



Testing of Health Warning Messages and Health Information Messages for Tobacco Products - Part 3 of 5

Quantitative Phase

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Quantitative Phase

The quantitative phase of this research was conducted in the summer of 2008. The methodology for this phase was hybrid mail and online. In total, 2,241 surveys were completed. The survey tested 41 proposed health warning messages (HWMs), 18 health information messages (HIMs) and contact information. Each proposed mock-up had a French version and an English version.

For a detailed description of the methodology, please see Appendix E.

Overall Findings

Overall, the Health Warning messages (HWMs) and Health Information messages (HIMs) were rated by Canadian smokers as being moderately effective. Some messages, and entire categories, were noticeably stronger than others were and the following section will describe these differences.

Overall, the HWMs' attributes were rated higher than the HIMs'. Please note that eight attributes were measured for the HIMs, compared to only seven attributes that were measured for the HWMs.

Message Categories

Both the Health Warning and Health Information messages were divided by category, based on either the topic or design of the overall message. The HWMs that were tested fell into six categories, and the HIMs fell into nine.

When ranked highest to lowest, the series were rated as follows:

Health Warning Message Categories:

- Health Impacts of Pre- and Post-natal Smoking (mean composite score = 68.23)
- Health Impacts of Smoking (mean composite score = 68.17)
- Health Hazards from Second-Hand Smoke (mean composite score = 65.55)
- Tobacco-attributable Mortality (mean composite score = 65.31)
- Addiction (mean composite score = 65.15)
- Toxic Emissions (mean composite score = 61.45)

As can be seen from these scores, the Health Impacts of Pre- and Post-natal Smoking and the Health Impacts of Smoking series were the strongest categories of Health Warning Messages. These messages related to the direct health risks of smoking had a noticeably higher impact on respondents than message that had a less specific health message.

Overall, most HWMs were preferred by younger respondents when compared to older respondents. Generally, this was the case in all message series, and was especially true for the top ranked messages in each series. In some cases, message ratings differed on language lines, with Anglophone and Francophone respondents ranking messages somewhat differently. However, there is very little consistency between these differing ratings by category and nothing to suggest that a particular series fared more or less favourably in one language or another. When gender is considered, very few differences are noted, with the exception of the Health Impacts of Pre- and Post-natal Smoking series that was ranked higher by women. For the other series, some gender differences are apparent for particular messages but no pattern is found for the series as a whole.

Health Information Message Categories:

- Anatomy (mean composite score = 70.05)
- Benefits (mean composite score = 67.63)
- Withdrawal Cravings (mean composite score = 67.33)
- True or False (mean composite score = 65.73)
- Stages (mean composite score = 64.76)
- Promotional (mean composite score = 62.85)
- Humour (mean composite score = 62.19)
- Join the Club (mean composite score = 61.18)
- Testimonial (mean composite score = 59.14)

The highest rated Health Information Messages were in the Anatomy series, followed by the Benefits and Withdrawal Cravings series. Again, in this series are messages that relate to specific health concerns that have been associated to smoking and our interpretation is that this element is the strength of the respective series overall. In addition, the highest rated series seemed to be more informational and scientific in nature. Qualitative research showed that the Withdrawal Cravings tended to work quite well if respondents had personal experiences with symptoms that they saw reflected in the message.

In the majority of cases, younger respondents rated the HIMs as more effective than did older respondents; again, this was especially true of the top ranked series such as Anatomy and Benefits. Francophones generally rated the messages higher, except in the case of the True or False series, and to some degree the Testimonials series. Gender did not play a notable role in the overall ranking of HIM series; there were differences noted for specific messages but no consistent pattern across series was observed.

Most/Least Effective Messages

Health Warning Messages:

When specific messages are reviewed, it becomes evident that messages concerning specific personal health threats were the most powerful HWMs. The following is a list of the top ten, ranked by the message's overall composite score.

1. Lungs are for life (H-12)
2. Throat cancer. It's tough to swallow (H-21)
3. Heart disease (H-11)
4. Smoking is a major cause of heart disease (H-28)
5. Lung cancer (H-24)
6. Harmful effects of second-hand smoke (P-33)
7. Eye disease (H-30)
8. Stroke (H-19)
9. Second-hand smoke. First-hand risk. (S-37)
10. Cigarettes are a major cause of strokes (H-25)

The least successful HWMs were those that were seen to be less relevant, lacking new information, and in many cases, these concepts received poor ratings for the impact of the picture. The following five messages were rated the lowest:

37. Don't poison me (T-44)
38. Enough is enough... (M-27)
39. "I planned to quit smoking before I turned 20. Now I'm 26." (A-1)
40. Air filters do not eliminate the smaller particles and gases found by tobacco smoke (S-41)
41. Living with chronic obstructive pulmonary disease (COPD) (H-20)

Health Information Messages:

The following is a list of the top five Health Information messages, ranked by the message's overall composite score. Messages related to health impacts and the physical benefits of not smoking were perceived to be the most appealing to respondents. These messages were information-heavy and focused on medical facts.

1. How is my body affected? (ANAT-02)
2. Do you cough in the morning? (B-08)
3. How is my body affected? (ANAT-02A)
4. Your heart will thank you... (B-09)
5. They peak during the first 48 hours... (WC-02)

The lowest rated HIMs are as follows and included many of the testimonial series. Respondents tended to find these personal accounts less relevant or

helpful to them; qualitative research showed that those messages that are seen as a realistic reflection of the quitting process as they themselves may have experienced, or as they believe it to be for others, may be stronger than the messages reflected in these particular HIMs, which are not seen as very helpful.

- 14. I didn't have to do it alone... (T-16)
- 15. Need help quitting? (P-01B)
- 16. Join the smoke free revolution (JTC-01)
- 17. I crossed the finish line...(T-18)
- 18. My reason for quitting...(T-17)

Evaluation of Contact Information

In addition to testing Tobacco Health Warning Messages and Health Information Messages, this study also evaluated the effectiveness of the contact information on the cigarette package. Primary findings include:

- The majority of respondents felt the information was noticeable (64%) or somewhat noticeable (23%);
- The majority (67%) agreed that the space occupied by the contact information was an appropriate size and should not be changed. About one-quarter (22%) felt it should be bigger, while only 1 in 10 thought it should be smaller; and
- For the most part, Canadians feel the presence of this contact information is either important (63%) or somewhat important (20%). Almost 1 in 5 (17%) said that this information is not important, resulting in a mean rating of 6.99.

Relationship Between Message Attributes and Composite Scoring

The primary objective of this quantitative research was to evaluate the impact, or effectiveness, of proposed tobacco health warning and information messages.

When testing messages it is common to evaluate a variety of communication attributes that lead to a message's overall impact. In the current research, respondents were asked to rate each message on its noticeability, relevance, credibility, understandability, readability, the newness of the information in the message, and the impact of the picture or illustration.

Additionally, respondents were directly asked how effective they believed a message was at conveying a particular point: In the case of Health Warning messages they were asked how effective the message was at informing them of the health effect of smoking, whereas in the case of Health Information messages respondents were asked how effective the message was at making them think about the benefits of quitting smoking

A simple correlation analysis showed that all attributes that were tested were highly correlated to each other. This confirmed two things: firstly, that the attributes tested did impact smokers' overall impression of the messages. Secondly, and more importantly, the analyses indicated that certain attributes affected the overall impact of messages in differing degrees - in other words, some attributes were more important as drivers of overall impact than others.

To further analyse the data, a reliability analysis was conducted. Reliability analysis is a statistical technique used to determine the degree to which items in a scale measure the same construct. It is based on the correlations between the individual measurements that make up the scale, relative to the variances of the items. In this case, this analysis would test how well the 7 (HWMs) or 8 (HIMs) attributes measure the overall impact of the message. The analysis also provides a coefficient (Cronbach's alpha, α) that represents the strength of this relationship (generally $\alpha > 0.70$ represents a highly reliable scale).

When the reliability analysis was conducted for the Health Warning Messages, we found a Cronbach's alpha value of 0.868, which is very high. This means that the seven attributes that were tested can be used to represent the overall impact of a message. Similarly, when the reliability analysis was conducted for the Health Information messages we found a Cronbach's alpha value of 0.902, which is also very high, indicating that the

eight attributes that were tested can be used to represent the overall impact of a message.

When evaluating messages it is useful to look at them in relation to each other; one way this can be done is by ranking. Ranking can be done in one of two ways: (1) Based on one variable (i.e. a particular attribute); or (2) Based on an overall score of all attributes. We felt that creating a composite score of all attributes would allow us to better gauge the overall impact of each message. Since some attributes played a more prominent role than others in determining the messages' overall impact, as described above, we weighted each attribute relative to its contribution.

The reliability analysis mentioned above calculated the correlation between each attribute and the overall construct (message impact). This correlation value, when squared, can be used to represent the relative weight of each variable. These squared correlation values were used to form an algorithm (below) so that a numeric score for each message could be calculated. The following was the basic formula used:

$$I_{M1} = r^2_{A1} (X_{A1}) + r^2_{A2} (X_{A2}) + r^2_{A3} (X_{A3}) \dots + r^2_{An} (X_{An})$$

Where:

I_{M1} = the overall impact of message 1

r^2_{A1} = the relative weight of attribute 1

X_{A1} = the mean value of attribute 1, as rated by respondents on a 1-10 scale

When applied to the HWMs and HIMs, these formulae were written as:

HWMs:

$$\text{Impact} = .72(x_{\text{effectiveness}}) + .66(x_{\text{relevance}}) + .66(x_{\text{picture}}) + .62(x_{\text{credibility}}) \\ + .55(x_{\text{noticeability}}) + .47(x_{\text{new info}}) + .31(x_{\text{understandability}})$$

HIMs

$$\text{Impact} = .73(x_{\text{effectiveness}}) + .71(x_{\text{relevance}}) + .67(x_{\text{credibility}}) + .63(x_{\text{picture}}) \\ + .63(x_{\text{noticeability}}) + .57(x_{\text{new info}}) + .51(x_{\text{readability}}) \\ + .45(x_{\text{understandability}})$$

With these, an overall impact score for each message was calculated. We then scaled these rankings on a 100-point scale to make them easier to interpret. Messages were then ranked based on this score (HWMs and HIMs separately) and following results were obtained:

HWMs*

Rank	Message	Calculated Score	Scaled Score	Rank	Message	Calculated Score	Scaled Score
1	H-12	29.15	73.02	21	H-15	26.86	67.29
2	H-21	28.85	72.27	22	M-31	26.77	67.04
3	H-11	28.82	72.20	23	S-36	26.71	66.89
4	H-28	28.78	72.10	24	S-39	26.56	66.52
5	H-24	28.52	71.43	25	S-38	26.36	66.03
6	P-33	28.48	71.34	26	A-2	26.25	65.74
7	H-30	28.41	71.16	27	A-3	26.21	65.65
8	H-19	27.96	70.03	28	P-31	25.98	65.08
9	S-37	27.84	69.74	29	H-14	25.94	64.98
10	H-25	27.81	69.65	30	H-16	25.84	64.73
11	H-29	27.72	69.43	31	S-40	25.53	63.94
12	A-5	27.63	69.22	32	H-26	25.13	62.94
13	P-34	27.60	69.14	33	T-50	24.78	62.07
14	H-17	27.51	68.90	34	A-7	24.69	61.83
15	H-10	27.29	68.35	35	H-23	24.48	61.31
16	M-25	27.10	67.87	36	T-51	24.43	61.20
17	H-9	27.07	67.80	37	T-44	24.39	61.09
18	A-4	27.04	67.72	38	M-27	24.36	61.02
19	H-27	27.03	67.70	39	A-1	24.25	60.75
20	P-32	26.89	67.37	40	S-41	24.02	60.18
				41	H-20	23.95	60.00

HIMs*

Rank	Message	Calculated Score	Scaled Score	Rank	Message	Calculated Score	Scaled Score
1	ANAT-02	34.62	70.80	11	STAGES-02	31.67	64.76
2	B-08	34.00	69.52	12	P-01A	31.55	64.52
3	ANAT-02A	33.88	69.29	13	HUM-01	30.41	62.19
4	B-09	33.29	68.08	14	T-16	30.09	61.54
5	WC-02	33.19	67.88	15	P-01B	29.92	61.18
6	WC-01	32.66	66.78	16	JTC-01	29.92	61.18
7	QA-03	32.58	66.62	17	T-18	28.42	58.12
8	QA-04	32.00	65.45	18	T-17	28.25	57.76
9	B-07	31.93	65.30				
10	QA-02	31.84	65.11				

*Please note that 8 attributes were measured for the HIMs, compared to only 7 attributes that were measured for the HWMs; for this reason overall scores between the two series of messages should not be compared.

The following section presents a brief review of the findings for each Health Warning and Health Information message. Messages are categorized by theme and have been ranked from highest to lowest based on their weighted composite scores. Ratings for individual attributes are discussed and compared, clearly demonstrating the strengths and weaknesses of each message and how certain attributes impact the overall message. Findings for each attribute may be presented in two ways, either by their mean scores or by the percentage of respondents that rated the attribute as High (7-10), Moderate (4-6), or Low (0-3).

Additionally, the “overall effectiveness” attribute is looked at in detail and significant differences between subgroups (age, gender, language) on this measure are discussed. Significance testing was conducted between all subgroups for each question. The cross-tabulation tables (under separate cover) show these differences at the 95% and 90% confidence intervals. In the current report, only statistically significant differences at the 95% confidence interval are presented.

Evaluation of Health Warning Messages

Addiction

The Addiction series consisted of six Health Warning messages. Figures in parentheses represent the scaled composite score for each message.

A-5 - Smoking is a destructive addiction (69.22)

A-4 - Break out of your tobacco addiction (67.72)

A-2 - "How can something so small have so much control over me?" (65.74)

A-3 - It's not too late to quit (65.65)

A-7 - Cigarettes are addictive, even for casual smokers (61.83)

A-1 - "I planned to quit smoking before I turned 20. Now I'm 26." (60.75)

Ranking of this series is fairly dispersed, with some Addiction messages falling in the top half of the rankings and the remainder of the series falling towards the bottom.

Overall, the series of Addiction warning messages fared moderately well in terms of overall effectiveness, with mean ratings ranging from 5.71 to 6.68. Although the messages were seen to be understandable (average of means ranging from 8.06 to 8.39), fairly noticeable (means = 6.69 to 7.48) and credible (means = 6.53 to 7.19), the fact that they were not perceived to contain new information negatively impacted them (means for new information ranged from 3.91 to 4.67). Their relevance was seen to be moderate, with averages ranging between 6.07 and 6.89, as was the impact of the picture (means = 5.63 to 7.15).



A-5 - Smoking cigarettes is a destructive addiction.

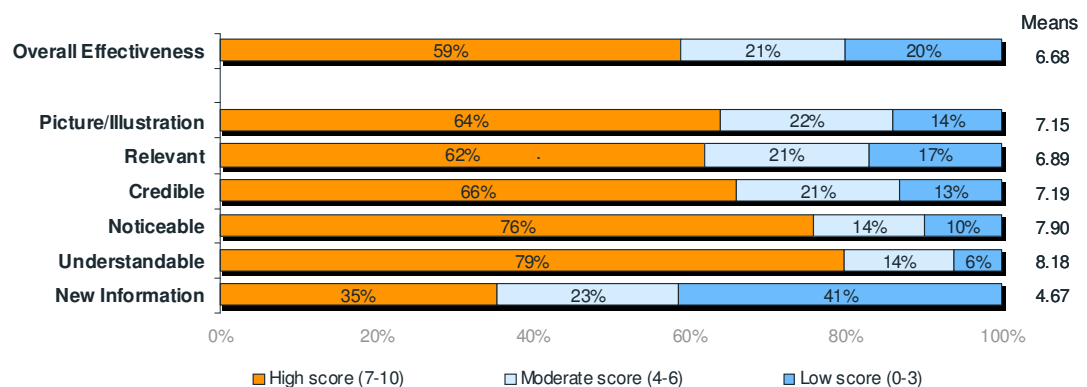
This message ranked 12th when compared to all other Health Warning messages and was the best-ranked message in the Addiction series.

Approximately 3 out of 5 respondents (59%) gave this message a high ranking (7-10) on the overall effectiveness attribute, that is, they felt the message was effective at informing them about the health effects of smoking (mean = 6.68). Its best feature was its understandability, rated at a mean of 8.18, with 79% of respondents ranking it as high on this attribute. It was also thought to be highly noticeable (mean = 7.90) and credible (mean=7.19). The picture was considered to impact the overall message by the majority (64%) of smokers, and the message was similarly considered relevant (62%). Most respondents however did not feel that the information was new; 64% gave a rating of 6 or below, with an average rating of 4.67.

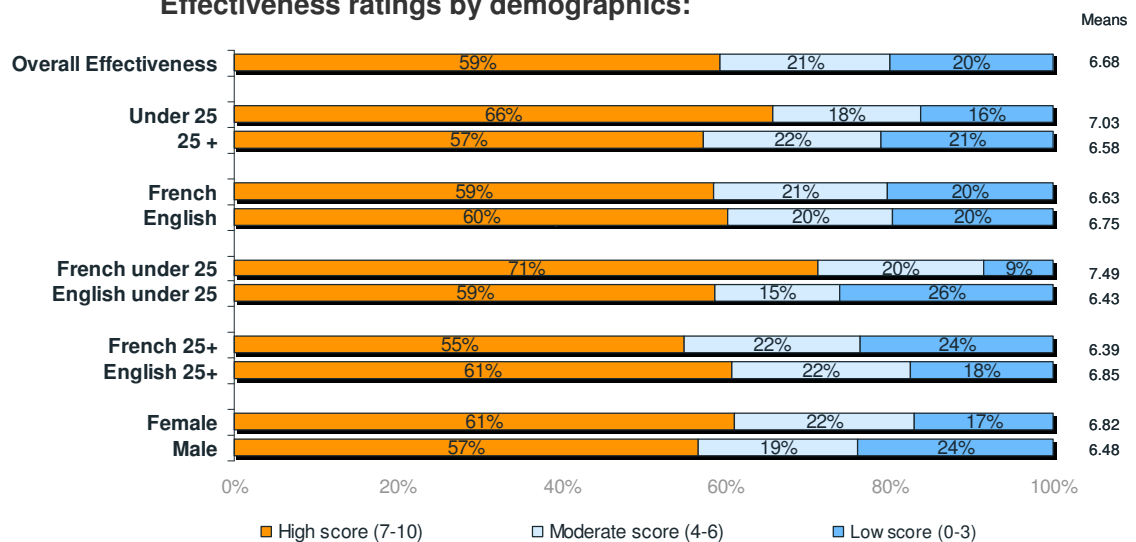
When demographic variables are considered, interesting trends are noted for overall effectiveness:

- French-speaking smokers aged 18-24 are more likely to find the message effective than French-speaking adults over 25 (mean=7.49 vs. 6.39);
- Most English-speaking respondents felt similarly about the message, with 59% of those under 25 rating it highly and 61% of those over 25 rating it highly; however,
- There is a gap between French-speakers of different ages, with 71% of those under 25 rating it highly and only 55% of adults over 25 rating it the same;

Ratings on key attributes:



Effectiveness ratings by demographics:





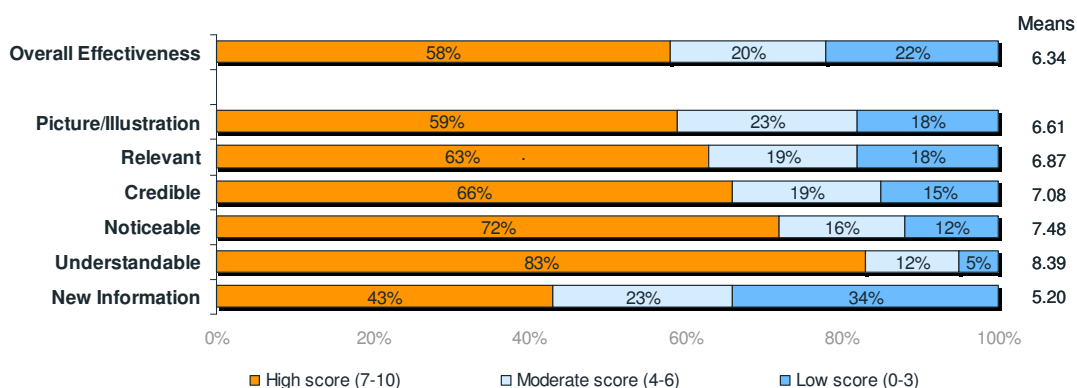
A-4 - Break out of your tobacco addiction.

This message ranked 18th overall when all message were ranked by their composite score.

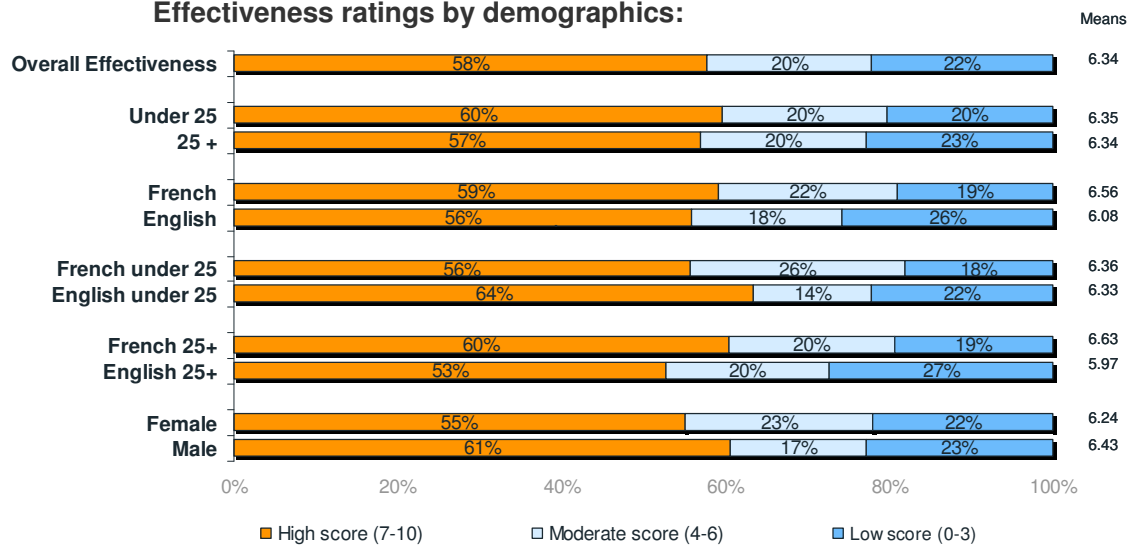
It had a mean rating on overall effectiveness of 6.34. The majority of respondents felt this message was effective; 58% rated it between 7 and 10, 20% said it was moderately effective and an equivalent proportion (22%) said it was not very effective. The message was rated as highly understandable (mean = 8.39) and highly noticeable (mean = 7.48). Relevance and credibility were highly rated by approximately two-thirds of respondents (63% and 66%, respectively). The impact of the picture was rated well by 3 in 5 respondents, but thought to be only moderately (23%) or not impactful (18%) by others. More so, it was also thought to lack new information; only 43% of respondents rated it highly in this respect, while 34% rated it poorly (mean = 5.20).

