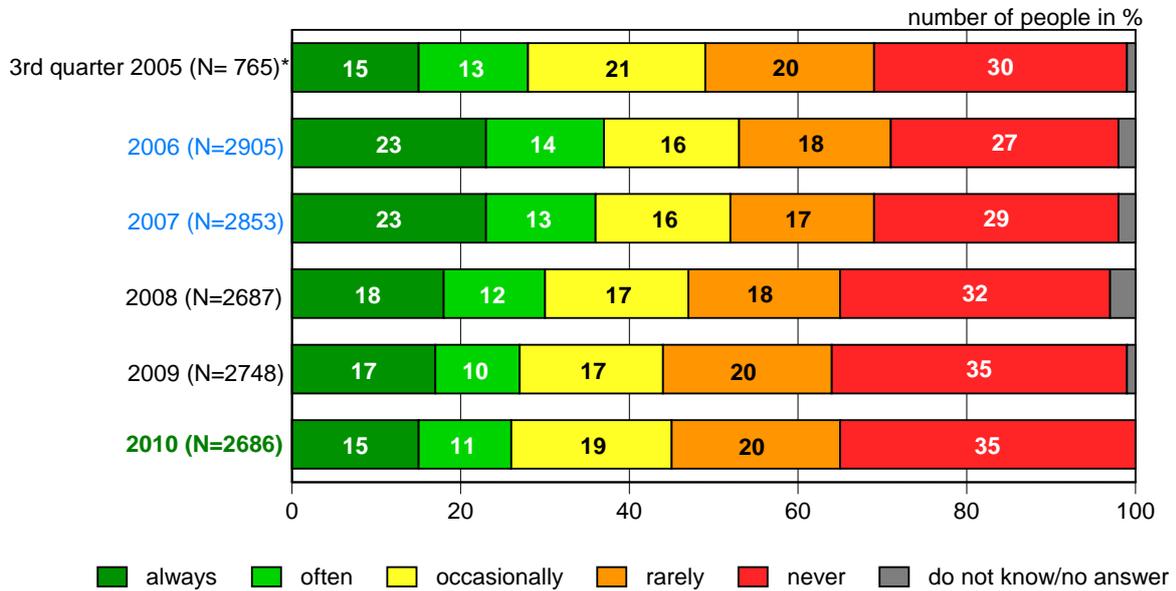


Figure 3: Percental rate of attention paid to the written warning indications, separated by year, only smokers were asked. Note. *The 3rd quarter 2005 is added as reference rate, since at this moment the bigger warning indications were not legally implemented yet. However, it is important to note the small sample size and the increased error margins. Blue marks the years of legal implementation of the written warning indications. Green marks the moment of legal implementation of the graphic warning indications (cf. Fig.2).

No significant sex differences were found for the year 2010. However, daily smokers seem to pay more attention to the written warning indications than the occasional smokers (cf. Figure 4). 32% of the occasional smokers (N = 795) indicate to «often» (14%) or «always» (18%) pay attention to the warning indications. 24% of the daily smokers (N = 1891) answer this question with «often» (10%) or «always» (14%).

**Written warning indications on cigarette packets call attention to the fact that smoking is harmful to your health.
How often do you pay attention to these indications?**

(Mean values from the 3rd quarter of 2005 to 2010)

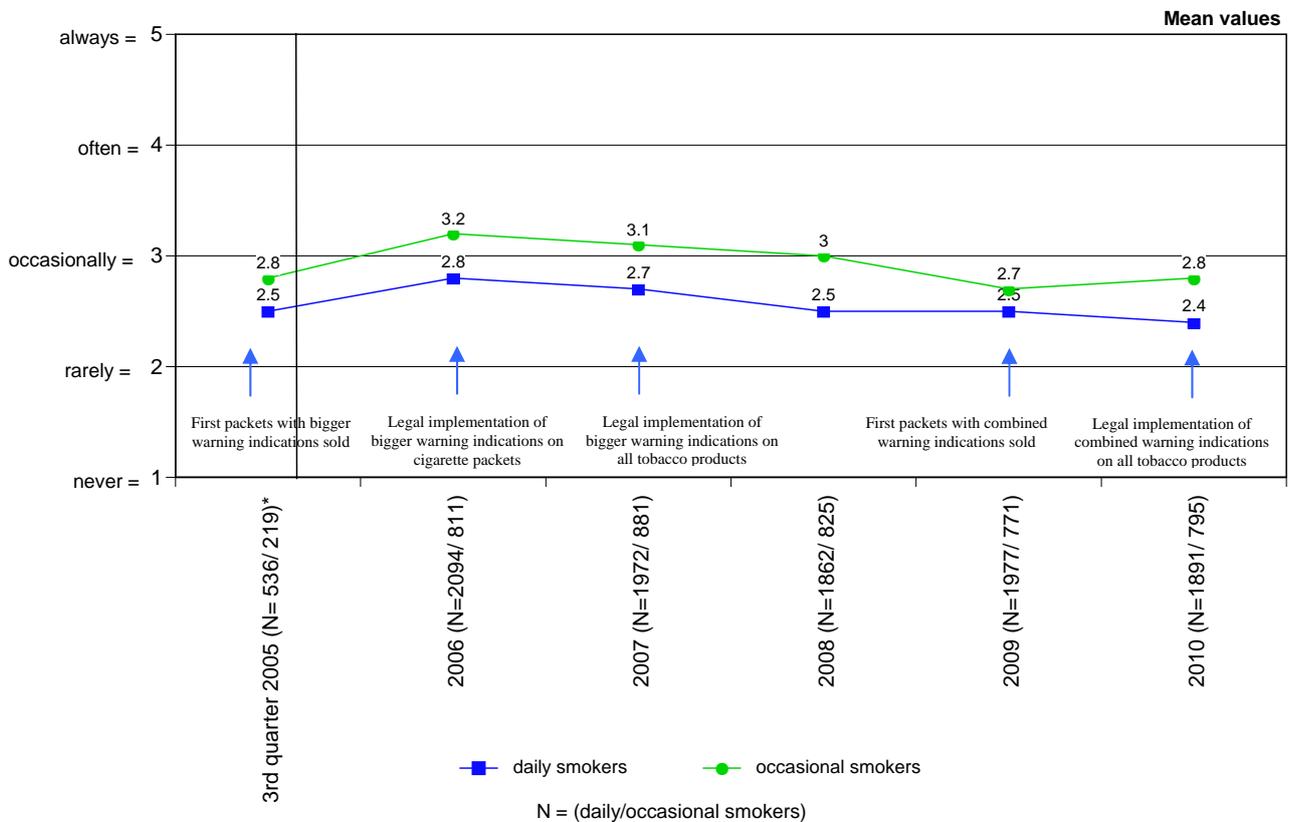


Figure 4: Mean value of attention paid to the written warning indications, separated by year and smoking status. Note. *The 3rd quarter 2005 is added as reference rate, since at this moment the bigger warning indications were not legally implemented yet. However, it is important to note the small sample size and the increased error margins.

Additionally, the smokers were asked how often they discussed the warning indications on cigarette packets with other people. A comparison with the preceding years shows that the mean value was 2.3 (SD = 1.1) in 2006 and 2.0 (SD = 1.0) in the following years. This suggests that the subject of warning indications is rarely discussed. This decrease since the legal implementation of the warning indications is also noticeable for the question how often the smokers think about the written warning indications (2.5 in 2006 (SD = 1.3), 2.3 in 2010 (SD = 1.3)).

In 2010 (cf. Fig. 5) 73% of the smokers declare to «never» or «rarely» talk about the warning indications with others, whereas 20% discusses them «occasionally» and 7% «always» or «often».

How often do you talk to other people about the written warning indications on cigarette packets?