When demographic variables are considered for overall effectiveness no significant differences are noted.

Ratings on key attributes:



Effectiveness ratings by demographics:



A-2 - "How can something so small have so much control over me?"

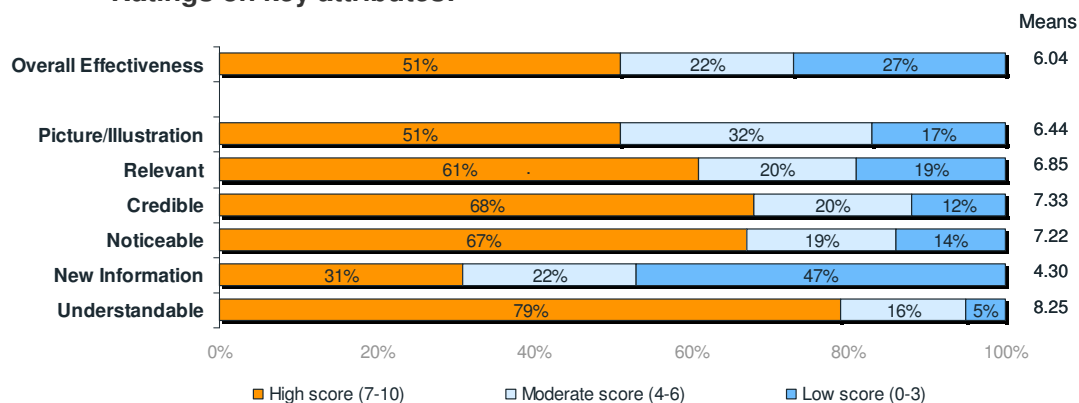
This message placed 26th, placing it in the bottom half of Health Warning messages.

Just over half (51%) of respondents said they thought it was effective (mean = 6.04). Although the ratings of the overall effectiveness attribute are the same for this message and A-3, this message was ranked higher because of the weighting scheme used to determine the composite score for each message. Fifty-one percent of respondents felt this message had a highly impactful picture, giving it a moderate mean rating of 6.44. One of its best features was its understandability, with 79% of respondents rating it highly. Credibility was also seen to be high, with over two-thirds (68%) rating it as such (mean = 7.33). Noticeability and relevance were also thought to be high, with mean ratings of 7.22 and 6.85, respectively. As was seen with many of the messages in this series, the newness of information severely hurt the overall ratings. In the case of this message, almost half (47%) rated the newness of information as low (mean = 4.30).

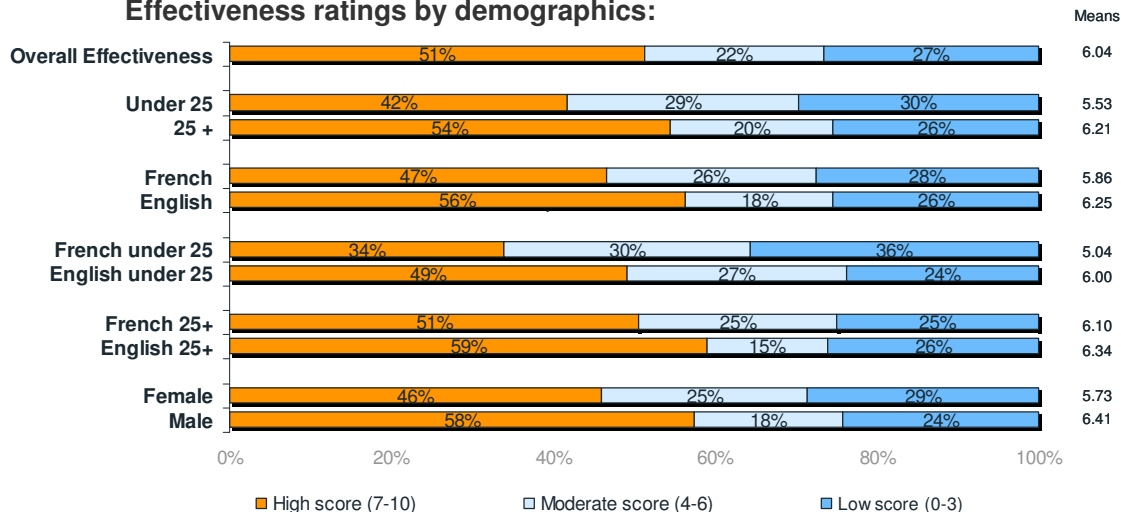
When demographic variables are considered, it becomes evident that:

- The message is most effective for older respondents (54% rated it highly vs. 42% for those under 25) and for men (mean = 6.41 vs. 5.73 for women);
- Anglophone smokers are more likely than Francophone smokers to rate this message highly (56% vs. 47%).

Ratings on key attributes:



Effectiveness ratings by demographics:



A-3 - It's not too late to quit.

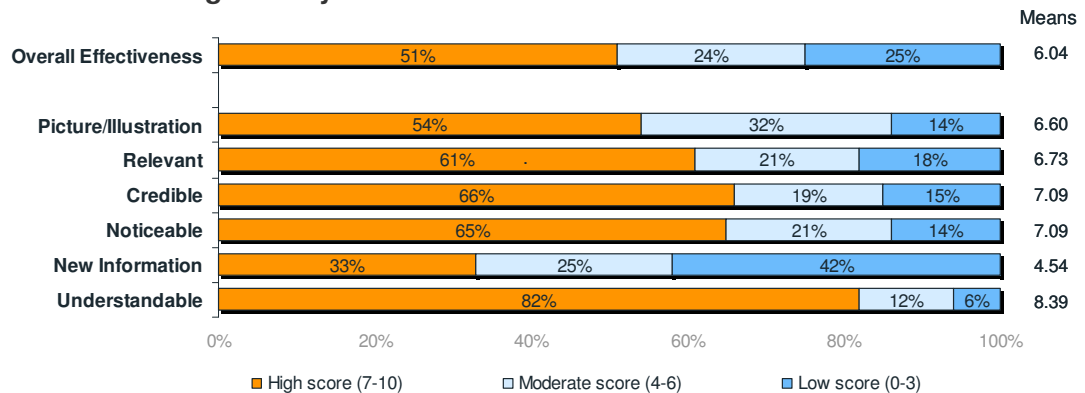
This message ranked 27th out of all forty-one Health Warning Messages, right behind the similar A-2 message.

Just over half of respondents (51%) rated this message as highly effective, giving it an overall mean effectiveness rating of 6.04. Equal proportions felt it was either moderately effective or not effective. This message's best rated feature was its understandability (mean = 8.39, with 82% rating it highly). Credibility and noticeability also rated highly, both with average ratings of 7.09 and about two-thirds of respondents agreeing that they were high on these attributes. It was also seen to be highly relevant, with an average rating of 6.73. The illustration was not thought to be that strong, with just over half (54%) saying it was impactful and another 32% saying it was only

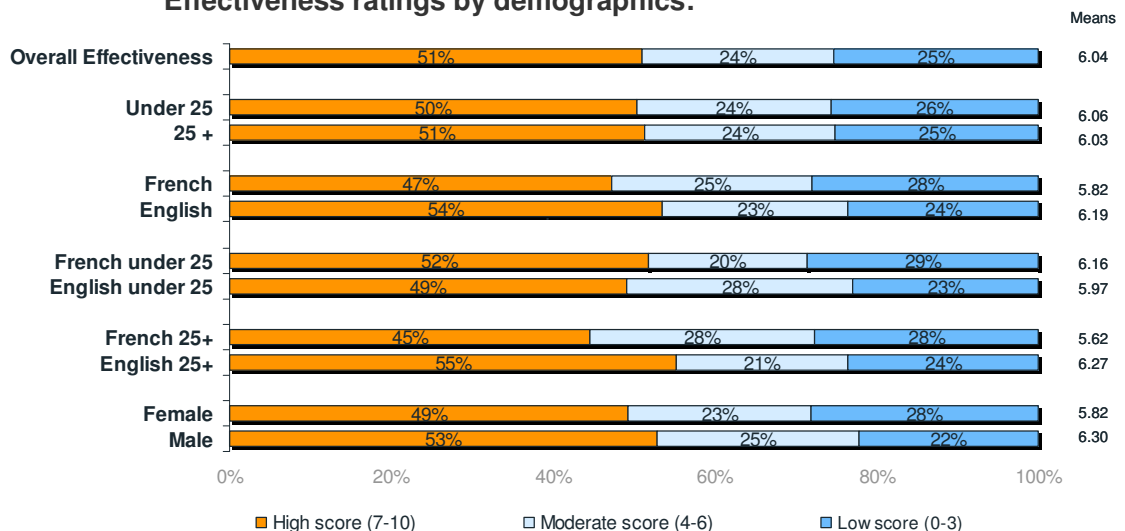
moderately so. The newness of information in the message hurt its overall rating quite a bit; only one-third of smokers rated it highly on this attribute, with the highest proportion of respondents (42%) rating between 0 and 3, for an overall mean of only 4.54.

There are no significant differences between any of the demographic subgroups.

Ratings on key attributes:



Effectiveness ratings by demographics:





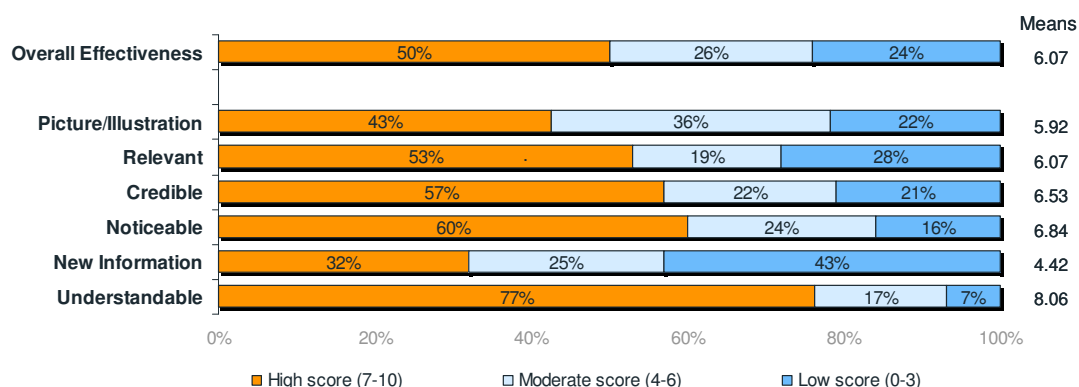
A-7 - Cigarettes are addictive, even for casual smokers.

This message was not seen to be very impactful, with an overall ranking of 34th.

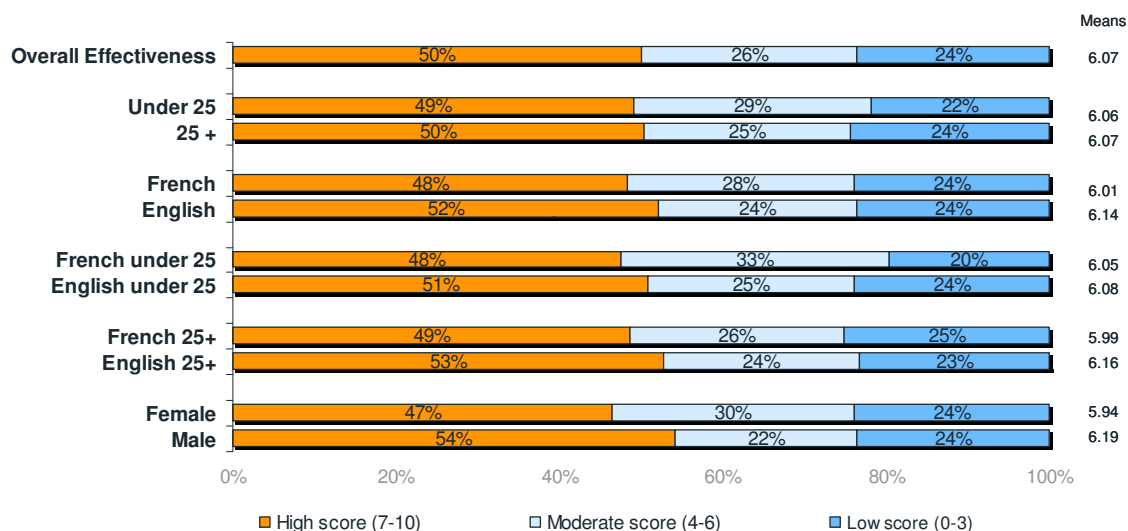
Its overall effectiveness was rated at an average of 6.07, which is considered moderate. Only half of respondents felt it was highly effective and one-quarter each felt that it was moderately or not effective. Although this message was rated as highly understandable (mean = 8.06), the picture and the lack of new information took away from its impact. Slightly more than 2 in 5 respondents (43%) felt the picture was effective, giving it a mean rating of 5.92. The newness of information was also a deterrent of this message, with the highest proportion of respondents (43%) giving a low rating on this attribute (mean = 4.42). With that said, it was thought to be very noticeable (mean = 6.84), moderately credible (mean = 6.53), and fairly relevant (mean = 6.07).

No significant differences are noted when demographics are considered.

Ratings on key attributes:



Effectiveness ratings by demographics:



A-1 - "I planned to quit smoking before I turned 20. Now I'm 26."

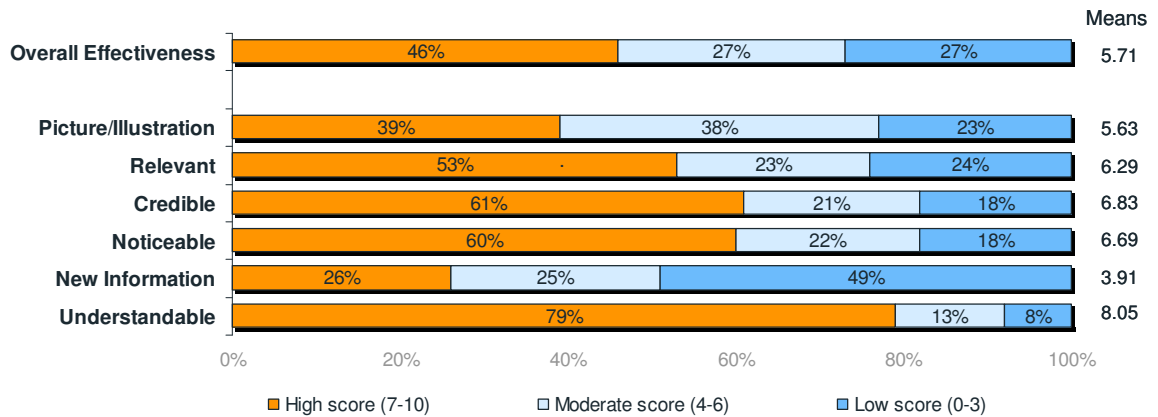
As the third lowest ranked message of all Health Warning Messages (39th), this message was not seen to have very much impact.

Fewer than half (46%) of smokers felt it was effective and its overall effectiveness rating was only 5.71. This low ranking (39th) in large part has to do with the picture; only 39% rated it highly, with an equal proportion (38%) saying it was just moderate (4-6). Although very noticeable (mean = 6.69) and credible (mean = 6.83) this message lacked impact and relevance (almost half rated it moderately or low on relevance). At a mean of 3.91, the newness of information was seen to be one of the lowest of all Health Warning messages. Although it was rated as well understood by a strong majority of respondents (79%), the low rankings on other attributes deterred from its impact.

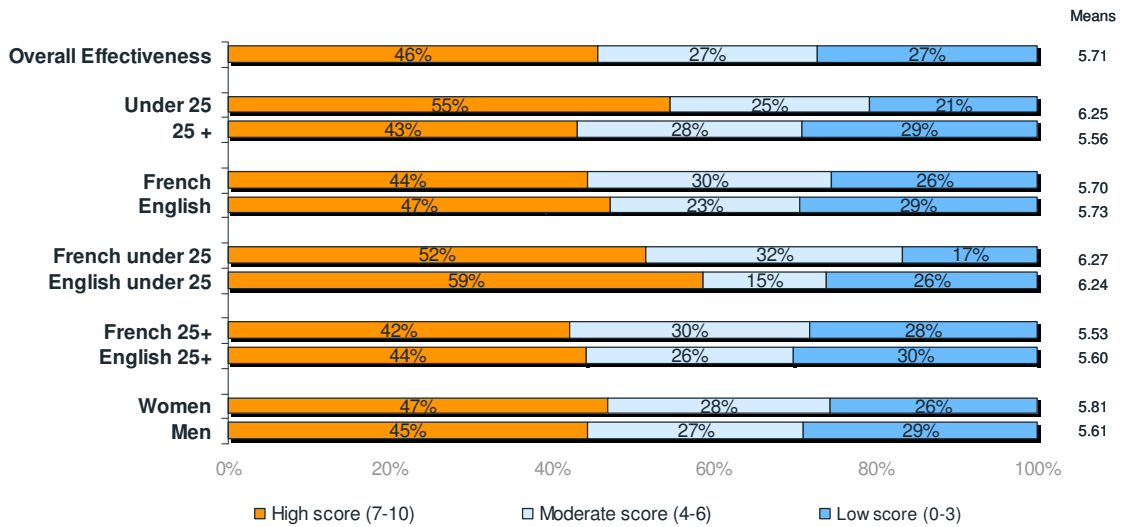
When demographics are considered:

- Younger respondents were more likely to rate this message as highly effective than older respondents (55% vs. 43%);
- Francophones under 25 were much more likely to think this message was moderately effective as compared to Anglophones in the same age category (32% vs. 15%).

Ratings on key attributes:



Effectiveness ratings by demographics:



Health Impacts of Smoking

The Health Impacts of Smoking series was the largest, including nineteen Health Warning messages:

- H-12 - Lungs are for life (73.02)
- H-21 - Throat cancer. It's tough to swallow (72.27)
- H-11 - Heart disease (72.20)
- H-28 - Smoking is a major cause of heart disease (72.10)
- H-24 - Lung cancer (71.43)
- H-30 - Eye disease (71.16)
- H-19 - Stroke (70.03)
- H-25 - Cigarettes are a major cause of strokes (69.65)
- H-29 - Cigarettes cause bladder cancer (69.43)
- H-17 - One cigarette closer to a heart attack (68.90)
- H-10 - Emphysema (68.35)
- H-9 - Chronic bronchitis (67.80)
- H-27 - Cigarettes cause heart attacks (67.70)
- H-15 - Wheezing (67.29)
- H-14 - Cigarettes lead to blindness (64.98)
- H-16 - When you smoke, it shows (64.73)
- H-26 - Life after a stroke (62.94)
- H-23 - Impotence (61.31)
- H-20 - Living with chronic obstructive pulmonary disease (COPD) (60.00)

The Health Impacts of Smoking series was one of the strongest amongst the Health Warning Messages, with the top five messages coming from this series and eight messages in the series ranking in the top ten. Despite some of the very high rankings, there was a fairly large range of rankings overall, with some messages in this series falling towards the bottom of the list. The worst ranked message was also from this series.

There was a fairly high range of ratings for overall effectiveness, with some means as low as 5.81 and others as high as 7.27; however the average was high at 6.76. The understandability and noticeability of the messages tended to drive their impact the most (average of the means = 8.19 and 7.41, respectively), and the majority of messages in this series were seen to be credible (means ranging from 6.11 to 7.72). Similarly, relevance was fairly strong, with an average rating of 6.63 across all messages in the series.

Given the nature of the images in this series, it comes as little surprise that most pictures were rated as having a significant impact. The average rating was 6.76 and the highest rated pictures were those in “Lungs for Life” and “Throat Cancer”.

With a few exceptions, respondents generally ranked these messages low on new information (average of the means = 5.36). This is likely because these messages are similar to the warnings smokers currently see on cigarette packs and so many have previously been exposed to this type of information. The risk of eye disease, bladder cancer, and blindness were all perceived as new, but also had slightly lower credibility scores than messages with better-known information.



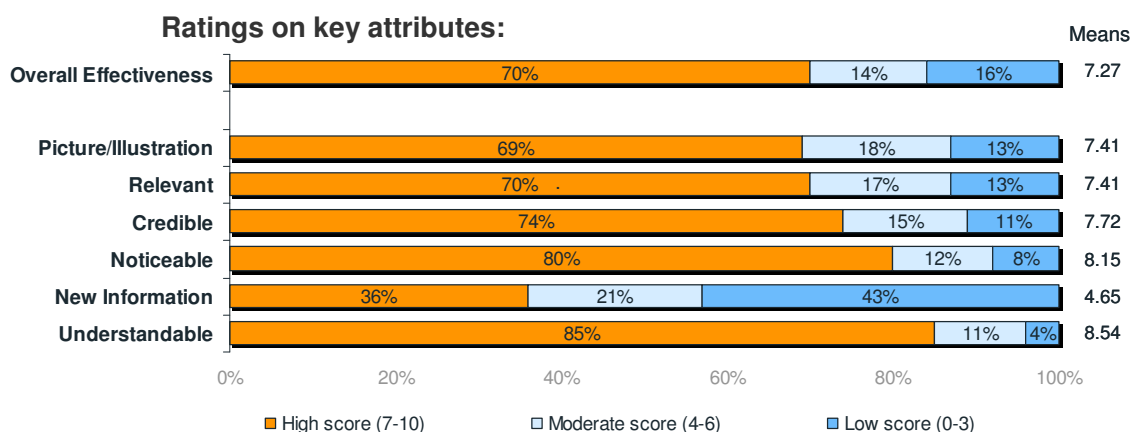
H-12 - Lungs are for life.

This message was the best-ranked Health Warning message out of all forty-one messages that were tested.

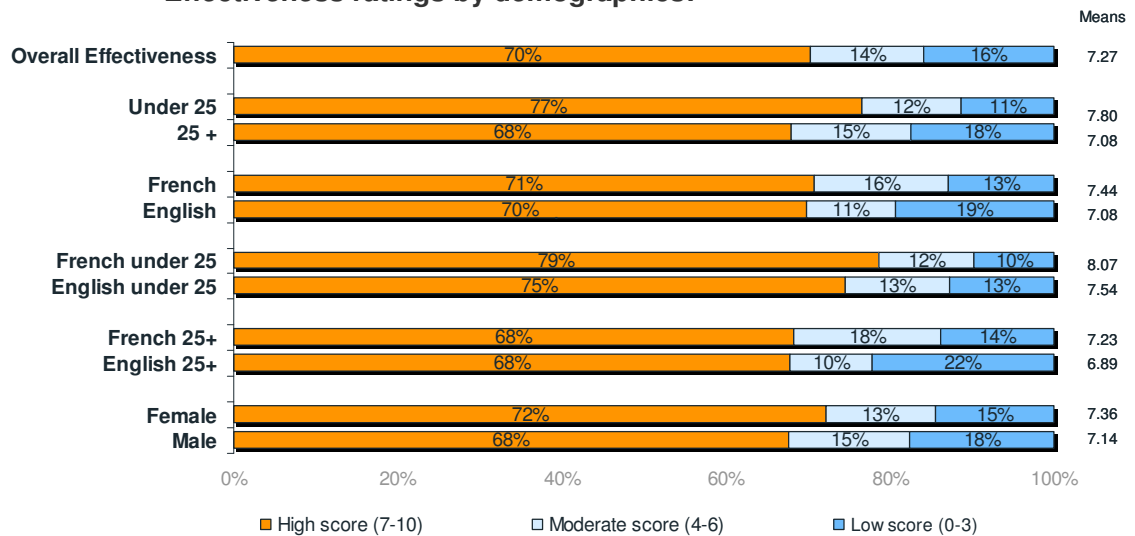
It had a high mean effectiveness rating of 7.27, with the strong majority (70%) rating it highly. The noticeability of this message really drove its success; its mean rating on this attribute was 8.15, with 4 out of 5 respondents rating it highly. The message was also thought to be highly credible by almost three-quarters (74%) of smokers, giving it a high mean score of 7.72. The impact of the illustration and the relevance of the message received comparable ratings, each with a mean score of 7.41. This message was also rated as very understandable (mean = 8.54), however the newness of information was rated as low and hurt its overall impact (mean = 4.65).

When findings are compared by demographic subgroups:

- It is clear that age plays a strong factor in the effectiveness of the message; younger respondents thought it was much more effective than did older respondents (mean = 7.80 vs. 7.08);
- A difference is seen when age and language are considered in combination, with more Anglophones 25+ finding the message ineffective more than Francophones in the same age category (22% vs. 14%).



Effectiveness ratings by demographics:



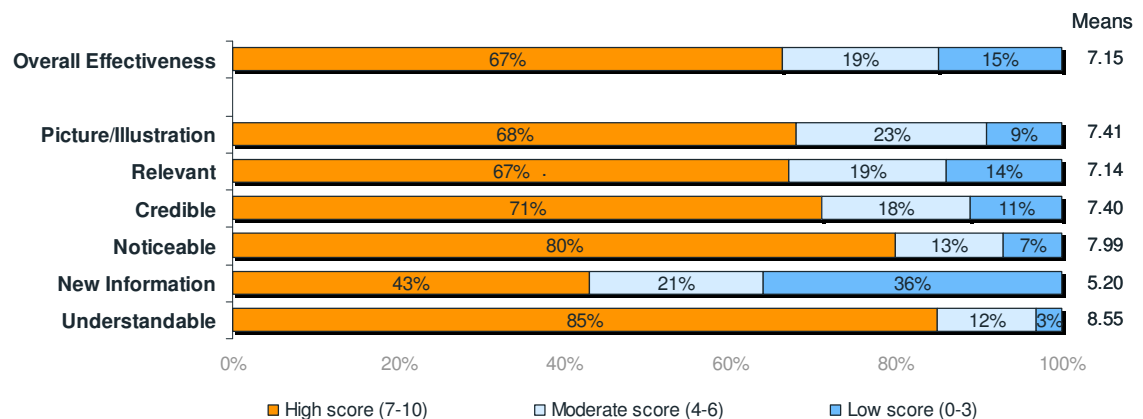
H-21 - Throat cancer. It's tough to swallow.

This was the second-best ranked message out of all HWMs.

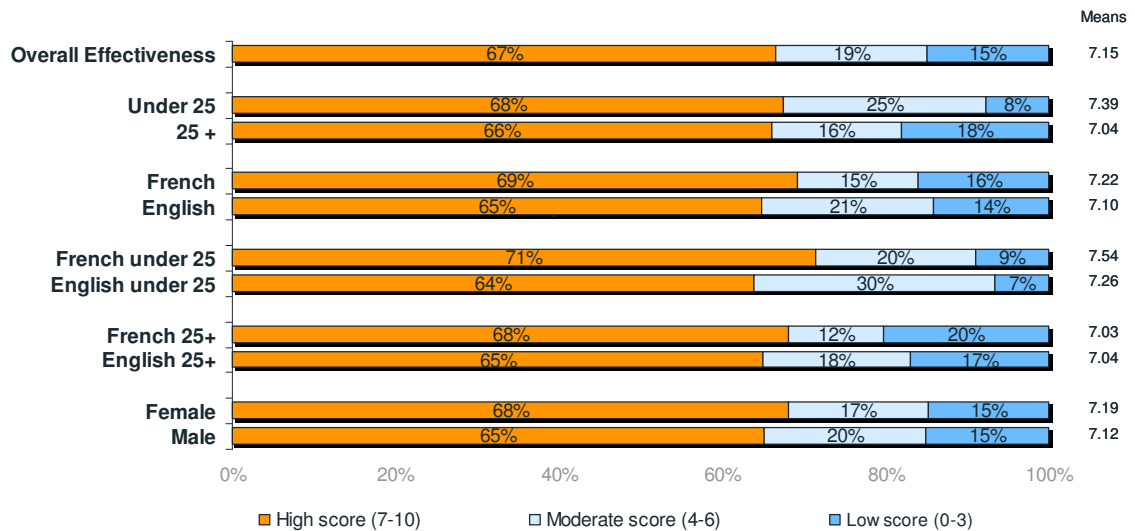
It received a high mean effectiveness score of 7.15. Noticeability was very high for this message, with a mean of 7.99 and 80% of respondents rating it highly. It was also thought to be very understandable (85% rating it as such, mean = 8.55) and credible (71% rating it highly, mean = 7.40). Similar proportion of smokers rated this message highly on relevance and the impact of its picture, however overall the picture rated better than relevance (mean = 7.41 vs. 7.14). Again, newness of information was rated significantly below other attributes, at 5.20 in this case.

Demographically, no differences are seen when mean effectiveness scores are compared, however older respondents were much more likely to rate it between 0 and 3 than were younger respondents (18% vs. 8%).

Ratings on key attributes:



Effectiveness ratings by demographics:



H-11 - Heart disease

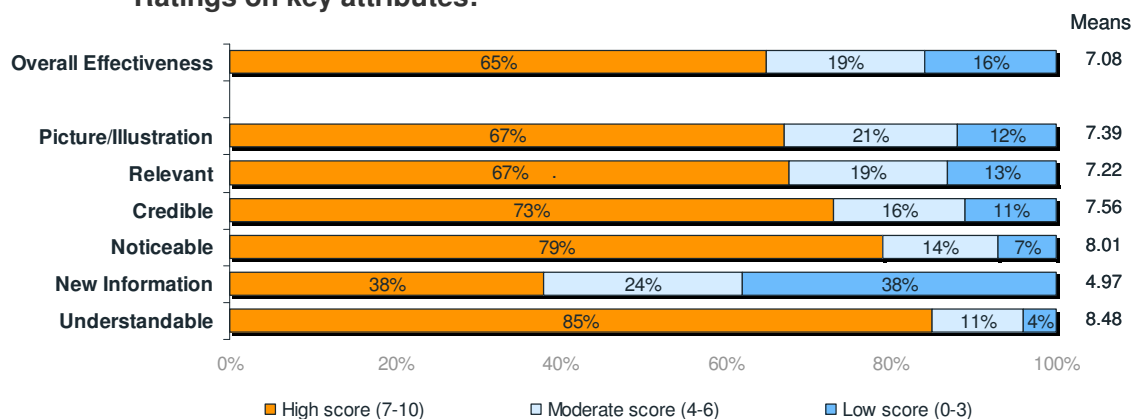
This Health Warning message ranked 3rd overall.

Its mean effectiveness score was high, at 7.08, and almost two-thirds (65%) of respondents felt it was a highly effective message. This was largely driven by its high ratings on noticeability, credibility, and the impact of the illustration (means = 8.01, 7.56, and 7.39, respectively). It was also thought to be very understandable (mean = 8.48) and quite relevant (mean = 7.22). Upwards of two-thirds of respondents felt highly about these attributes. As was common throughout this series of messages, the newness of information was the lowest ranked attribute, at a mean of 4.97; in this case, equivalent proportion of respondents rated it highly and poorly on this attribute (38% for each).

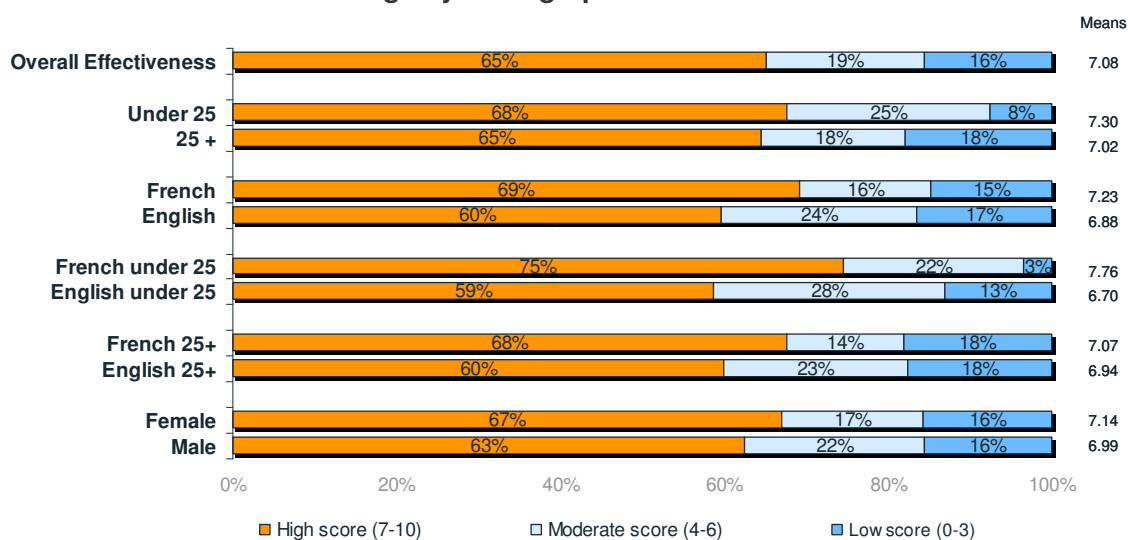
There are a few demographic differences that should be noted for this message:

- Adult respondents (25+) are more likely to rate the message as ineffective than young adults 18-24 (18% vs. 8%);
- Francophones are more likely than Anglophones to rate it highly (69% vs. 60%);
- The mean rating between Francophone and Anglophone young adults is significantly different (7.76 vs. 6.70);

Ratings on key attributes:



Effectiveness ratings by demographics:



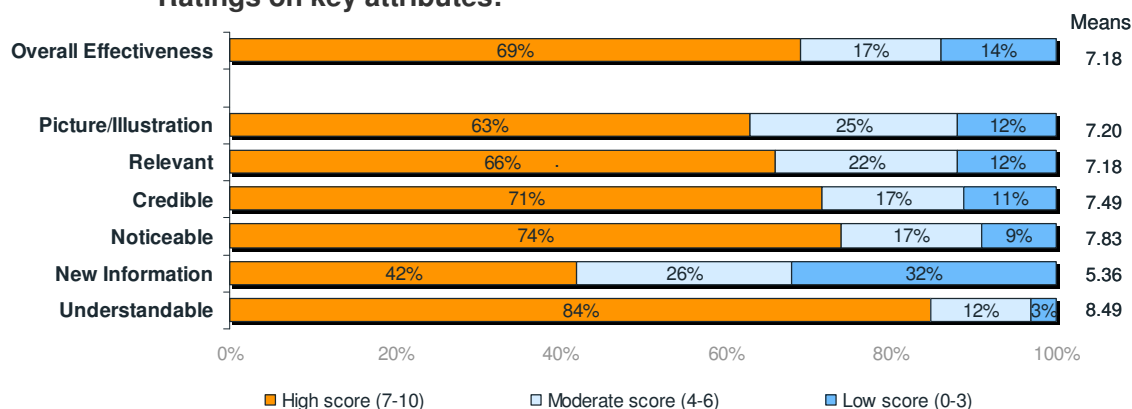
H-28 - Smoking is a major cause of heart disease.

This message ranked 4th overall.

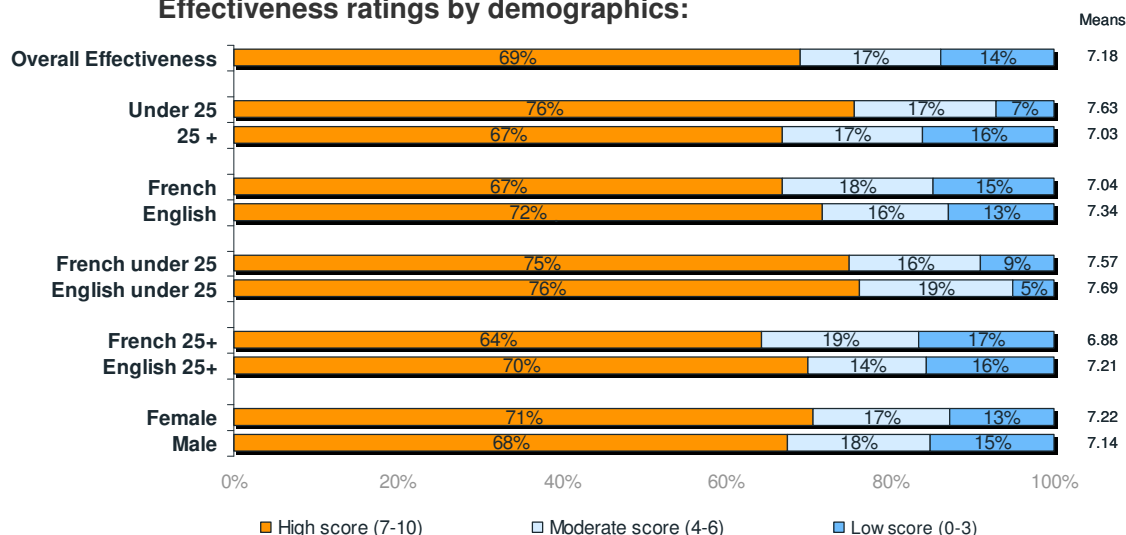
The message had a high mean effectiveness rating of 7.18. More than two-thirds (69%) of respondents felt it was highly effective, while only 14% rated it low on effectiveness. This was strongly influenced by the noticeability of the message (mean = 7.83), where almost three-quarters of smokers rated it highly. The message was also rated as very understandable, credible, and the image had high impact (means = 8.49, 7.49 and 7.20, respectively). Relevance was also highly rated, at 7.18, however the information was only considered to be moderately new (mean = 5.36), with just over 2 in 5 respondents rating it between 7 and 10.

There is a significant difference between age groups, where a higher proportion of older respondents rated the message as ineffective compared to younger respondents (16% vs. 7%).

Ratings on key attributes:



Effectiveness ratings by demographics:



H-24 - Lung cancer

Rounding out the top five Health Warning messages is this Health Impacts of Smoking message about lung cancer.

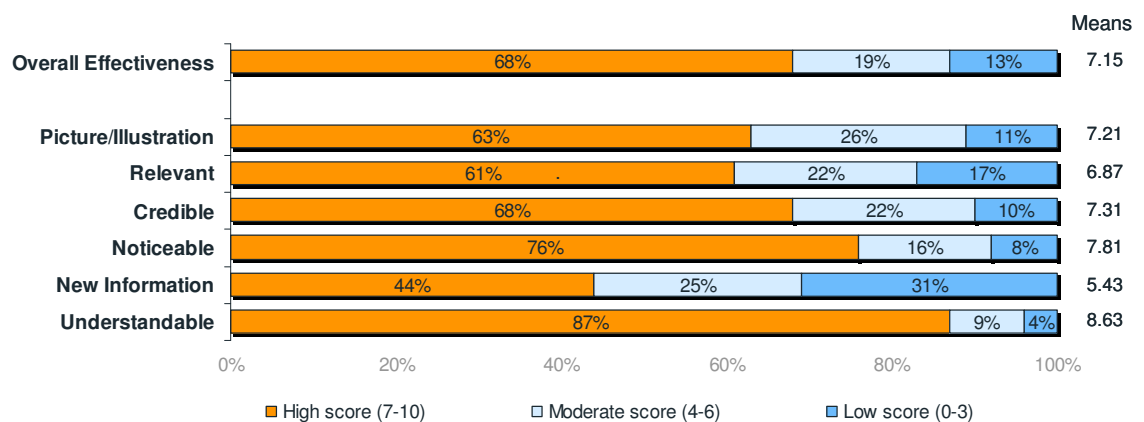
The message had a high mean effectiveness rating of 7.15. Over two-thirds (68%) of respondents felt it to be highly effective, and almost one in five (19%) thought it was moderately so. The message's ratings on understandability, noticeability, and credibility drove its high ranking, with means of 8.63, 7.81, and 7.31, respectively. Nearly 9 out of 10 respondents felt it was understandable, however most felt the information was not very new (44% rating it highly, mean = 5.43). The impact of the picture and the

relevance of the message were thought to be high for more than 60% of respondents, however when the means of these attributes are compared it is clear that the picture added more to the message than did the relevance of the message (mean = 7.21 vs. 6.87).

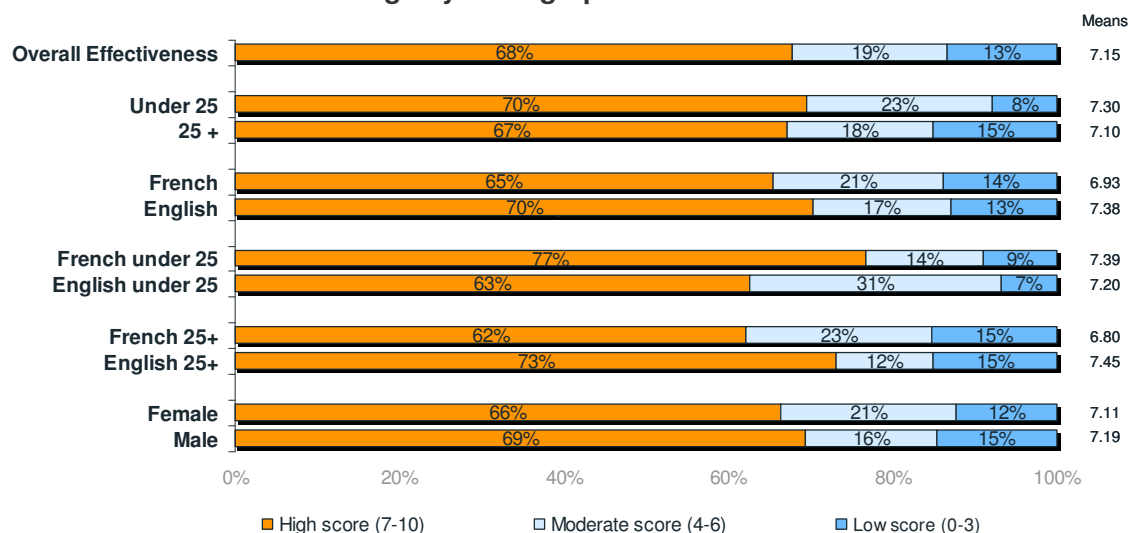
Some interesting demographic differences can be observed:

- Respondents aged 25 and older are more likely than their younger counterparts to rate the message as ineffective (15% vs. 8%);
- Anglophone adults are more likely than Francophone adults to rate the message as highly effective (73% vs. 62%).

Ratings on key attributes:



Effectiveness ratings by demographics:





H-30 - Eye disease

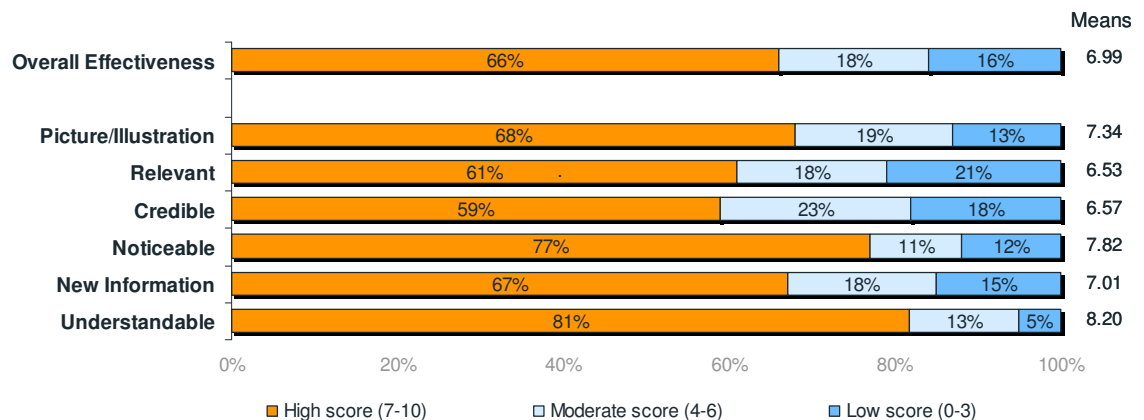
This message ranked 7th overall.

With a high mean effectiveness rating of 6.99, two-thirds of respondents felt it was highly effective and approximately equal proportions thought it to be either moderately or not at all effective. This message's success was due in large part to its perceived noticeability and the impact of its illustration (means = 7.82 and 7.34, respectively). It was also rated as very understandable (mean = 8.20) and, contrary to the majority of messages in the series, it was considered to contain new information (mean = 7.01 with 67% rating it highly on this attribute). It was also considered to be fairly credible (mean = 6.57) and relevant (mean = 6.53).