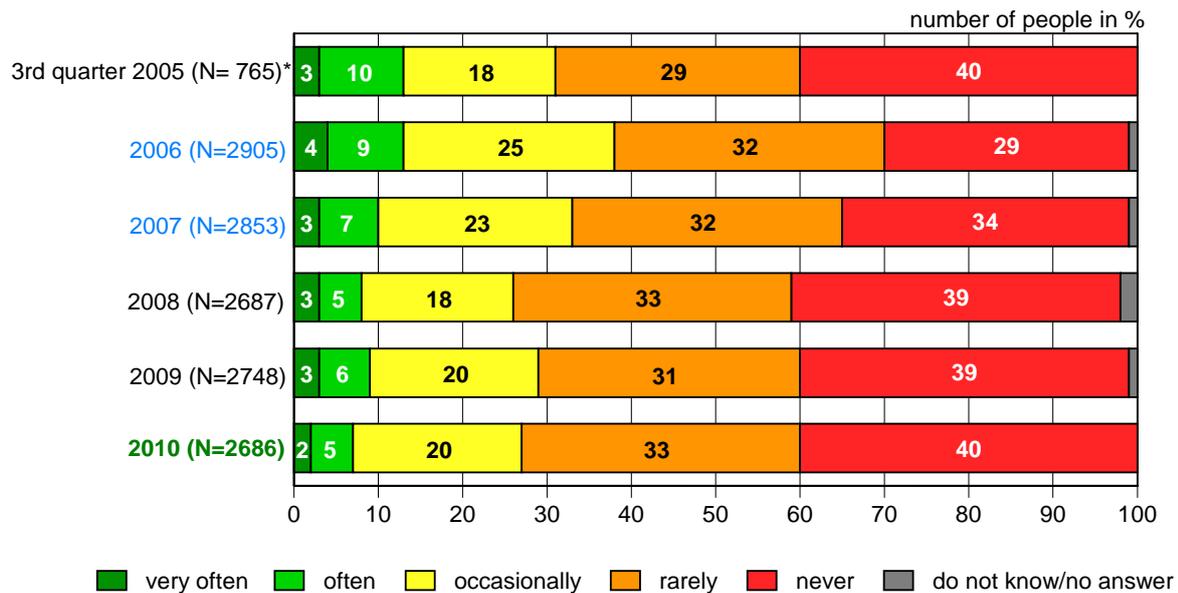


Figure 5: Percental rate of discussions about the written warning indications, separated by years, only smokers were asked. Note. *The 3rd quarter 2005 is added as reference rate, since at this moment the bigger warning indications were not legally implemented yet. However, it is important to note the small sample size and the increased error margins. Blue marks the years of legal implementation of the written warning indications. Green marks the moment of legal implementation of the graphic warning indications (cf. Fig.2).

There are sex differences in the year 2010: women (31%, N = 1170) state more often than men (24%, N = 1516) that they talk about the warning indications to others. Concerning the smoking status, the following results were found: the occasional smokers discuss the warning indication more often than the daily smokers. 32% of the occasional smokers (N = 795) declare to discuss the warning indications «occasionally» (25%), «often» (6%), or «always» (1%), whereas 25% of the daily smokers (N = 1891) speak about the warning indications «occasionally» (18%), «often» (5%), or «always» (2%).

The smokers were asked to indicate whether they smoke less, the same or more due to the written warning indications on the cigarette packets. In 2010 89% of the smokers perceive no influence of the warning indications and smoke the same amount, 8% smoke less. Occasional smokers (14%, N= 795) indicate more often than daily smokers (5%, N= 1 891) to reduce their tobacco consumption due to the warning indications.

According to Figure 6, 34% of the smokers indicated 2006 to have seen the phone number; in 2010 this number has increased to 47%. More men (50%, N = 1 516) than women (44%, N = 1 170) seem to have noticed the phone number in 2010. This might be due to the fact that more men than women smoke daily and hence, have a higher probability of seeing the phone number on a cigarette packet. 56% of the daily smokers (N = 1 891) and 27% of the occasional smokers (N = 795) have seen the phone number before.

A warning indication on cigarette packets calls attention to a phone number, catered to people who want to quit smoking. Have you seen this indication before?