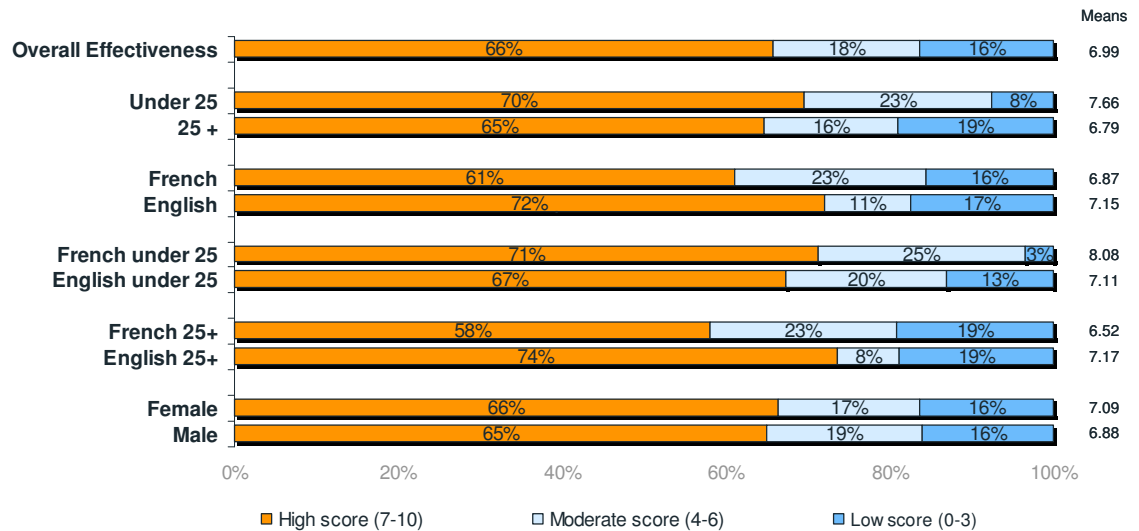
Demographically,

- Younger respondents thought it was more effective than the older respondents (mean = 7.66 vs. 6.79);
- Language did not play a role in mean ratings until age and language were combined, demonstrating that younger Francophones were much more positive about the message than were younger Anglophones (mean = 8.08 vs. 7.11);
- Language did however affect the proportion of respondents that ranked the message as highly effective, with more Anglophones rating it as such (72% vs. 61%).

Ratings on key attributes:



Effectiveness ratings by demographics:



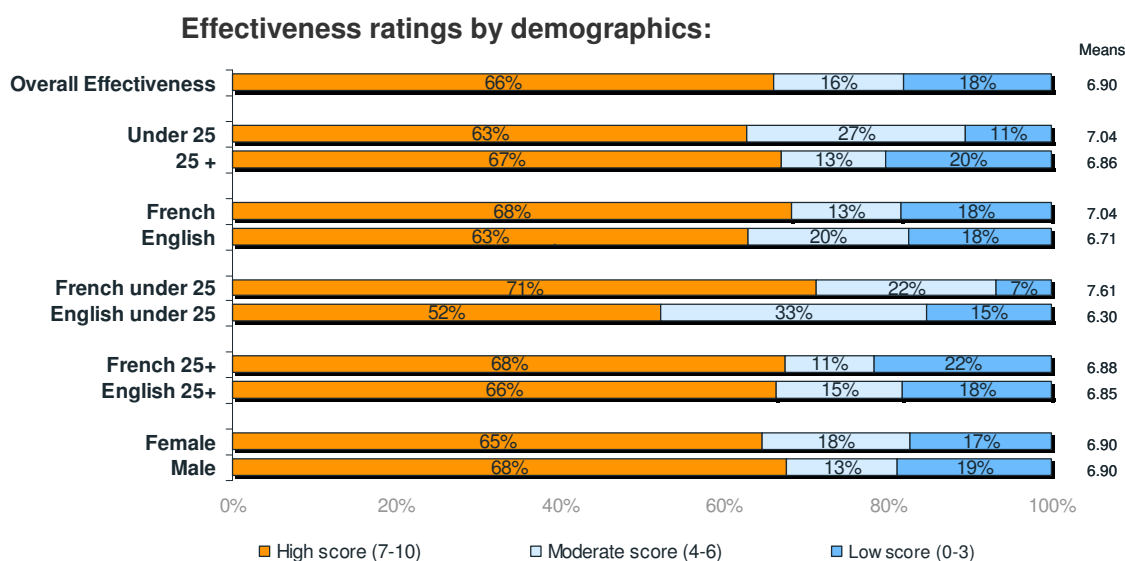
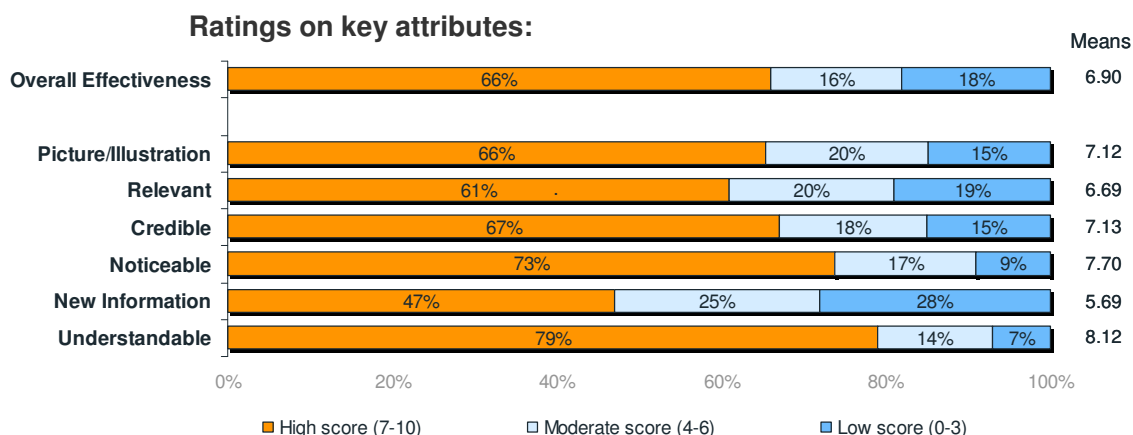
H-19 – Stroke

This Health Warning message ranked 8th overall.

With a mean effectiveness rating of 6.90, two-thirds of respondents felt it was a highly effective message. Top rated attributes of this message include understandability (mean = 8.12) and noticeability (mean = 7.70). The picture was also seen to be very impactful, adding to the overall effectiveness of the message (mean = 7.12, 66% rating it highly). Despite the fact that the newness of the information was not rated highly by many respondents the message was still thought to be very credible (mean = 7.13) and, to a lesser extent, relevant (mean = 6.69).

When demographic differences are considered:

- Age plays a major role, with older respondents more likely to consider the message as ineffective (20% vs. 11%);
- Although language is not a factor on its own, when paired with age it becomes evident that this message is more effective for younger Francophones than it is for younger Anglophones (mean = 7.61 vs. 6.30).



H-25 - Cigarettes are a major cause of strokes.

This message was ranked the 10th best Health Warning message.

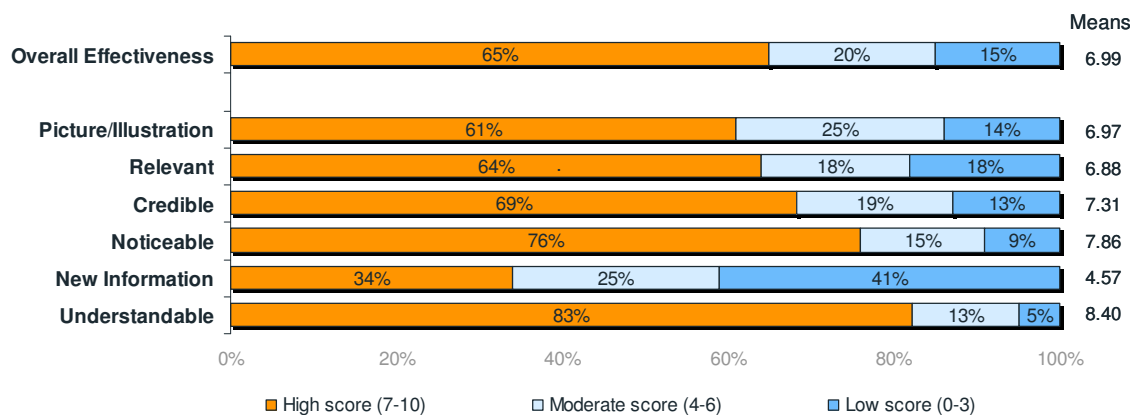
It had a mean effectiveness rating of 6.99; 65% of respondents agreed that it was effective and another 20% thought it was moderately so. The message was considered to be highly understandable (mean = 8.40), very noticeable (mean = 7.86), and very credible (mean = 7.31). To a slightly lesser degree it was also relevant (mean = 6.88) and the illustration had high impact (mean = 6.97). The highest proportion of respondents however felt that the information in this message was not new (41% rated it 0-3).

When demographics are considered:

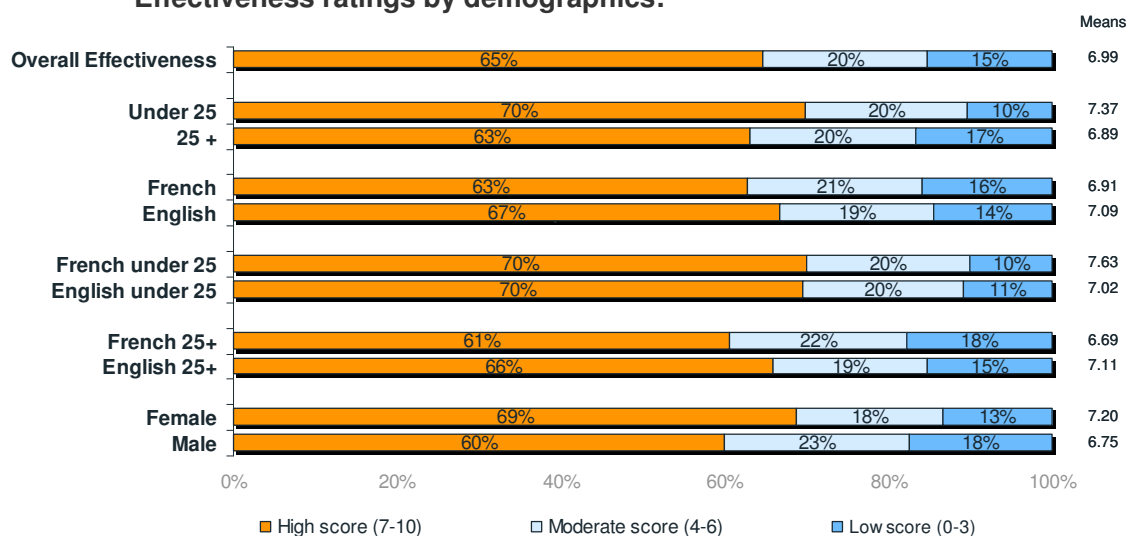
- More women found the message highly effective compared to men (69% vs. 60%);

- Francophone young adults, when compared to Francophone adults, felt the message was more effective (mean = 7.63 vs. 6.69).

Ratings on key attributes:



Effectiveness ratings by demographics:



H-29 - Cigarettes cause bladder cancer.

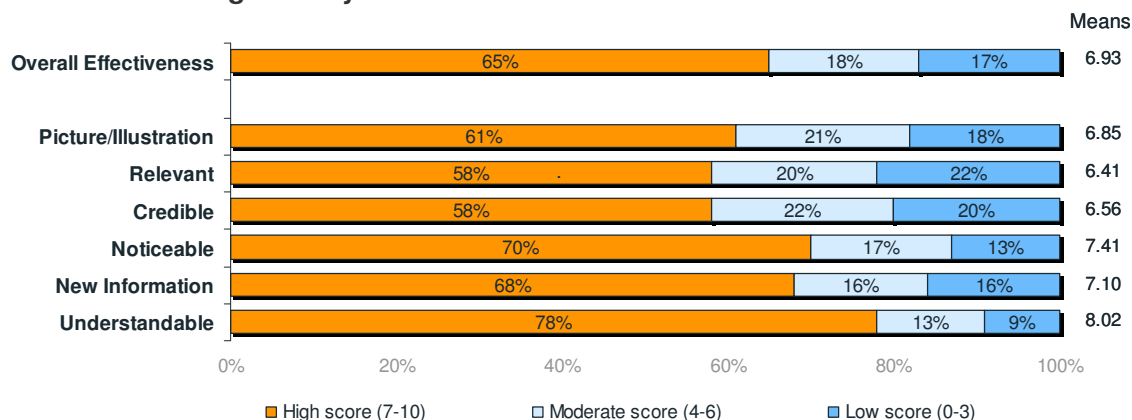
Ranking 11th out of all Health Warning Messages, this message narrowly missed placing in the top 10 messages.

It received a mean overall effectiveness score of 6.93. The majority of respondents felt it was highly effective (65%), with equal proportions feeling it was only moderately effective or ineffective. The noticeability of this message played an important role, receiving a mean score of 7.41. Its noticeability is likely a function of its impactful picture (mean = 6.85) and the newness of the information (mean = 7.10, with 68% of respondents rating it highly). Compared to other messages in the series, this message was perceived to be new. Understandability was also rated very high (mean =

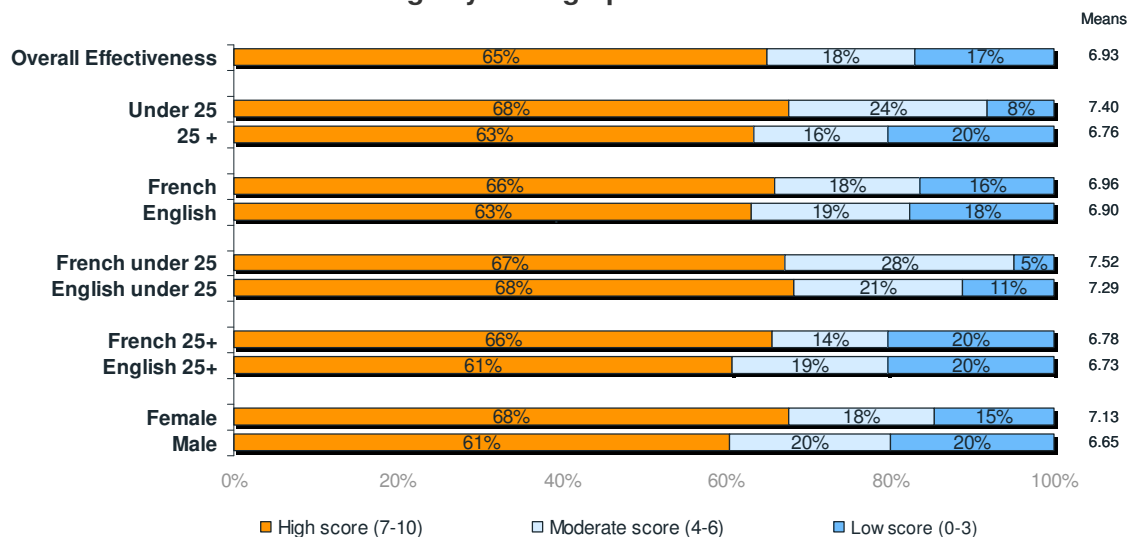
8.02), an important factor when the message is considered to be new. Credibility and relevance were moderate (means = 6.56 and 6.41), which, again, could be related to the newness of the message.

The only notable demographic difference is between age groups, where older respondents were much more likely to feel this message was ineffective than those under 25 (20% vs. 8%).

Ratings on key attributes:



Effectiveness ratings by demographics:



H-17 - One cigarette closer to a heart attack.

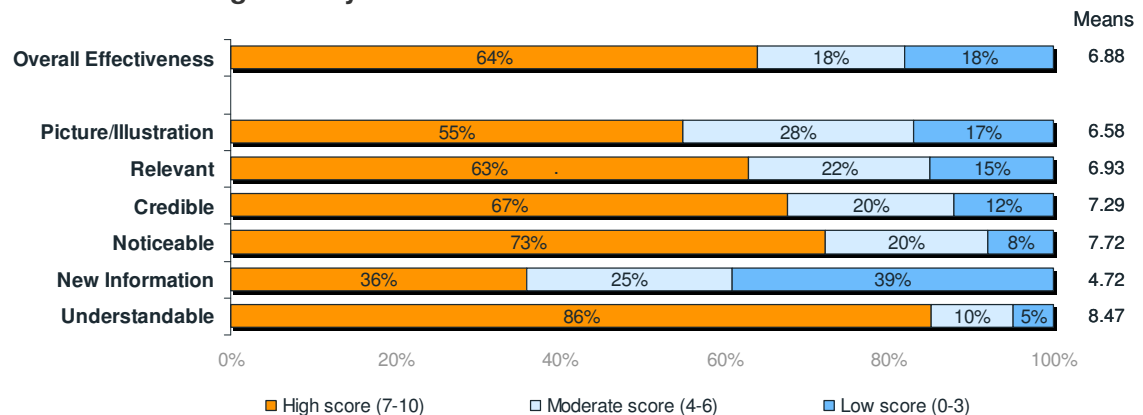
This message ranked 14th overall.

It was thought to be highly effective by 64% of respondents and had a mean effectiveness score of 6.88. Equal proportions of smokers felt the message was moderately effective as those who thought it was not effective (18% for each category). In addition to rating very highly on understandability (mean = 8.47), this message was thought to be very noticeable and credible (means =

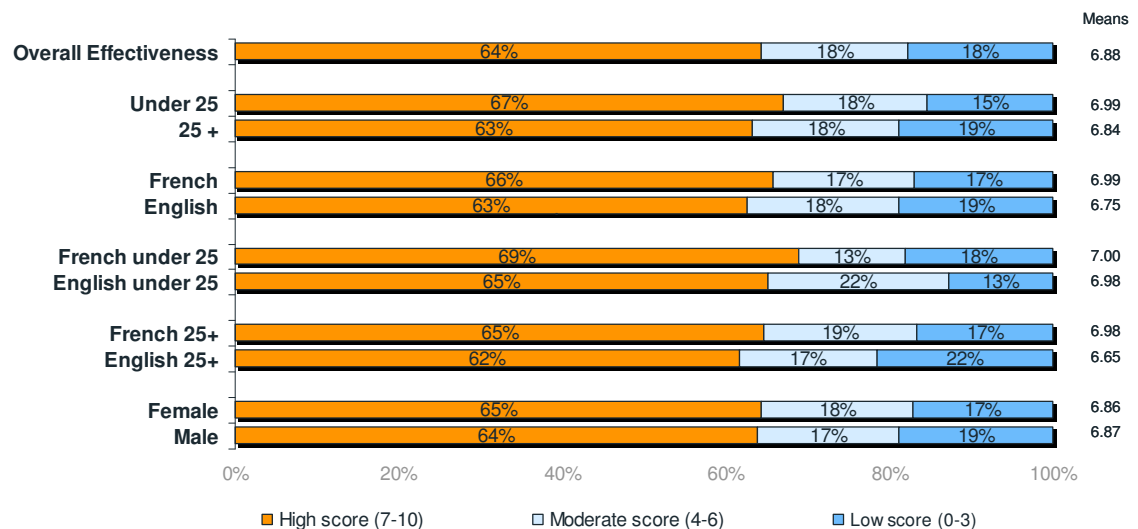
7.72 and 7.29, respectively). It was also highly relevant, with a mean score of 6.93 on this attribute. This message lost some impact because of the picture; although its mean score on this attribute was a moderate 6.58, only 55% felt it was highly impactful, noticeably lower than the better-ranked messages in this series. The highest proportion of respondents also felt that the information was not new, with 39% rating it between 0 and 3.

There are no significant differences between subgroups when effectiveness ratings are considered.

Ratings on key attributes:



Effectiveness ratings by demographics:





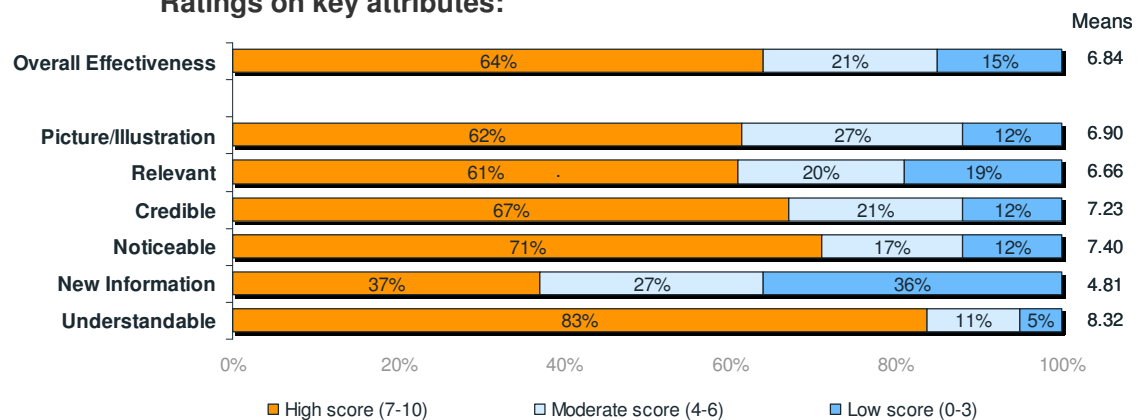
H-10 – Emphysema

This Health Impacts of Smoking message about emphysema ranked 15th overall.

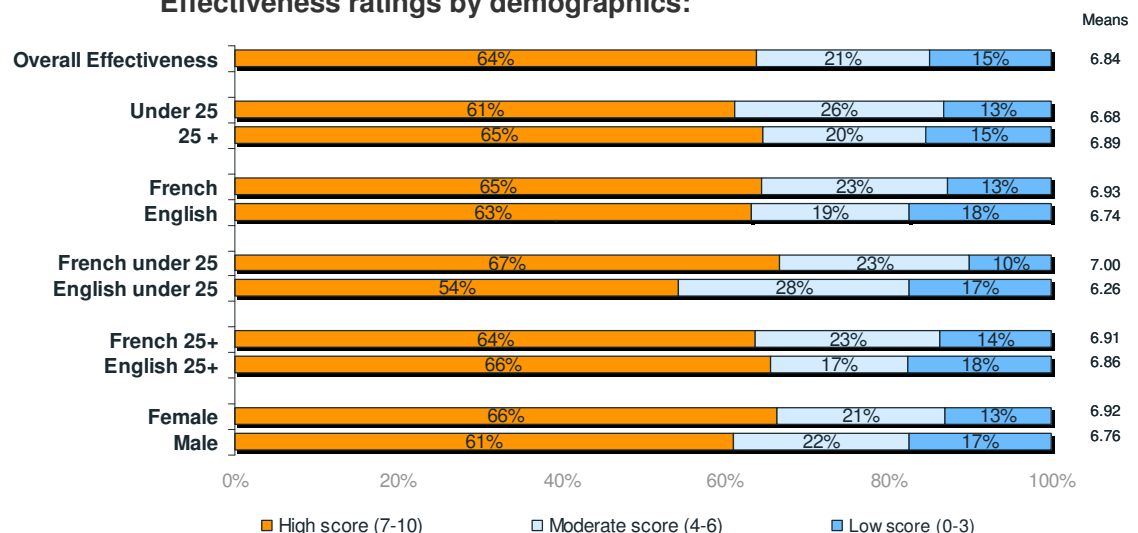
The majority (64%) of smokers felt it was highly effective, 21% felt it was moderately so, and 15% did not find it to be effective at all. Although rated as highly understandable (mean = 8.32) this message did not score as well on some important attributes as did other messages in this series. Noticeability was high, at a mean of 7.40, and the message was seen to be credible (mean = 7.23). The impact of the picture, at a mean of 6.84, was important, as was the message's relevance (mean = 6.66). The information was not perceived to be very new, with comparable proportions of respondents ranking it highly (7-10) and poorly (0-3).