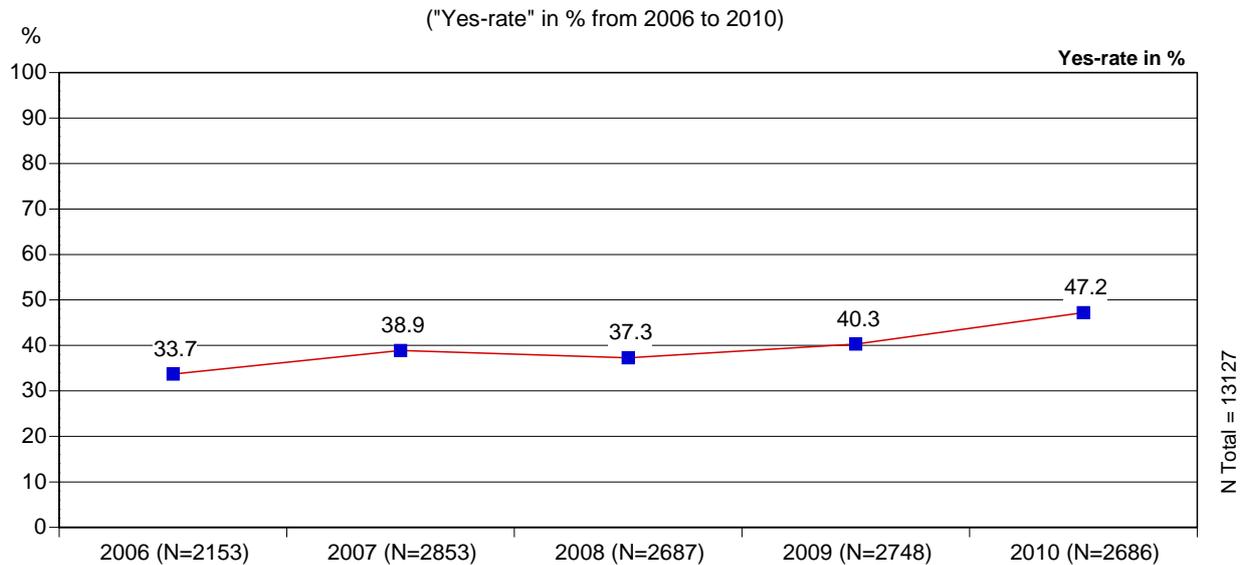


Figure 6: “Yes-rate” of phone number on cigarette packets noticed, separated by year, only smokers were asked. Note. In the year 2006, this question was only posed in three waves. Thus, the comparison with the other years is restricted due to the smaller sample size.

17% of smokers answers that they «definitely would » (3%) or «probably would » (14%) call the phone number if they intended to quit smoking. This percentage has not changed much since 2006.

1.4.2 Graphic warning indications

The questions concerning the graphic warning indications were asked for the first time in the 2nd quarter 2009 (April to July 2009) and since repeated four times per year.

The smoking and non-smoking 14- to 65-year-olds were asked whether they have seen the graphic warning indications before. As shown in Figure 7, 50% of the respondents have seen the pictures before the legal implementation (2nd quarter 2009). This might be due to the fact that the pictures were already subject in the media, were already implemented in different countries (for example in the United Kingdom; Schuler & Anderegg, 2009; <http://www.tobaccolabels.ca>) or by certain producers (American Spirit and Davidoff).

With the legal implementation of the pictures in Switzerland in January 2010 the rate of people, who have seen the pictures, increased continuously to 76% in the 4th quarter 2010.

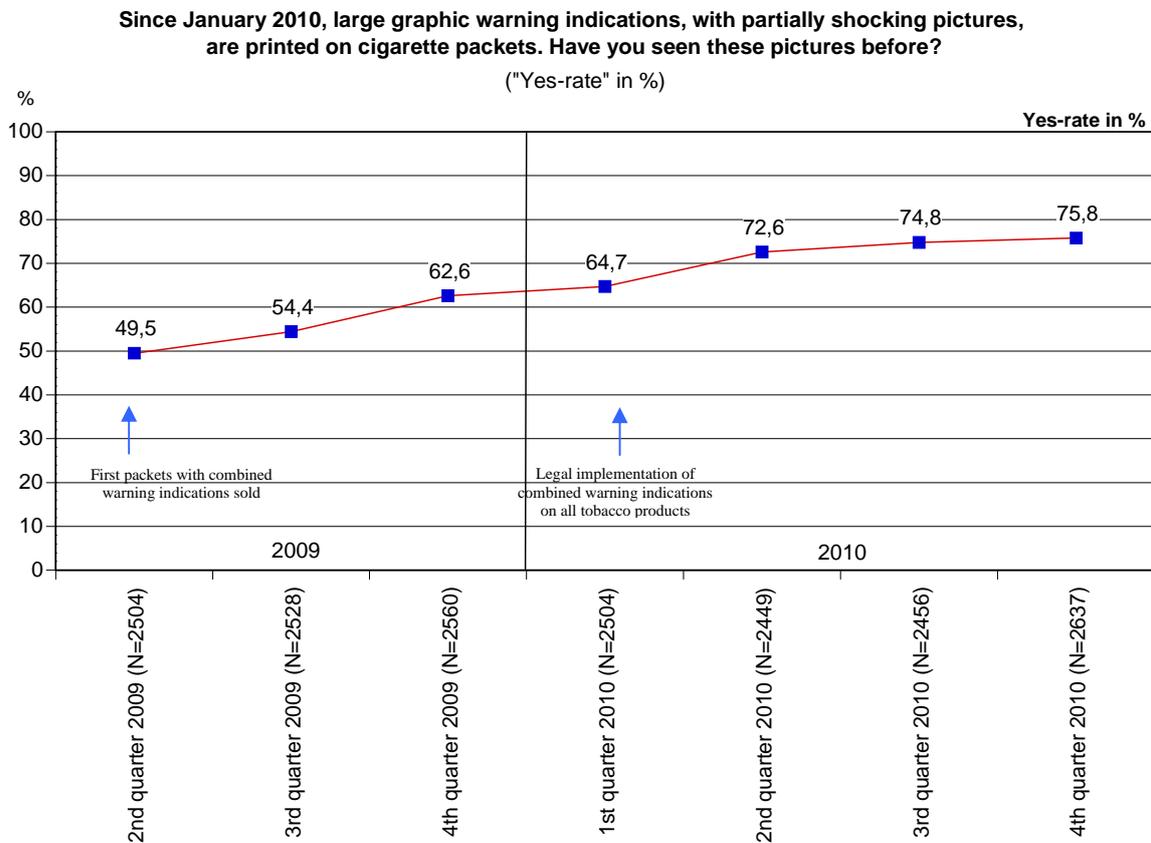


Figure 7: Perception of the graphic warning indications, separated by quarters, smokers and non-smokers were asked.

Additionally, the 14- to 65-year-olds were asked for their opinion concerning the pictures on the cigarette packets. The mean values in the 4th quarter of 2010 suggest that the Swiss resident population agree with the implementation of the graphic indications (M = 2.8, SD = 1.1). Figure 8 presents the mean values of the approval of the graphic warning indications, separated by smoking status. Generally, non-smokers agree more strongly with the implementation of graphic warning indications than smokers. Furthermore, 33% of the daily smokers indicate that they do not approve of the graphic warning indications at all, whereas only 19% of the occasional smokers disapprove strongly.

Do you approve of the graphic warning indications, with partially shocking pictures, on cigarette packets?
(Mean values from the 2nd quarter 2009 to the 4th quarter 2010)