When demographic variables are considered no significant differences are noted.

Ratings on key attributes:



Effectiveness ratings by demographics:





H-9 - Chronic bronchitis

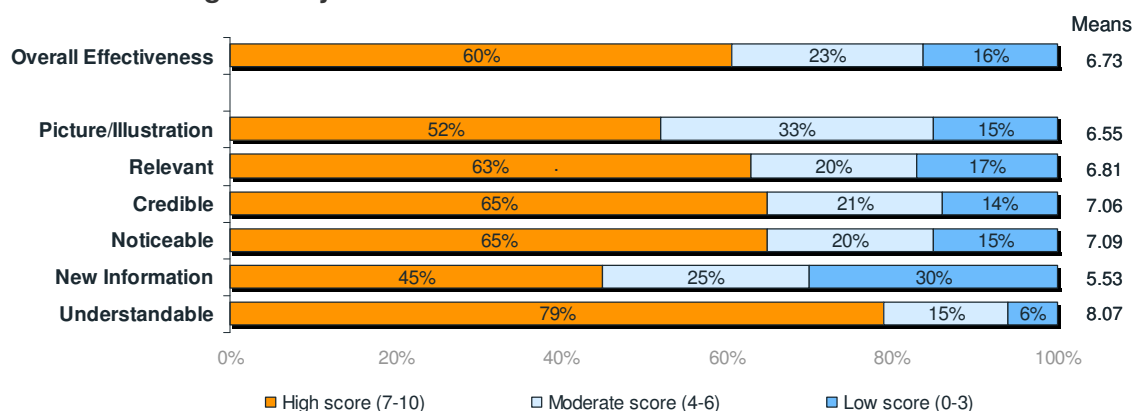
The Health Impacts of Smoking message about chronic bronchitis ranked 17th overall.

Sixty percent of respondents thought it to be highly effective, resulting in a mean effectiveness rating of 6.73. In addition to being rated as highly understandable (mean = 8.07), this message was considered relevant, noticeable, and credible by approximately two-thirds of smokers. The picture was only rated highly by just over half of respondents (52%), which likely affected the overall impact of the message. The information was not considered to be particularly new either, but received higher ratings than some other messages in this series (mean = 5.53).

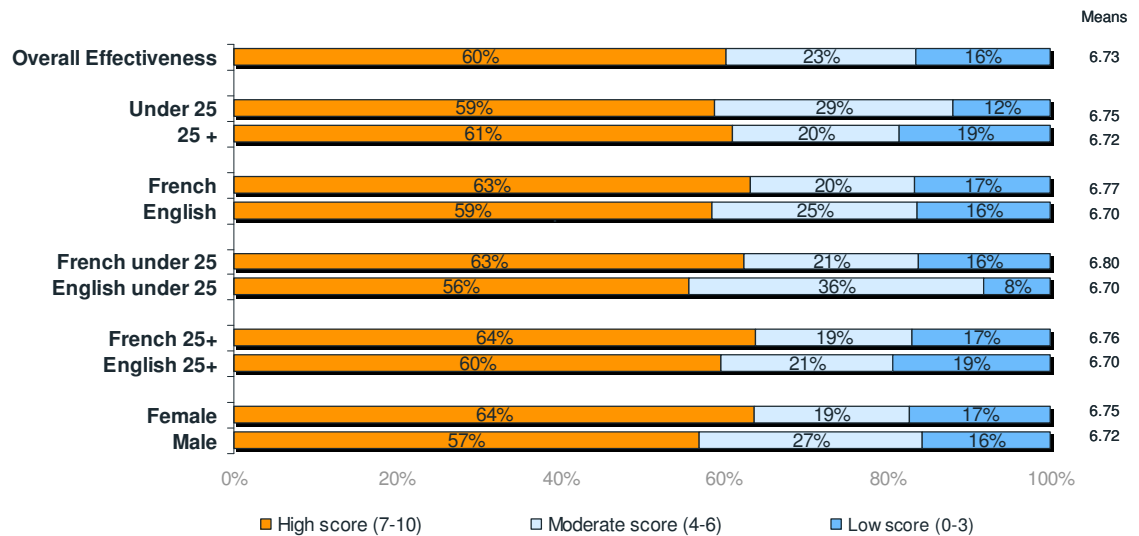
There is only one noteworthy demographic difference:

- Amongst English-speaking respondents, adults 25 and older are more likely to feel this message is only ineffective (0-3) than younger Anglophones (19% vs. 8%).

Ratings on key attributes:



Effectiveness ratings by demographics:



H-27 - Cigarettes cause heart attacks.

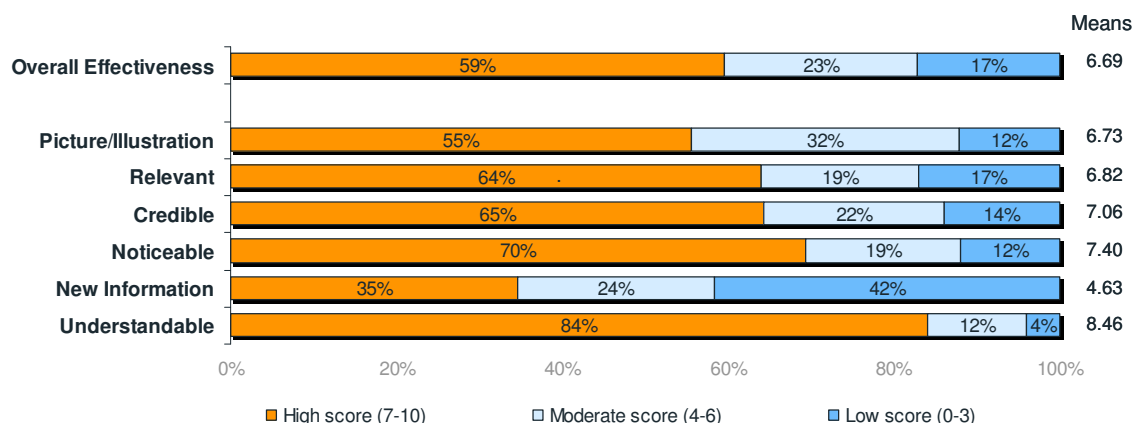
This message ranked 19th overall.

Nearly three in five respondents (59%) thought this message to be highly effective, giving a mean rating of 6.69. It was perceived to be very noticeable (mean = 7.40), credible (mean = 7.06), and highly understandable (mean = 8.46). The picture had a strong impact, with 55% rating it highly and another 32% rating it moderately impactful. It was also thought to be relevant, (mean = 6.82) although it was not considered to be new information.

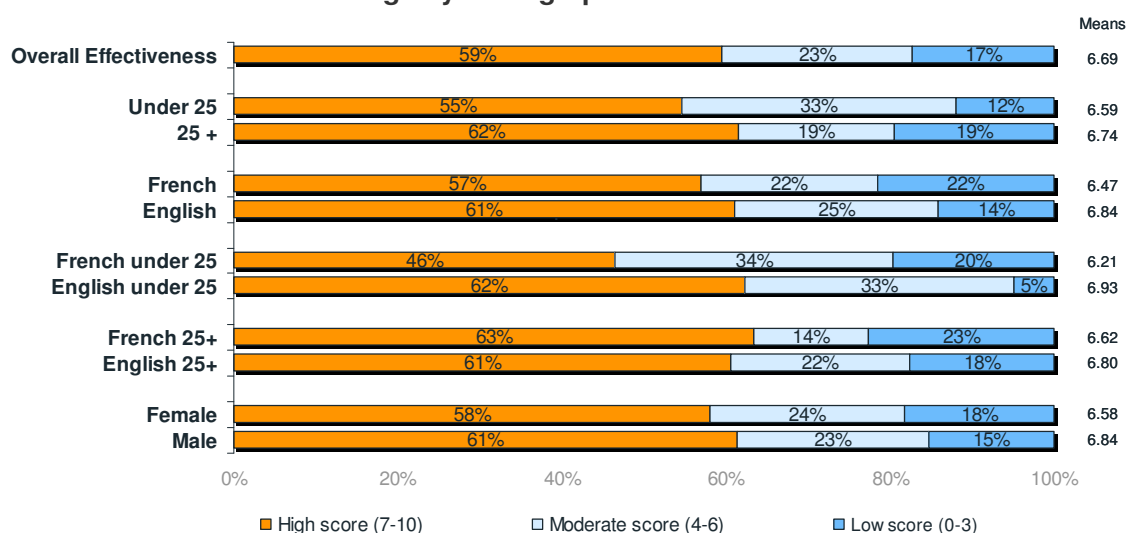
When demographics are considered:

- Younger respondents are more likely than older ones to rate the effectiveness of this message between 4 and 6 (33% vs. 19%);
- French-speaking young adults are the least likely to think this message is highly effective when compared to all other age/language subcategories (46% vs. 61-63%).

Ratings on key attributes:



Effectiveness ratings by demographics:



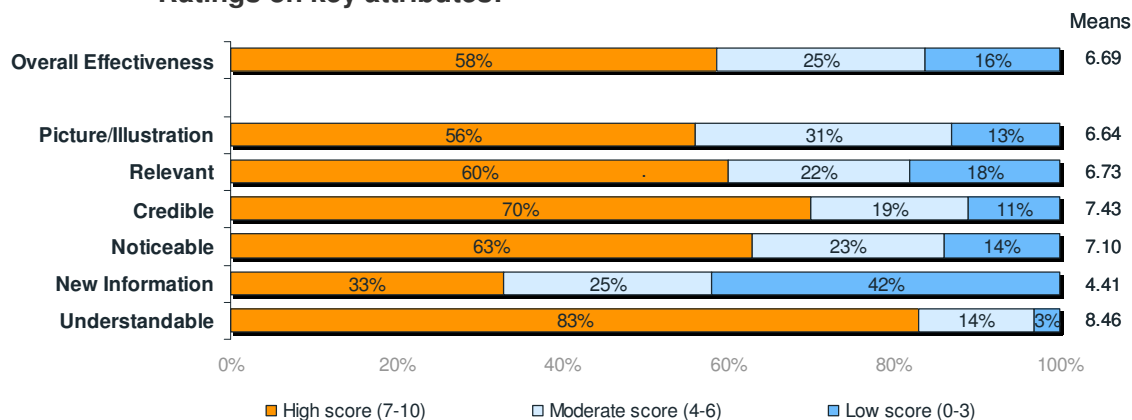
H-15 – Wheezing

This message ranked 21st overall.

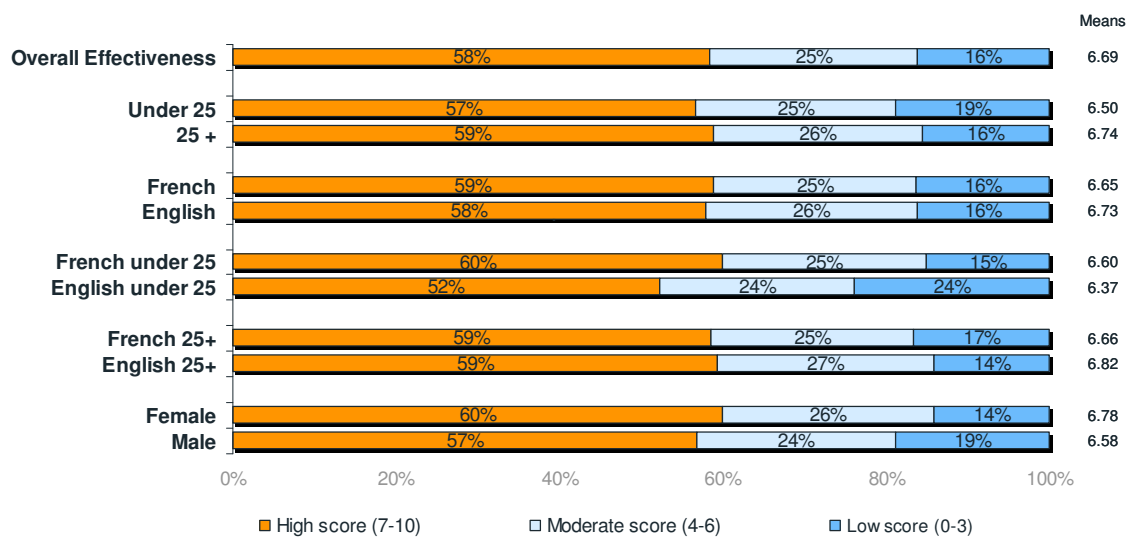
Overall, the majority of respondents felt this message was highly effective, with 58% responding as such and an average rating of 6.69. Seven out of ten respondents perceived the message to be highly credible. It was also thought to be very noticeable and relevant (means = 7.10 and 6.73, respectively) and rated as highly understandable (mean = 8.46). Although respondents rated this message as highly credible (mean = 7.43), it received particularly low ratings on the newness of information (mean = 4.41). The picture had a moderate impact, with 56% rating the illustration highly and 31% rating it moderately impactful.

No differences are apparent when demographic subgroups are considered.

Ratings on key attributes:



Effectiveness ratings by demographics:



H-14 - Cigarettes lead to blindness.

This message had an overall ranking of 29th amongst all Health Warning messages.

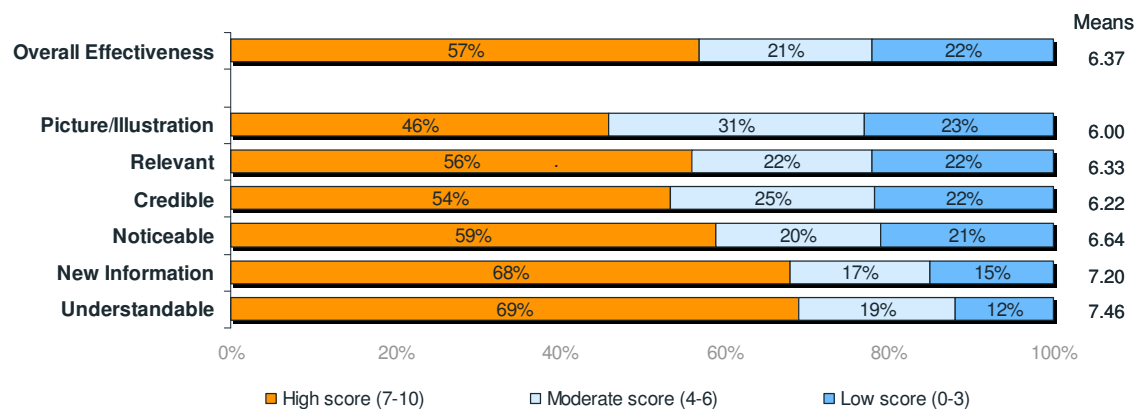
With 57% of respondents saying this message was highly effective overall, it received a moderate mean rating of 6.37. Its most highly rated attributes include its understandability (mean = 7.46) and, interestingly, the newness of its information (mean = 7.20). The majority of other messages in this series received low ratings for the newness of information so this message stands out. It also received a high credibility rating from more than half of respondents (54%), an important attribute for a message containing new information. This message was perceived to be fairly noticeable (mean = 6.64) and moderately relevant (mean = 6.33), however it lost impact due to

the weak image; fewer than half of respondents (46%) rated it highly on this attribute (mean = 6.00).

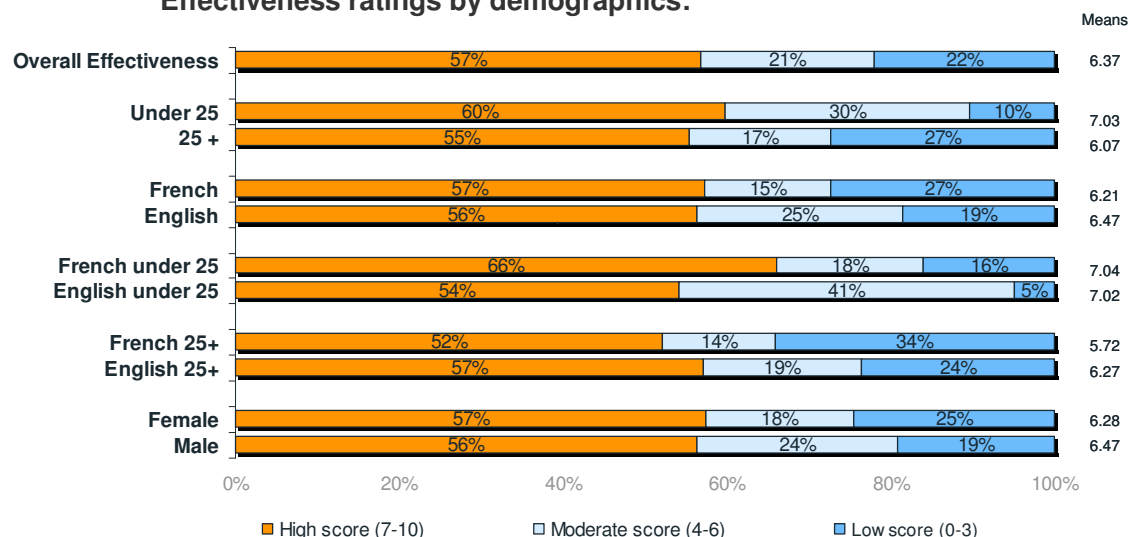
When demographic subgroups are compared:

- Younger respondents rated the overall effectiveness more highly than older respondents (mean = 7.03 vs. 6.07);
- When age and language are considered; French adults 25 and older were the most likely to give a poor rating when compared to all other age/language subgroups (34% vs. 5-16%);
- Anglophones under 25 were more likely than all other groups to feel the message was moderately effective (4-6) (41% vs. 14-19%).

Ratings on key attributes:



Effectiveness ratings by demographics:





H-16 - When you smoke, it shows.

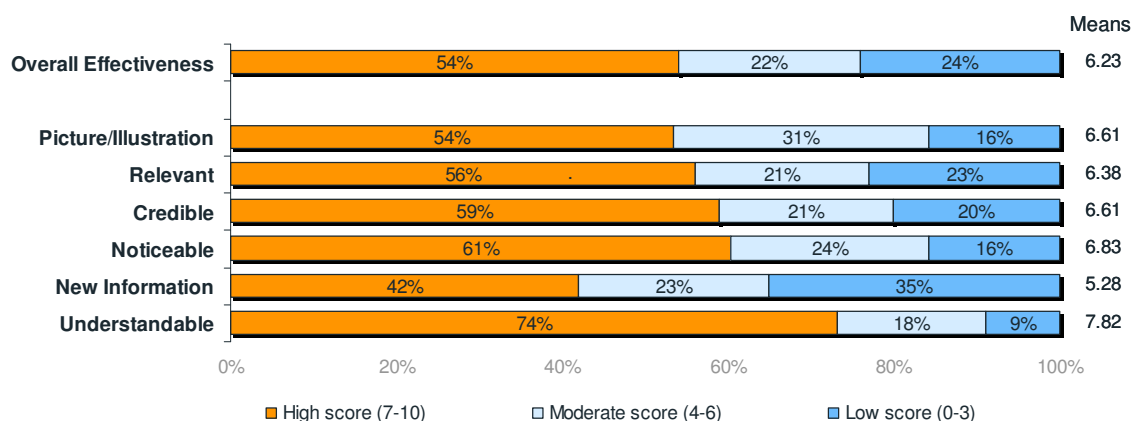
This message was ranked 30th overall.

Overall effectiveness of this message was ranked highly by just over half (54%) of respondents, with a mean rating of 6.23. Generally, respondents felt that it was an understandable message that was also noticeable (means = 7.82 and 6.83, respectively). Mean ratings for the message's credibility and the impact of the picture are both moderate, at 6.61, however a slightly higher proportion of smokers rated the message as highly noticeable (61%) than rated the picture as highly impactful (54%). The majority (56%) felt the message was relevant with a moderate mean rating of 6.38. As with many messages in this series, the information was not perceived to be very new, with only 42% of respondents rating it highly on this attribute.

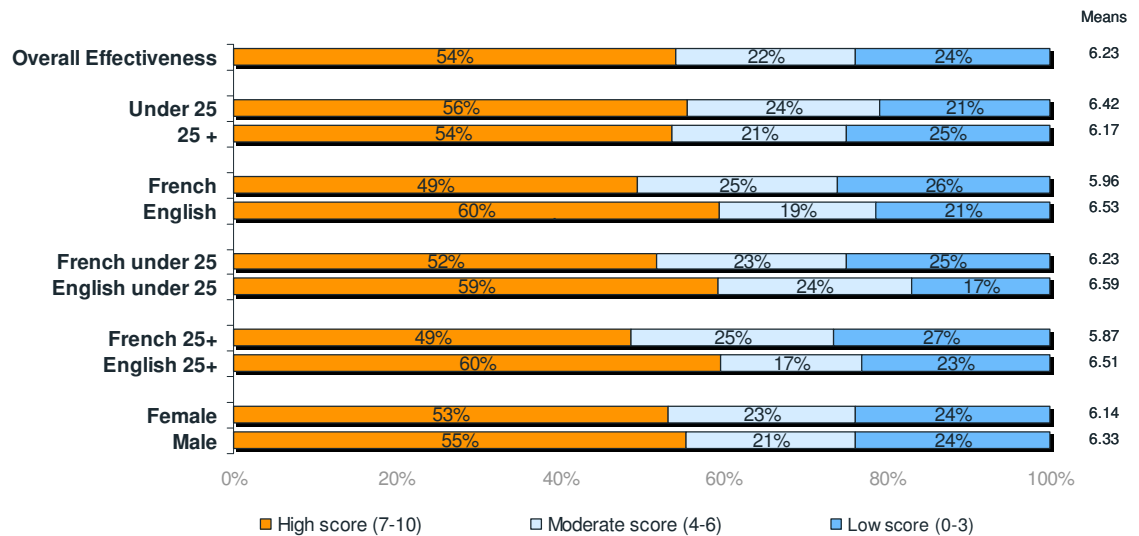
Very few demographic differences are worth noting:

- Anglophones were more likely than Francophones to rate it as highly effective (60% vs. 49%).