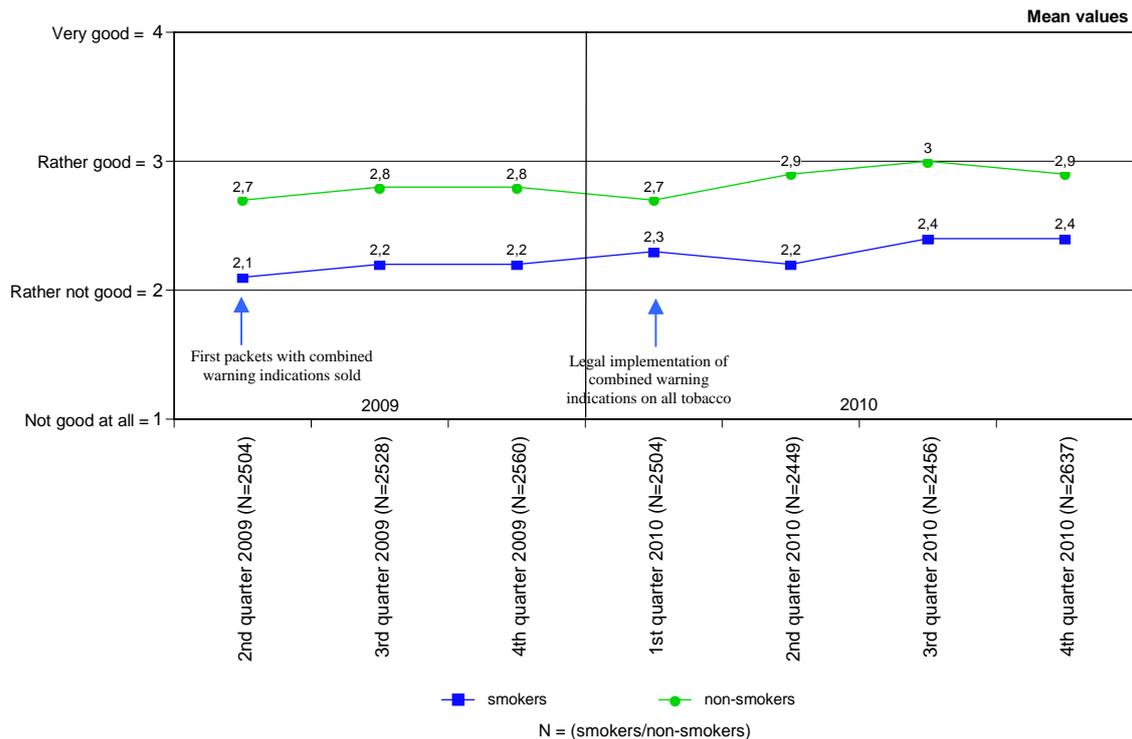


Figure 8: Perception of the graphic warning indication, separated by quarter and smoking status (smokers: SD = 1.1; non-smokers: SD = 1.1).

In the 4th quarter of 2010 23% of the non-smokers think that the graphic indications motivate smokers to quit smoking. Analogous, 23% of the smokers indicate to be motivated to quit smoking through the graphic warning indications. Additionally, the respondents were asked whether the pictures would keep non-smokers from smoking (cf. Figure 9).

Do you think the graphic warning indications keep non-smokers from smoking?

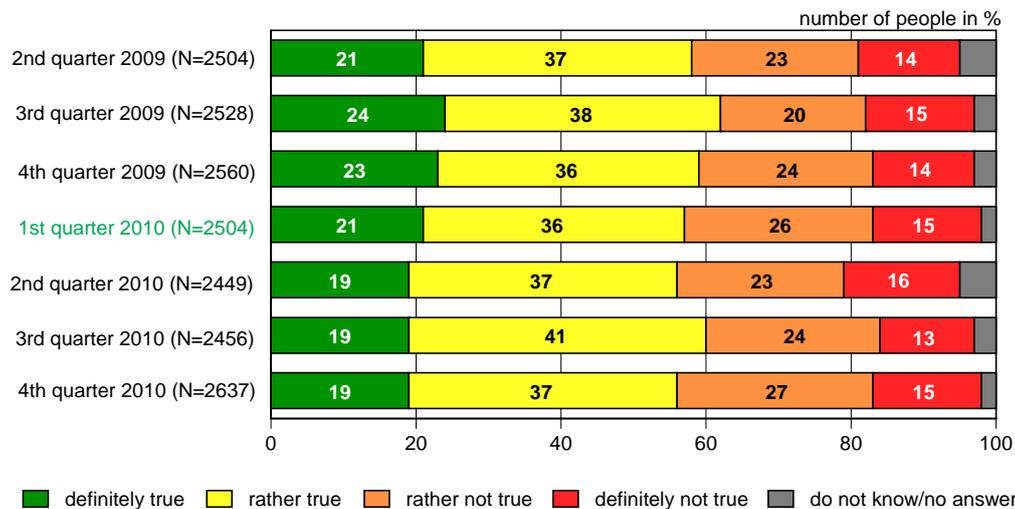


Figure 9: Percental answers: Do you think the graphic warning indications keep non-smokers from smoking? Smokers and non-smokers were asked. Note. Green marks the implementation of the combined warning indications.

2 Acceptance of the tobacco tax increase

2.1 Background

The tobacco tax increase is part of the general goals in the National Tobacco Agenda 2008-2012, with the goal to effectively reduce tobacco related illnesses and fatalities, especially for adolescents (BAG, 2008). The federal council of Switzerland can change the tobacco tax by regulation. The last tax increase was implemented on the 1st of October 2010; additionally, the tobacco producers increase their prices continuously as well. The retail price of the most-selled cigarette brand is 7.60 CHF. In 2003 the retail price was 4.90 CHF. In the following, the results concerning the acceptance of this continuous increase of the tobacco price are presented.