Ratings on key attributes:



Effectiveness ratings by demographics:



H-26 - Life after a stroke

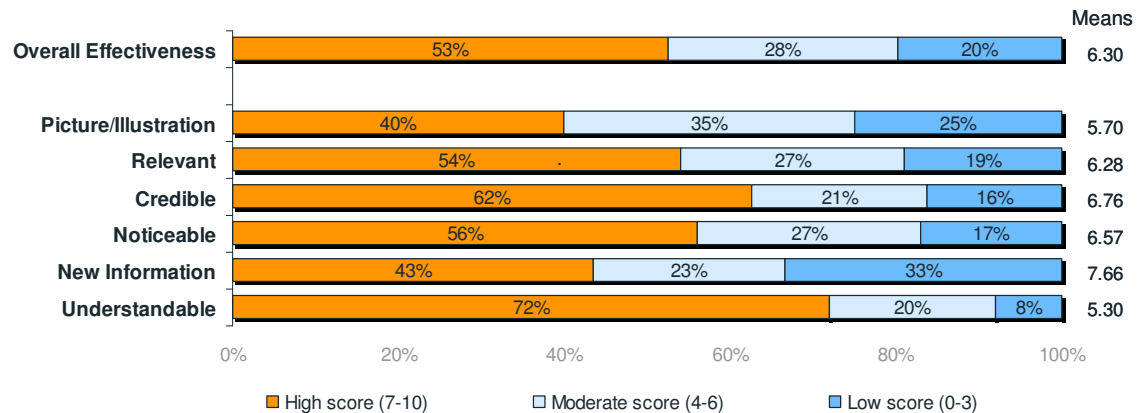
This Health Warning message ranked 32nd overall.

Slightly more than half of smokers (53%) thought it to be a highly effective message, resulting in a mean rating of 6.30. This message's best-rated attributes were its understandability (mean = 7.66) and its credibility (mean = 6.76). The majority of respondents also felt that it was noticeable and credible, however they felt that the information was only moderately new (mean = 5.30). The least strong attribute of this message, and what to some extent led it being placed so low, was the poor impact of the illustration. Only 40% of respondents felt the image was impactful, with a quarter saying it was not impactful.

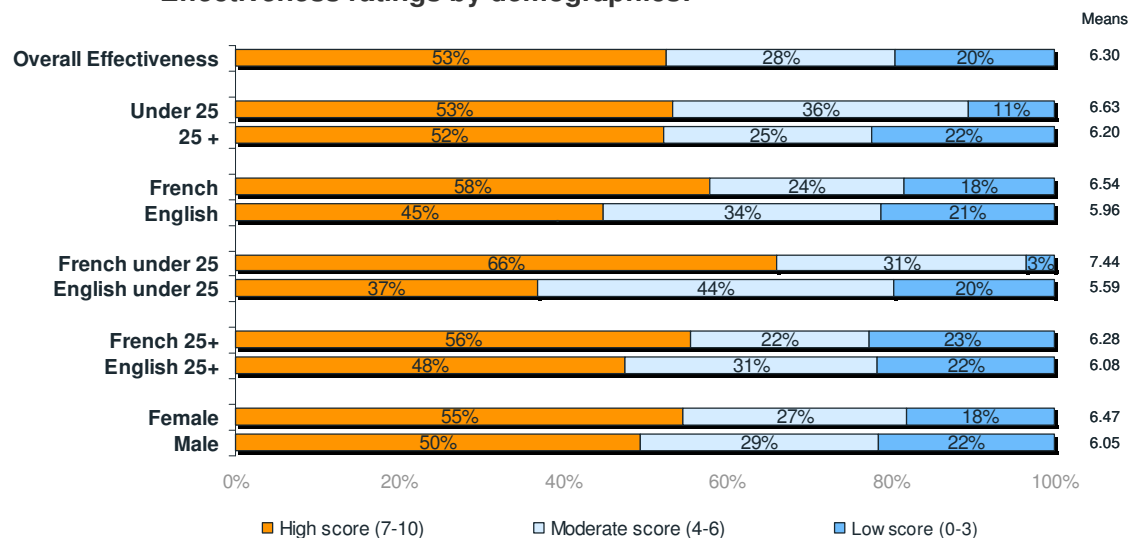
Demographic differences for the overall effectiveness measure were also noted:

- Francophones are more likely to feel that this message is highly effective than Anglophones (58% vs. 45%);
- Adults 25 and older are more likely to give a rating of 0-3 for the effectiveness of this message (22% vs. 11%);
- When these trends are combined it is apparent that French young adults are the most likely to be affected by this message when compared to all other groups (mean = 7.44 vs. 5.59-6.28 for other age/language groups).

Ratings on key attributes:



Effectiveness ratings by demographics:



H-23 – Impotence

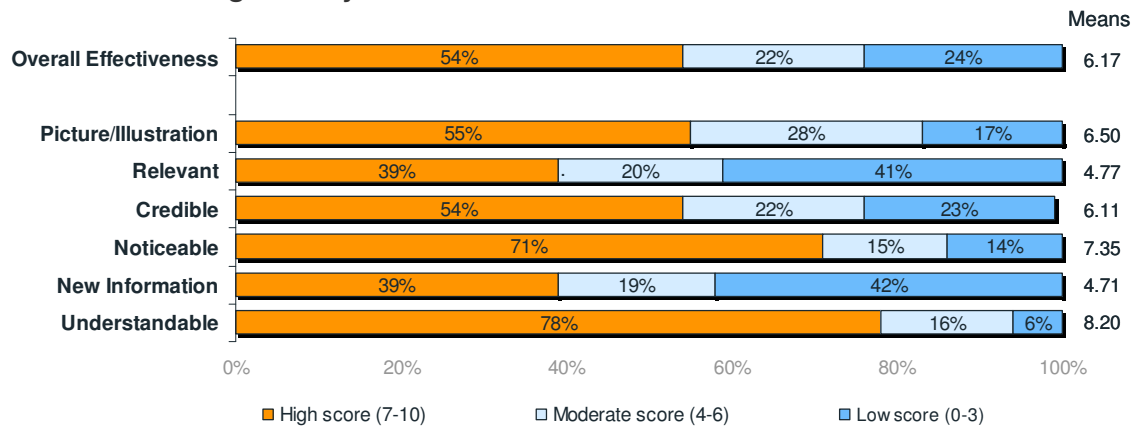
This Health Impacts of Smoking message was not ranked very well, putting it in 35th place overall.

Slightly more than half of respondents (54%) thought this message was effective, but almost one-quarter said it was ineffective, resulting in a mean rating of 6.17. In general, respondents rated this message as understandable (mean = 8.20) and noticeable (mean = 7.35), however it was not thought to be relevant (mean = 4.77); more respondents ranked it poorly on relevance than highly. The impact of the picture was moderate (mean = 6.50), with over half of respondents rating it highly, as was the case for the messages' credibility.

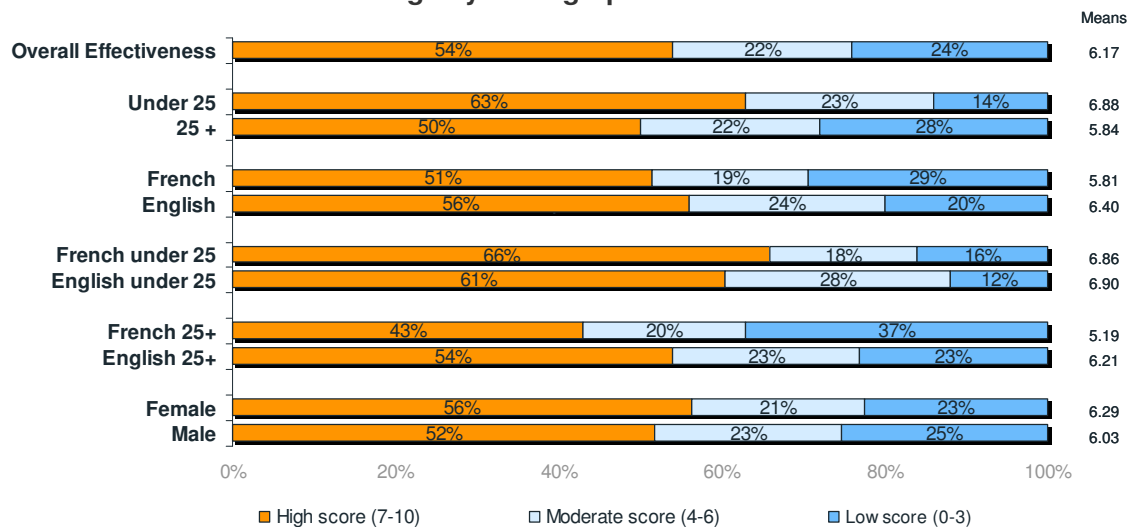
Demographic differences are noted:

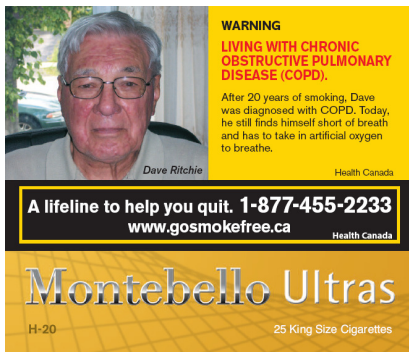
- Francophones are more likely than Anglophones to rate this message as ineffective (29% vs. 20%);
- Young adults felt that message was more effective than older adults (mean = 6.88 vs. 5.84);
- Francophone adults are more likely than any other age/language group to give this message a low score (0-3) (37% vs. 12-23%).

Ratings on key attributes:



Effectiveness ratings by demographics:





H-20 - Living with chronic obstructive pulmonary disease (COPD).

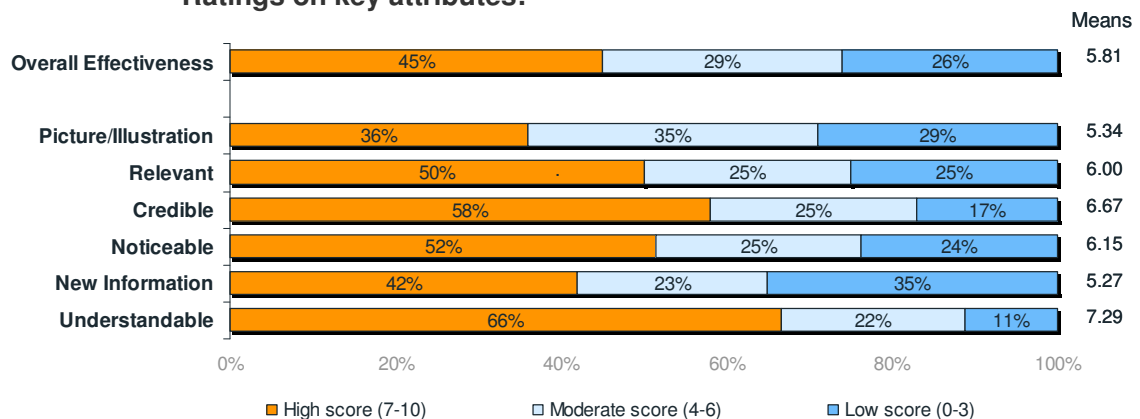
Not only was this message ranked lowest amongst the Health Impacts of Smoking series, but it was ranked the least impactful message out of all the Health Warning messages (41st place).

Fewer than half of respondents thought it was effective (45%), with a mean rating of 5.81. The impact of the picture, which carries a lot of weight when evaluating messages, was thought to be particularly low, with only 36% saying it was impactful; the low rating on this attribute definitely hurt the overall effectiveness of this message. Understandability, an attribute that is usually fairly highly rated, was noticeably lower on this message than others in the Health Impacts of Smoking series (only 66% rated it between 7 and 10 on this attribute). Credibility, noticeability, and relevance rated moderately well, with approximately half of respondents rating the message highly on these attributes (58%, 52%, and 50% respectively). The newness of information was considered to be comparable to that of other messages in this series, with an average rating of 5.27.

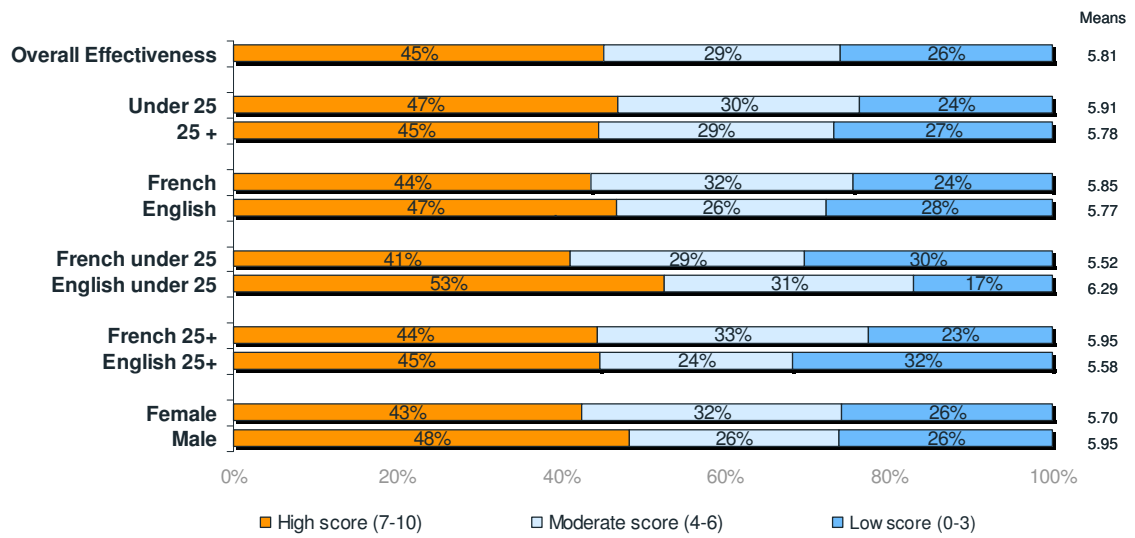
Demographic differences are only noted when age and language variables are considered simultaneously:

- English-speaking adults 25 and older are more likely than younger Anglophones to rate this message between 0-3 on overall effectiveness (32% vs. 17%).

Ratings on key attributes:



Effectiveness ratings by demographics:



Tobacco-attributable Mortality

The Tobacco-attributable Mortality series only consisted of three Health Warning messages:

M-25 - Cigarettes destroy families (67.87)

M-31 - Another premature death... (67.04)

M-27 - Enough is enough... (61.02)

Two messages in this series scored moderately well and one was less strong. These messages were positively impacted by their understandability and noticeability, and negatively impacted by their perceived lack of new information (average of means = 8.28, 7.12, and 4.65, respectively). Credibility was moderate, ranging from 6.54 to 7.06; however, with an average of 6.85 it was lower for this series than most others. The picture in “Cigarettes destroy families” rated the highest with a mean of 7, and that of “Enough is enough...” rated the lowest at 5.61. Lastly, the relevance of all three messages was comparable, with mean ratings ranging from 6.08 to 6.57.

M-25 - Cigarettes destroy families.

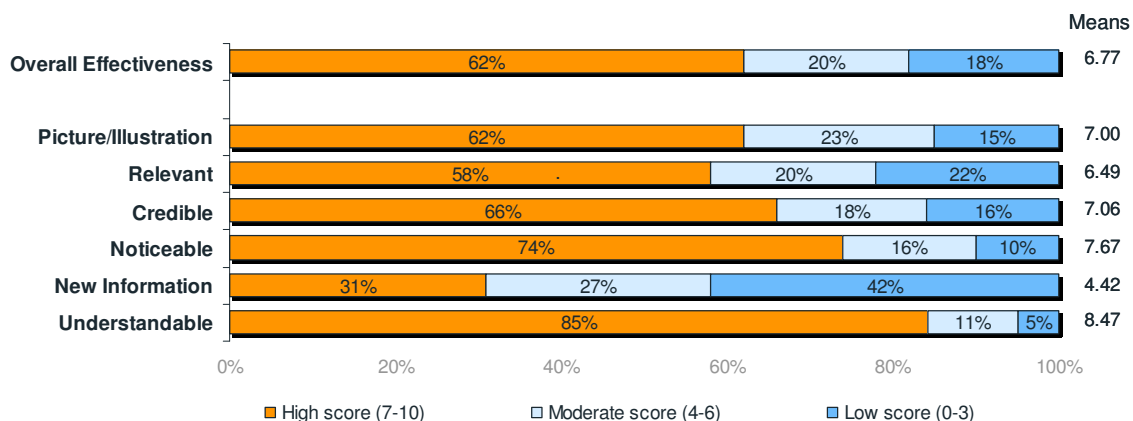
This message was the best ranked in the Tobacco-attributable Mortality series and came in 16th overall.

The majority of respondents rated this message as effective, with 62% rating it highly and a mean rating of 6.77. It was thought to be very noticeable (mean = 7.67), in large part because of the picture (mean = 7.00). The majority of respondents also rated this message as understandable (85% rated it highly), credible (66%) and relevant (58%). The newness of the information in this message was low, with a mean rating of 4.42 and the highest proportion of respondents (42%) rating this attribute between 0 and 3.

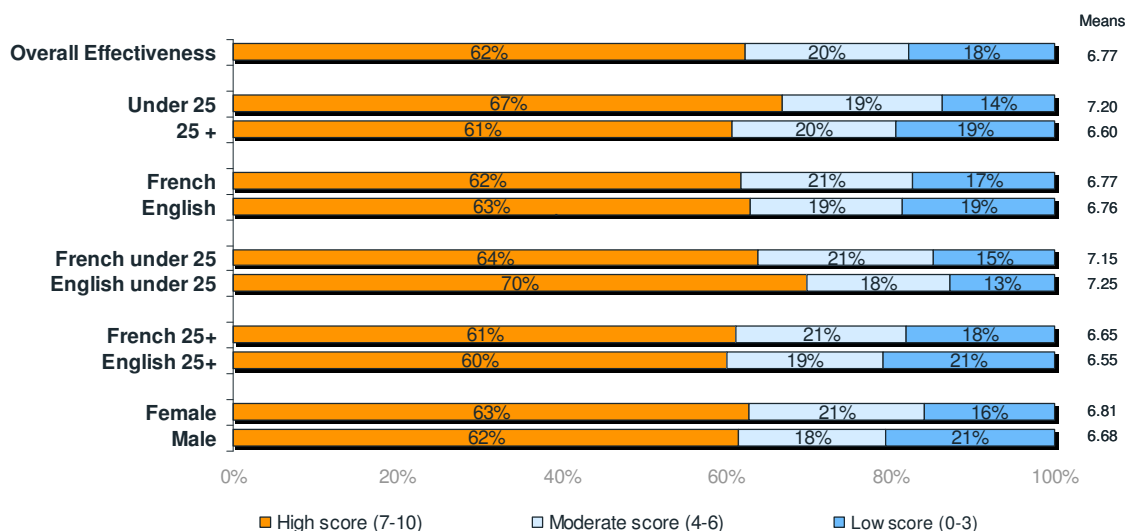
There are no noticeable demographic difference between subgroups.



Ratings on key attributes:



Effectiveness ratings by demographics:



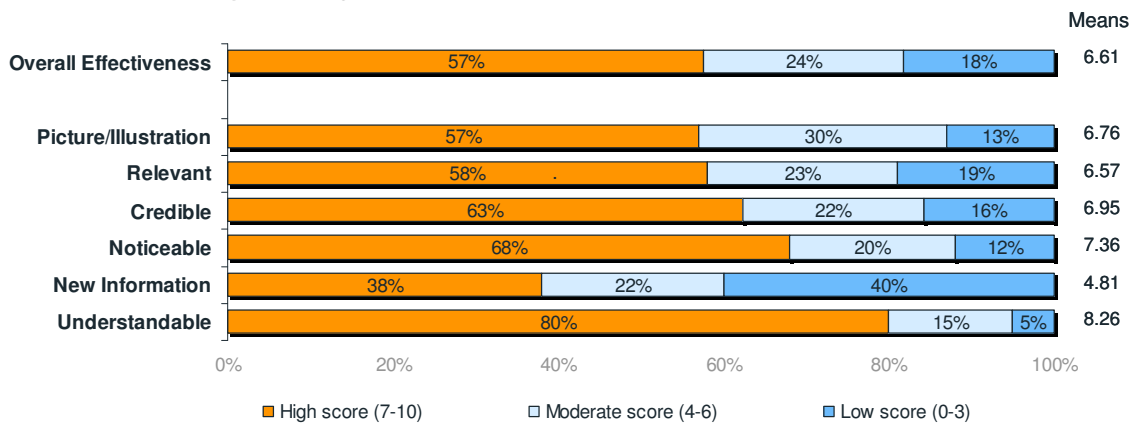
M-31 - Another premature death...

This message ranked 22nd out of the forty-one Health Warning Messages.

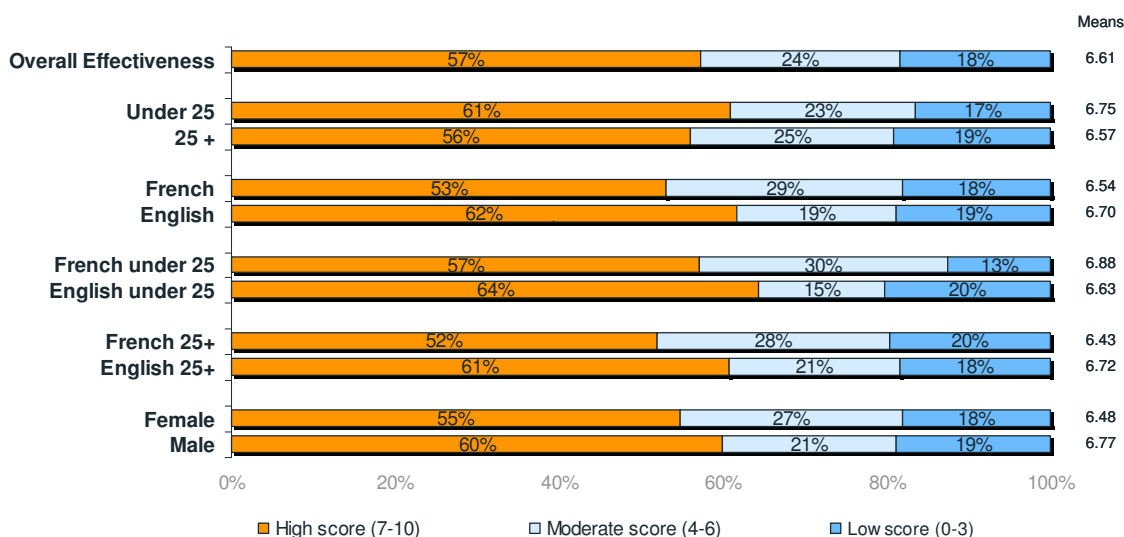
Although close to 3 in 5 (57%) respondents felt this message was highly effective, the overall average was only moderate at 6.61. In addition to being rated as highly understandable by most (80%), it was also rated as highly noticeable (68%) and credible (63%). The picture was impactful, at an average rating of 6.76 and only 13% of respondents rating it poorly. The message's relevance was slightly less impactful, with an average rating of 6.57 and 19% of respondents rating it poorly. However the lack of new information hurt this message, with the highest proportion of respondents rating it as low (mean = 4.81).

There are no noteworthy significant differences between demographic groups.

Ratings on key attributes:



Effectiveness ratings by demographics:



M-27 - Enough is enough...

This message ranked 38th overall and was the least impactful Tobacco-attributable Mortality message.

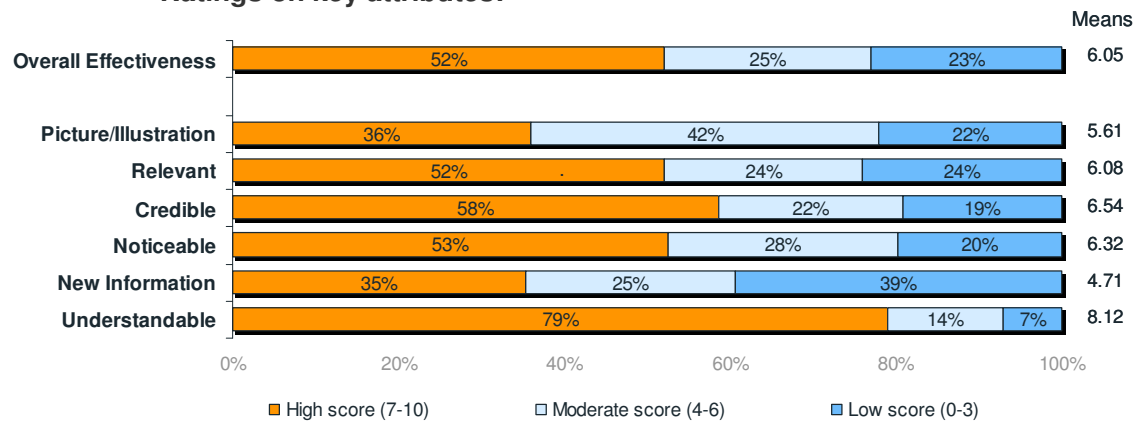
Although half of respondents (52%) felt this message was effective, almost one-quarter thought it was only moderately effective and another quarter felt it was ineffective. This is likely due, to some degree, to the poor ratings of the illustration used on this message; the highest proportion of respondents (42%) felt the picture was only somewhat impactful, rating it between 4 and 6. This message received moderate ratings for credibility, noticeability, and relevance (means = 6.54, 6.32, and 6.08, respectively). Although this

message was very understandable (79%), 39% of respondents rated the newness of information as low.

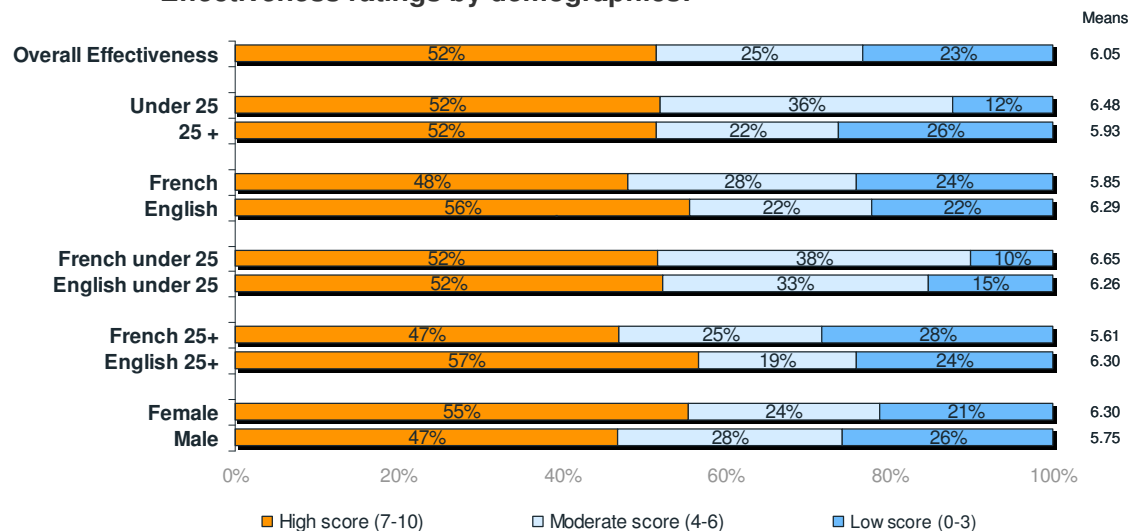
When demographic differences are considered:

- Younger Francophone respondents felt this message was more effective than older Francophones (mean = 6.65 vs, 5.61);
- Older respondents are more likely than those under 25 to feel this message is not effective, rating it between 0 and 3 (26% vs. 12%).

Ratings on key attributes:



Effectiveness ratings by demographics:



Health Impacts of Pre- and Post-natal Smoking

Four Health Warning messages made up the Health Impacts of Pre- and Post-natal Smoking series:

P-33 - Harmful effects of second-hand smoke (71.34)

P-34 - When you smoke, your baby pays the price (69.14)

P-32 - Smoking hurts everyone (67.37)

P-31 - Give your baby a smoke-free family (65.08)

This series saw some of the widest-ranging rankings, overall and for particular attributes. The four messages in this series ranked 6th, 13th, 20th, and 28th overall.

The top two messages of this series were not only ranked high on effectiveness, but were also perceived to be very noticeable (mean ratings = 8.06 and 8.37). Their understandability and the impact of the picture also drove them to success. Comparatively, the other messages in the series ranked much lower on noticeability and their pictures lacked impact. Credibility was rated as being fairly high for all Health Impacts of Pre- and Post-natal Smoking messages, with an average mean rating of 7.27.

All messages in the series were ranked low on new information (average of the means = 4.53) and were ranked low on relevance by many of the respondents (average of the means = 5.80). This latter attribute might have ranked low because the message is not seen to be relevant by those who do not have, or do not plan to have, children.



P-33 - Harmful effects of second-hand smoke

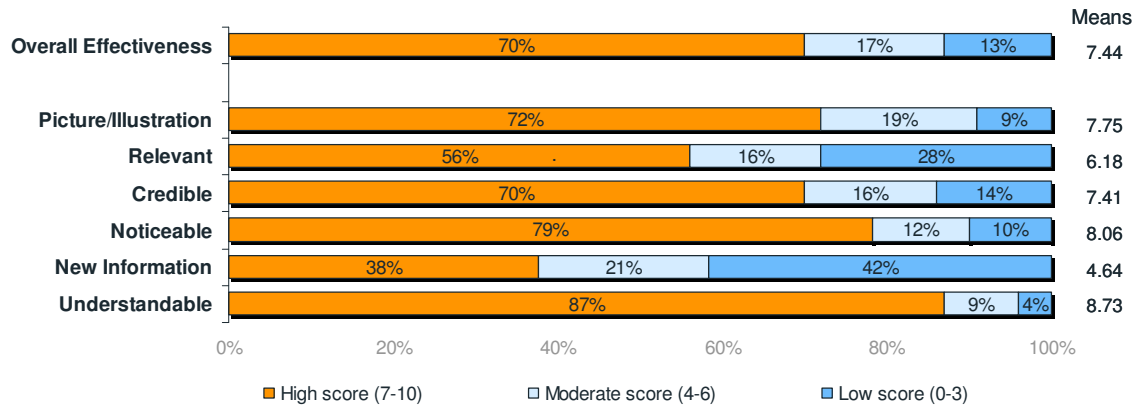
This message ranked 6th overall and was the best rated message of the Health Impacts of Pre- and Post-natal Smoking series.

This message was the highest ranked on overall effectiveness when compared to all other Health Warning Messages (mean = 7.44), however it only placed 6th because of its ratings on other important attributes such as relevance. The message was rated as highly understandable with 87% of respondents rating it as such (mean = 8.73). The picture on this message was especially impactful, with 72% of respondents rating it highly (mean = 7.75). In fact, fewer than 10% of respondents thought it had a low impact. The message was also thought to be highly noticeable by 79% of smokers (mean = 8.06) and very credible as well (by 70% of respondents, mean = 7.41). The relevance of this message was rated slightly lower compared to other attribute, with only 56% of respondents rating it highly. Although many respondents did not feel the information in this message was new, it did not seem to have a negative impact on the message overall.

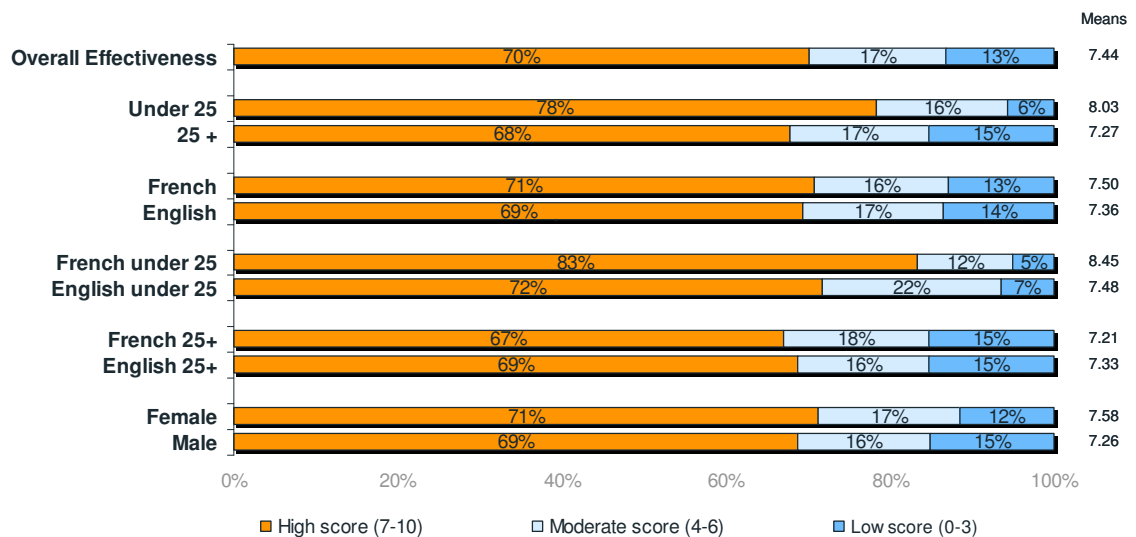
When demographic differences are considered, it becomes apparent that:

- This message has a greater impact on young adults than it does on adults 25 and older (mean = 8.03 vs. 7.27);
- This message was most effective for Francophone young adults, compared to all other age/language groups (mean = 8.45 vs. means between 7.21-7.48 for the other age/language groups).

Ratings on key attributes:



Effectiveness ratings by demographics:





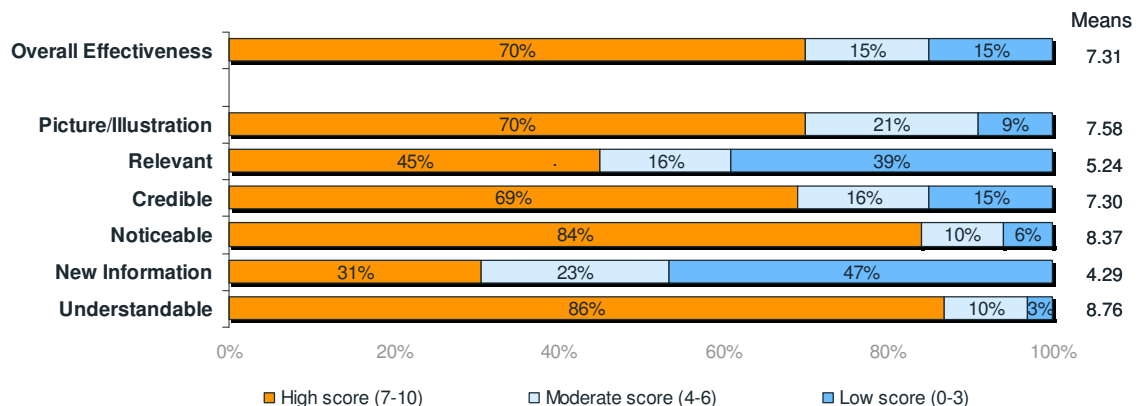
P-34 - When you smoke, your baby pays the price.

This Health Impacts of Pre- and Post-natal Smoking message ranked 13th overall. Although it ranked similarly on many of the attributes as did the previous message in the series (P-33) it was rated slightly lower on some key attributes that are significant drivers of overall impact.

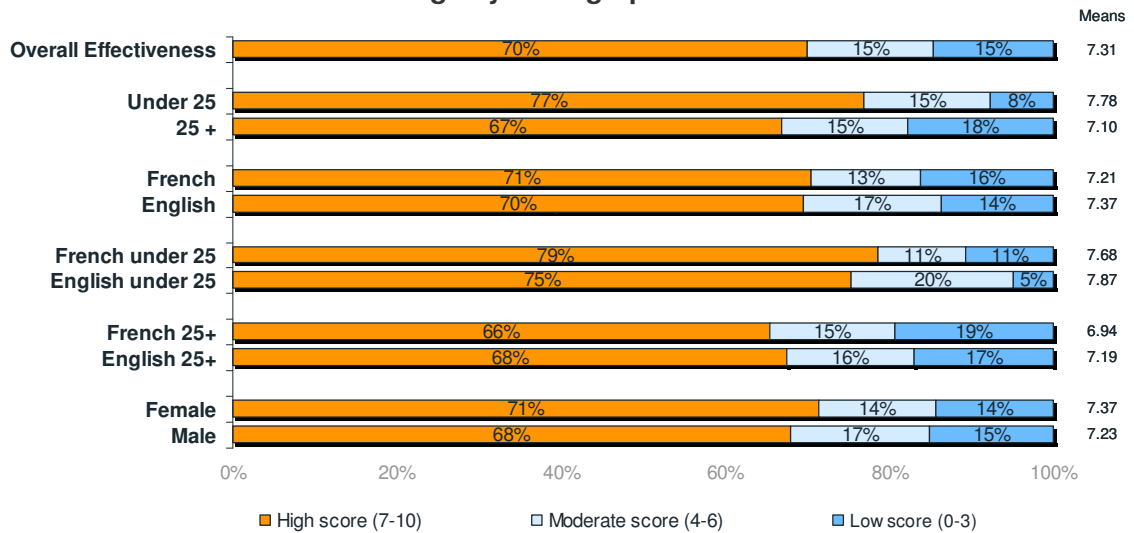
In terms of effectiveness, 70% felt that this message was high, resulting in a high mean rating of 7.31. The noticeability of this message was one of the highest rated attributes (just behind understandability, 86%) with 84% of respondent rating it between 7 and 10. This is likely in large part due to the impactful illustration that was use; 70% of smokers felt the image was highly impactful, with a mean rating of 7.58. The information was also thought to be very credible (mean = 7.30). The information was not perceived to be new, but as was the case with P-33, it does not seem that this had a negative impact on the message overall. Interestingly, this message rated noticeably lower on relevance than it did on other attributes, with only 45% saying it was highly relevant. This can be explained by significantly lower ratings from men and older respondents on this attribute.

When overall effectiveness is considered by demographic subgroups the only difference observed is between younger and older respondents, with older respondents more likely to find the message ineffective (18% vs. 8%).

Ratings on key attributes:



Effectiveness ratings by demographics:



P-32 - Smoking hurts everyone.

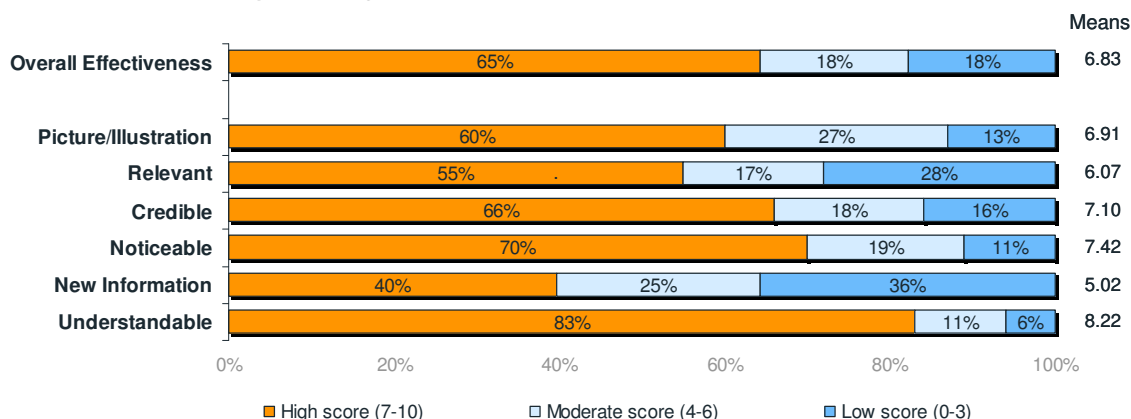
This message ranked 20th out of all Health Warning messages.

Approximately two-thirds of respondents felt it was highly effective, and close to one-fifth thought it was moderately so or not at all effective. The noticeability of this message was one of its best-rated attributes, with 70% of respondents rating it highly on this. It was also thought to be very understandable (mean = 8.22) and highly credible (mean = 7.10). The illustration was considered highly impactful by 60% of respondents and the majority also felt that the message was relevant (55%). Although only 40% felt the information was new, the information in this message was the best ranked of all the Health Impacts of Pre- and Post-natal Smoking series at a mean rating of 5.02.

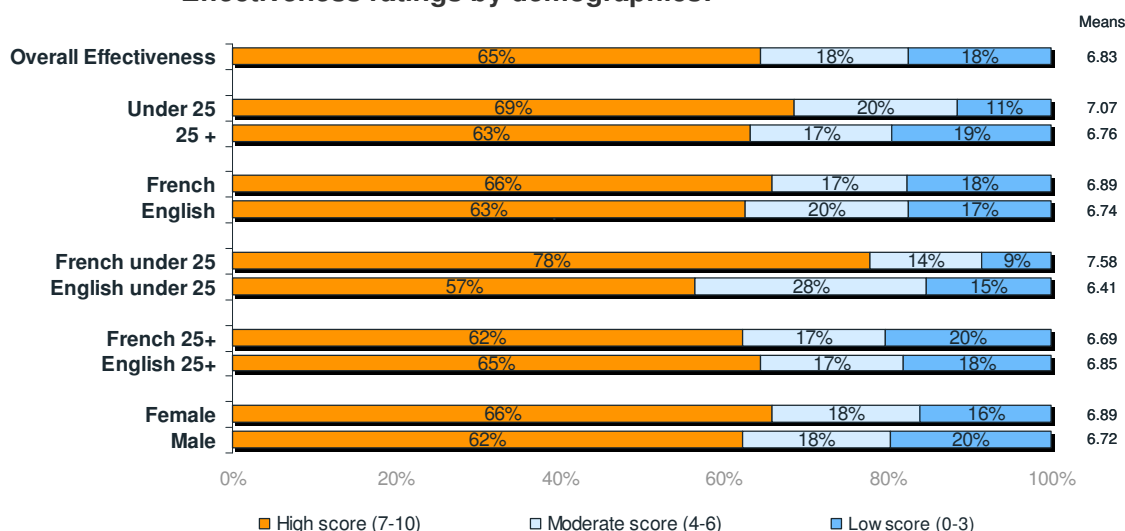
When demographic variables are considered:

- Adults 25 and older are more likely than young adults to rate this message as ineffective (19% vs. 11%);
- Francophone young adults are the most likely demographic subgroup to find this message highly effective (mean = 7.58, compared to means between 6.41 and 6.85 for the other language/age groups).

Ratings on key attributes:



Effectiveness ratings by demographics:



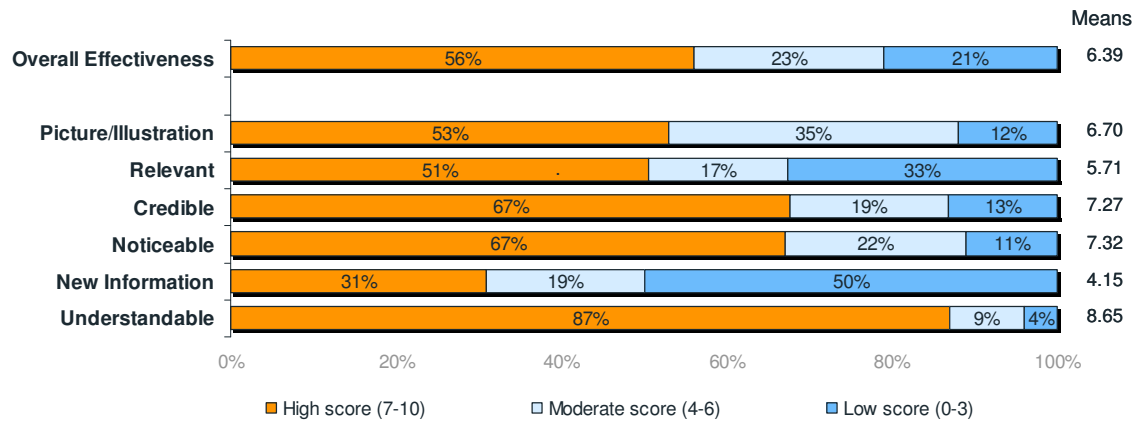
P-31 - Give your baby a smoke-free family.

With a 28th place ranking, this message was the least effective in the Health Impacts of Pre- and Post-natal Smoking series.