2.2 Results

The question was adapted with each increase of cigarette retail price. Since the 3rd quarter 2010 the following question was posed: “This year the price of a packet of cigarettes will increase from 7.20 CHF to 8.10 CHF. Please indicate whether, you strongly agree, rather agree, rather disagree or strongly disagree”. In the 4th quarter 2010, 36% «strongly agree» and 23% «rather agree» with the increase in cigarette price. 13% «rather disagree» and 22% «strongly disagree». In Figure 10 the mean values of the acceptance of the increase in tobacco price are visible. The mean values do not vary much depending on the increase.

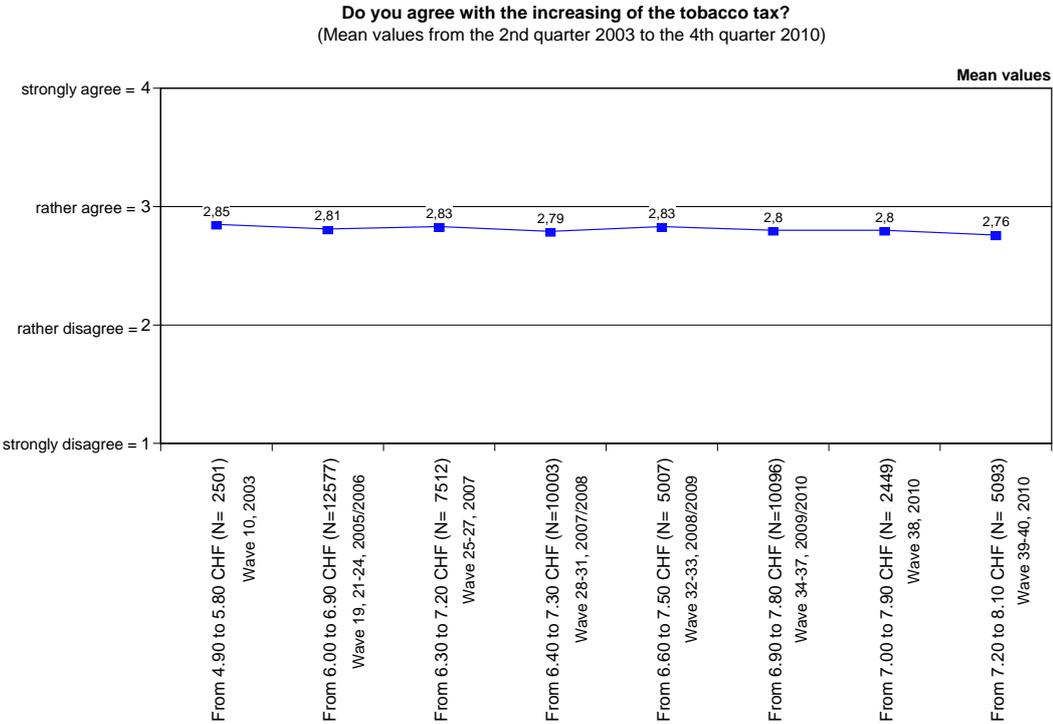


Figure 10: Acceptance of the cigarette price increase, mean values (2003 to 2010).

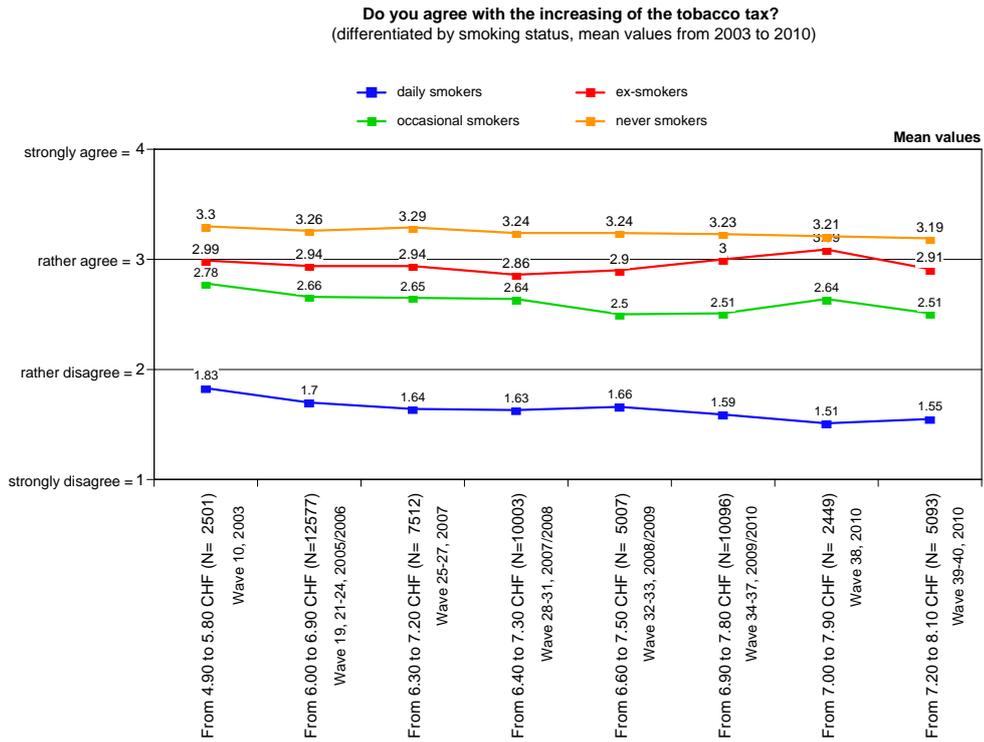


Figure 11: Acceptance of the cigarette price increase by daily smokers, occasional smokers, ex-smokers and never smokers, mean values (2003 to 2010).

In Figure 11/12 the mean acceptance of the increase in the cigarette retail price depending on smoking status and age is presented. Daily smokers exhibit the least acceptance toward the price increase, followed by occasional smokers. Ex-smokers and never smokers agree the most with the increase in tobacco price. Overall, there are no significant age differences but there is a trend that daily smoking adolescents reject the increase in cigarette price the most.

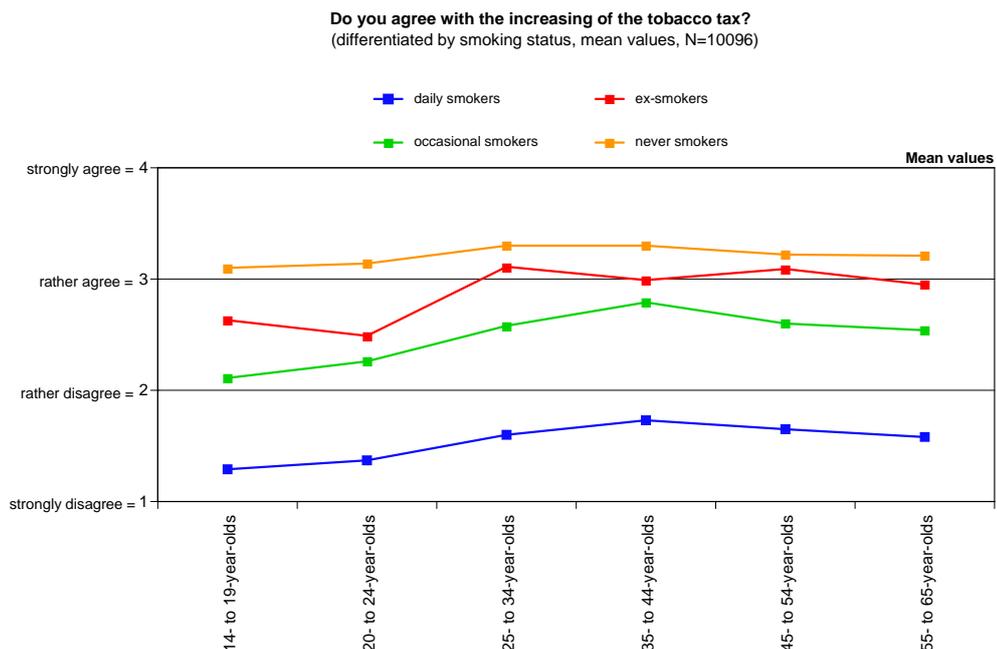


Figure 12: Acceptance of the cigarette price increase, differentiated by age and smoking status, mean values cumulated for the 2nd quarter 2009 to 1st quarter 2010.

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