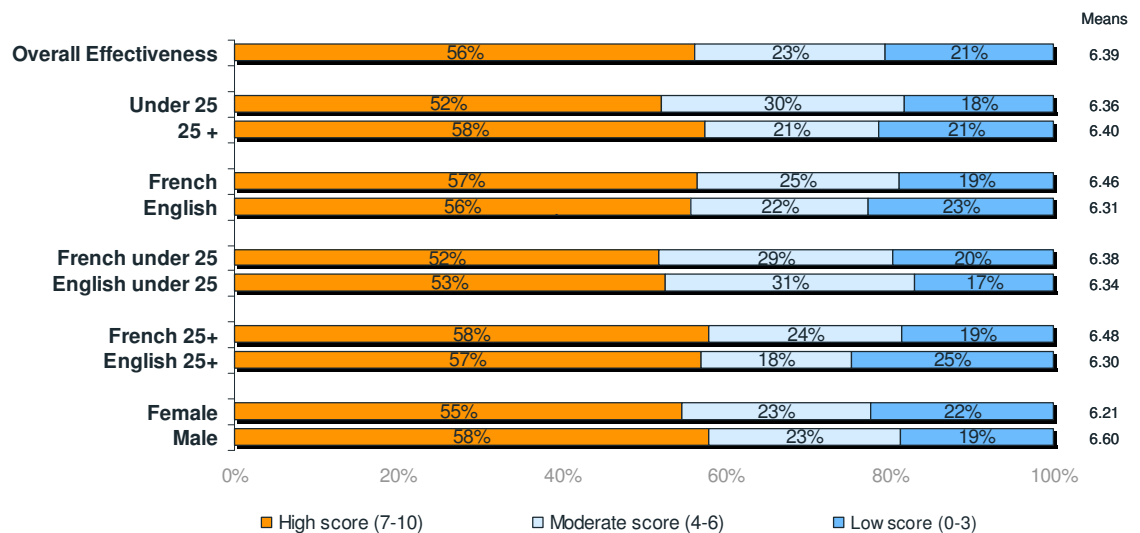
More than half of respondents (56%) felt this message was highly effective, resulting in a moderate mean rating of 6.39. It was thought to be noticeable and credible by two-thirds of respondents (means = 7.32 and 7.27), but the impact of its picture and its relevance did not fare as well, with just over half of respondents rating these attributes highly. However, 35% of respondents did feel the picture had a moderate (4-6) impact, boosting the mean to 6.70 (compared to a mean of only 5.71 for relevance). Half of respondents did not feel this message contained new information; however, the strong majority did feel it was easy to understand (87%).

No noteworthy demographic differences are present for this message.

Ratings on key attributes:



Effectiveness ratings by demographics:



Health Hazards from Second-Hand Smoke

Six Health Warning message about Health Hazards from Second-Hand Smoke were tested:

- S-37 – Second-hand smoke. First-hand risk. (69.74)
- S-36 – Your kids are sick of your smoking (66.89)
- S-39 – Smoking near a window is not good enough (66.52)
- S-38 – Smoking in the car hurts more than just you (66.03)
- S-40 – In a vehicle, if you smoke, everyone smokes (63.94)
- S-41 – Air filters do not eliminate the smaller particles and gases found by tobacco smoke (60.18)

With the exception of one message in this series, which ranked 9th overall, most of the series only scored in the bottom half, with rankings ranging from 22nd place to 40th. With that said, the average of the effectiveness ratings was 6.52, higher than three other series of messages. The newness of information was fairly low, at an average rating of 4.62. Noticeability, credibility, and understandability were all rated well, and fairly consistently across all messages in the series (average of the mean = 7.10, 6.96, and 8.41 respectively for the aforementioned attributes). The picture had a strong positive impact for the highest-ranking messages in the series (“Second-hand smoke. First hand risk.” and “Your kids are sick of your smoking”). Respondents found these messages somewhat relevant, rating them a 6.13 on average, however the “Air Filters” message was not perceived to be as relevant as the others.



S-37 – Second-hand smoke. First-hand risk.

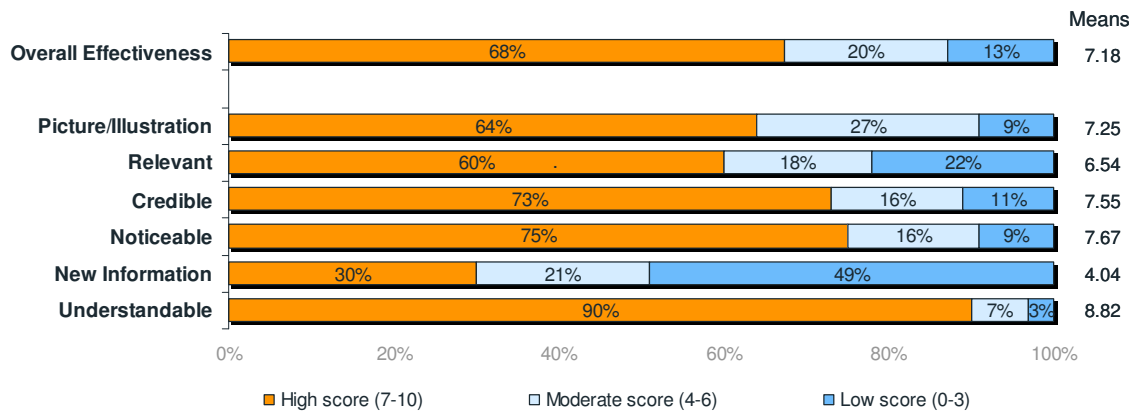
This message ranked 9th overall and was the best ranked of the Health Hazards from Second-Hand Smoke series.

Over two-thirds of respondents felt this message was highly effective (68%), resulting in a high average score of 7.18. Contributing to its success was its very high understandability (mean = 8.82, 90% rating it highly), and strong noticeability (mean = 7.67) and credibility (mean = 7.55). The picture fared well also, with 64% of smokers saying it was highly impactful and another 27% saying it was moderately so. Relevance was a slightly lower rated attribute, with an average score of 6.54. The newness of information was considered to be low, with an average rating of only 4.04 and nearly half of respondents saying this attribute was low.

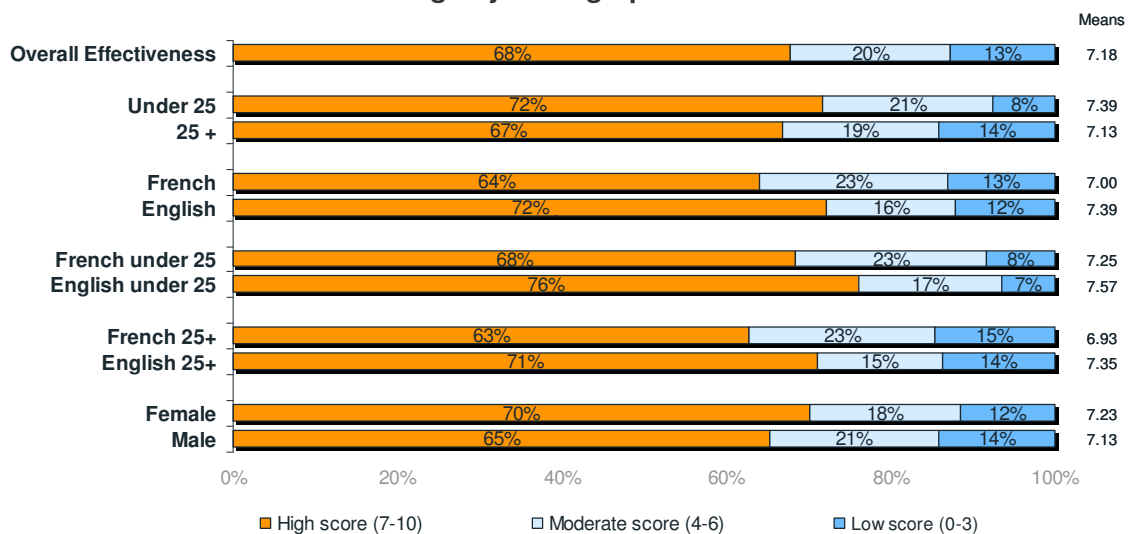
When demographic trends are considered:

- Adults 25 and older are more likely to rate this message poorly (0-3) than are young adults under 25 (14% vs. 8%).

Ratings on key attributes:



Effectiveness ratings by demographics:



S-36 – Your kids are sick of your smoking.

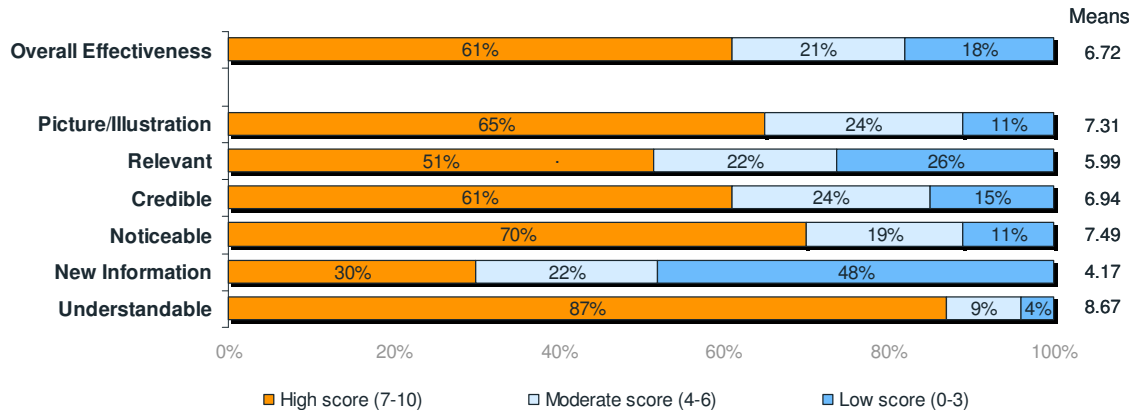
This message ranked 23rd overall.

Approximately 3 out of 5 respondents (61%) felt this message was effective, with another 21% saying it was moderately so (mean = 6.72). The impactful picture on this message definitely led to its success; on average, it was rated 7.31 with 65% of respondents rating it highly on this attribute. It was also thought to be noticeable by 70% of respondents and highly understandable by the overwhelming majority (87%). Credibility fared well with mean rating of 6.94 and relevance was rated moderately at 5.99. Hurting the overall success of this message were the low scores it received on the attribute, new information; only 30% of respondents rated it highly on this aspect, with almost half (48%) giving it a rating of 0 to 3.

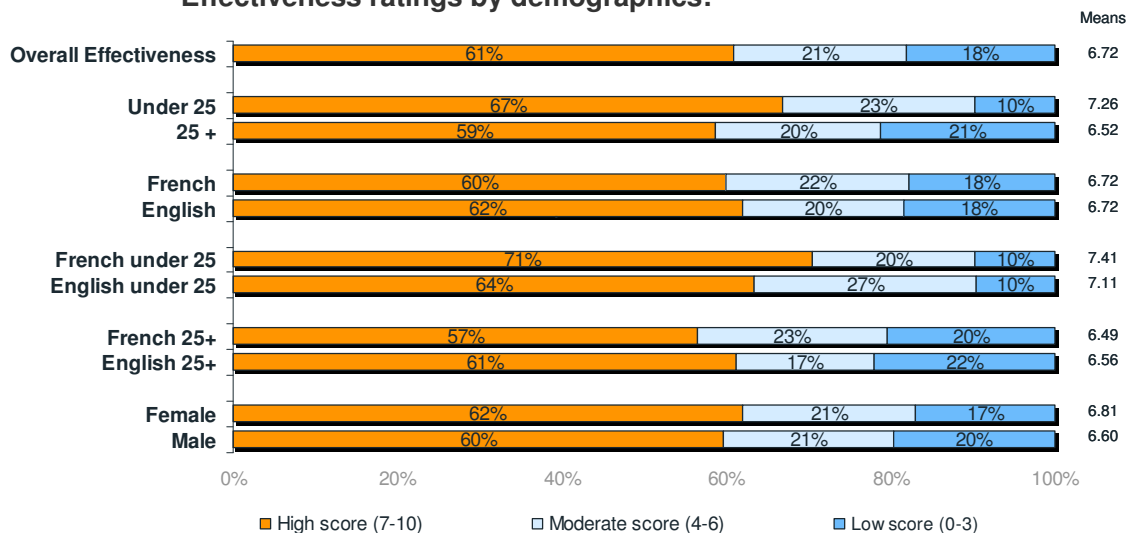
When demographic subgroups are considered, it becomes apparent that:

- Younger respondents felt this message was more effective than older respondents (mean = 7.26 vs. 6.52).

Ratings on key attributes:



Effectiveness ratings by demographics:



S-39 – Smoking near a window is not good enough.

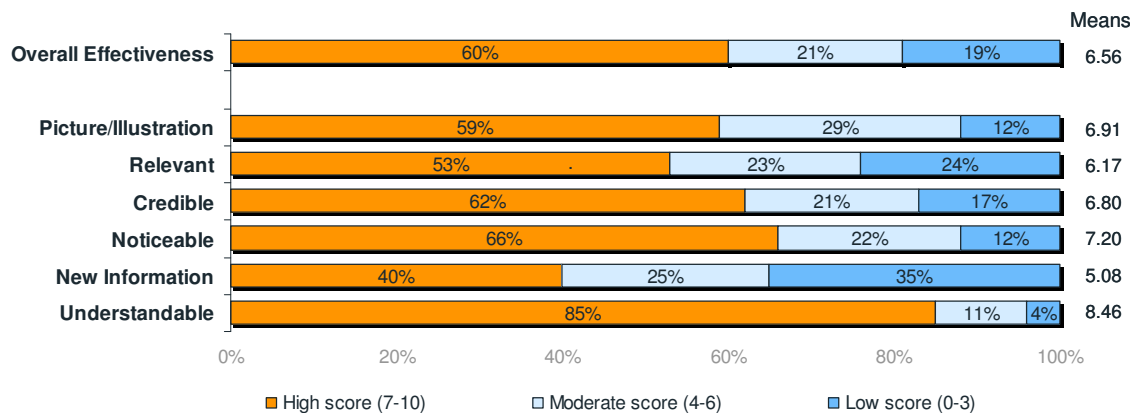
This message ranked 24th overall, just behind the above message in this series.

For the most part respondents felt this message was similar to the one above, with 60% of respondents rating its overall effectiveness as high (however the mean was lower at 6.56). It was also seen to be highly noticeable (mean = 7.20) and credible (mean = 6.80). Again, relevance was a slightly lower rated attribute, at an average of 6.17, but still rated

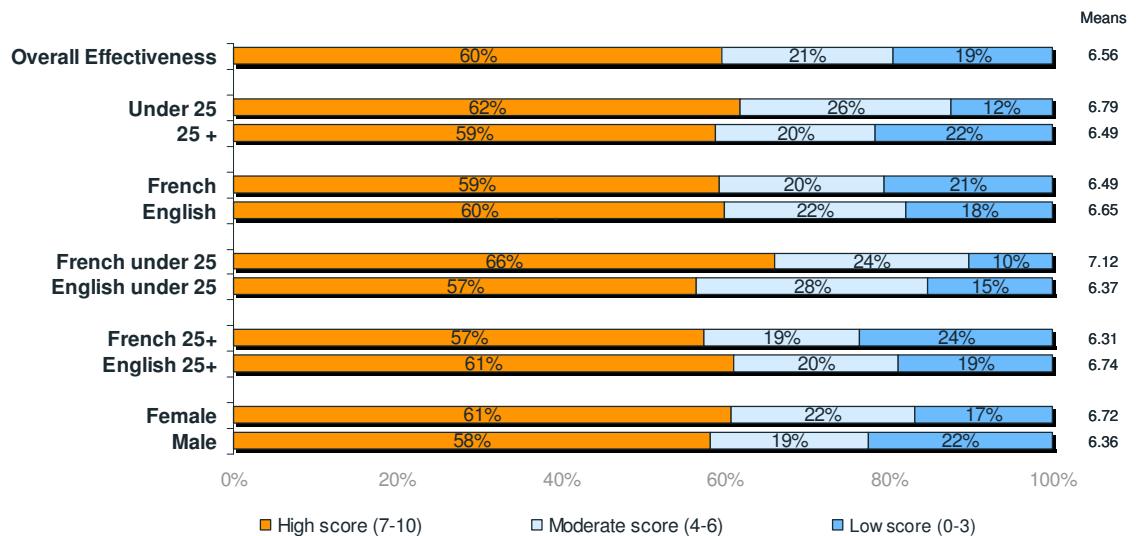
moderately well. Understandability was also very high, with 85% of respondents rating it so. This message ranked below S-36 (above) because its picture was perceived to be slightly less impactful; 59% of respondents rated it highly and it received an average rating of 6.91. However, the information in this message was seen to be newer than that in S-36, with the highest proportion of respondents (40%) rating it highly on this attribute (mean = 5.08).

The only notable significant difference is that older respondents (25+) are more likely to rate this message's effectiveness as low when compared to younger respondents (22% vs. 12%).

Ratings on key attributes:



Effectiveness ratings by demographics:





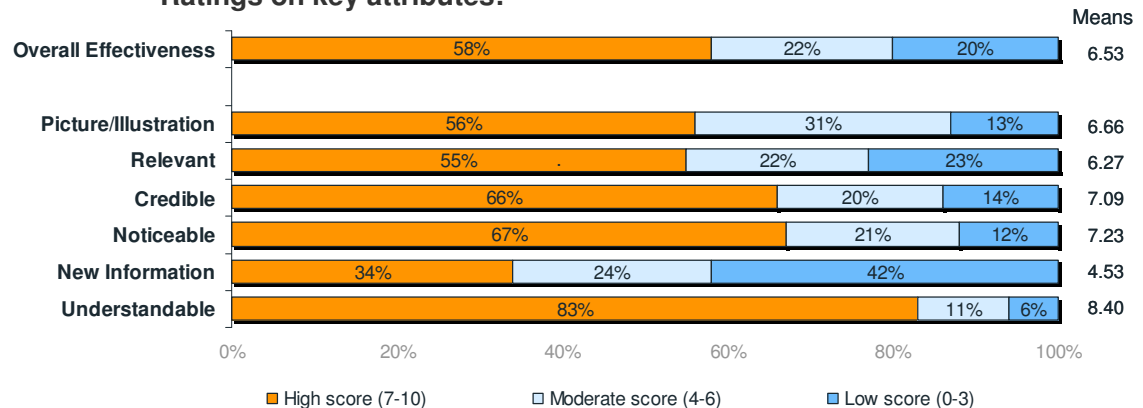
S-38 – Smoking in the car hurts more than just you.

This message ranked 25th out of all Health Warning Messages, just behind S-36 and S-39 of this series. However, this message ranked lower on all attributes than either of the above.

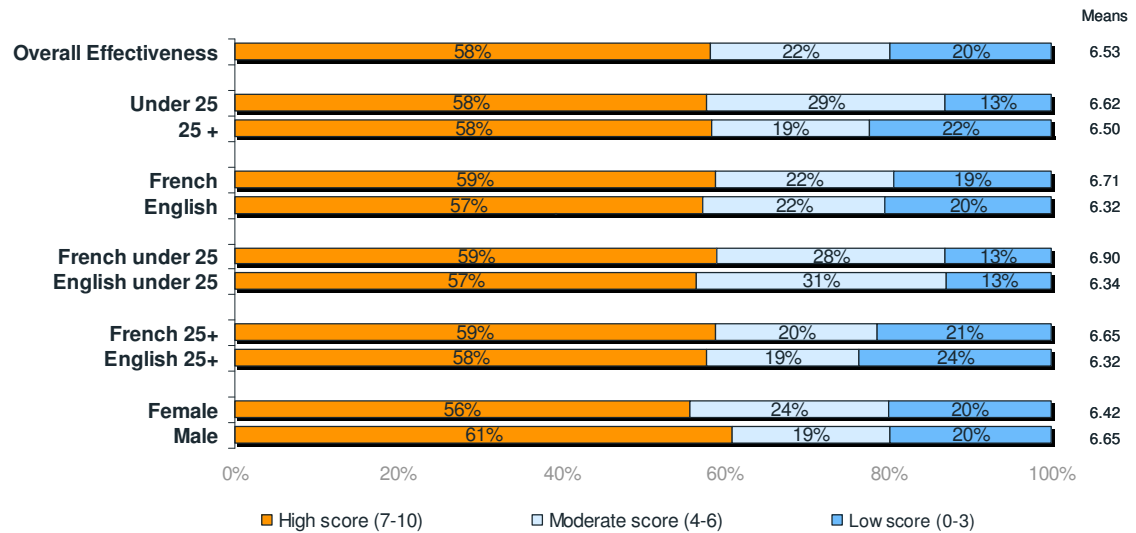
With 58% of respondents saying this message was highly effective, it received a moderate average rating of 6.53. Eighty-three percent of respondents felt it was very understandable (mean = 8.40), however only one-third thought the information was new (mean = 4.53), with the highest proportion of respondents (42%) rating it low on this attribute. Two-thirds of smokers felt this message was noticeable and credible (means = 7.23 and 7.09, respectively) and over half felt the picture was highly impactful (56%; mean = 6.66) and that the message was highly relevant (55%; mean = 6.27).

The only demographic difference is between older and younger respondents, with those 25 and older more likely to rate this message between 0 and 3 for its overall effectiveness (22% vs. 13%).

Ratings on key attributes:



Effectiveness ratings by demographics:



S-40 – In a vehicle, if you smoke, everyone smokes.

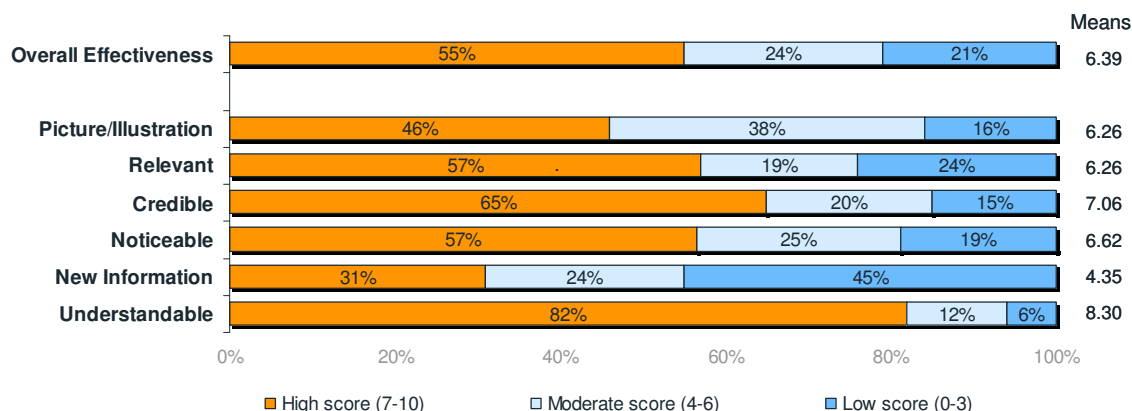
This message ranked just above the bottom ten of all Health Warning messages, at 31st place.

Fifty-five percent of respondents rated this message as highly effective overall, resulting in an average score of 6.39. Although the message was thought to be very credible (mean = 7.06), it was seen as less noticeable and relevant than other messages in this series (means = 6.62 and 6.26, with 57% of respondents rating these attributes as high). This message was likely perceived as less effective because of the impact of the image; only 46% of smokers felt the picture was highly impactful. The highest proportion of respondents (45%) felt that the message portrayed was not new to them (mean = 4.35). The rating of understandability was high, with an average score of 8.30.

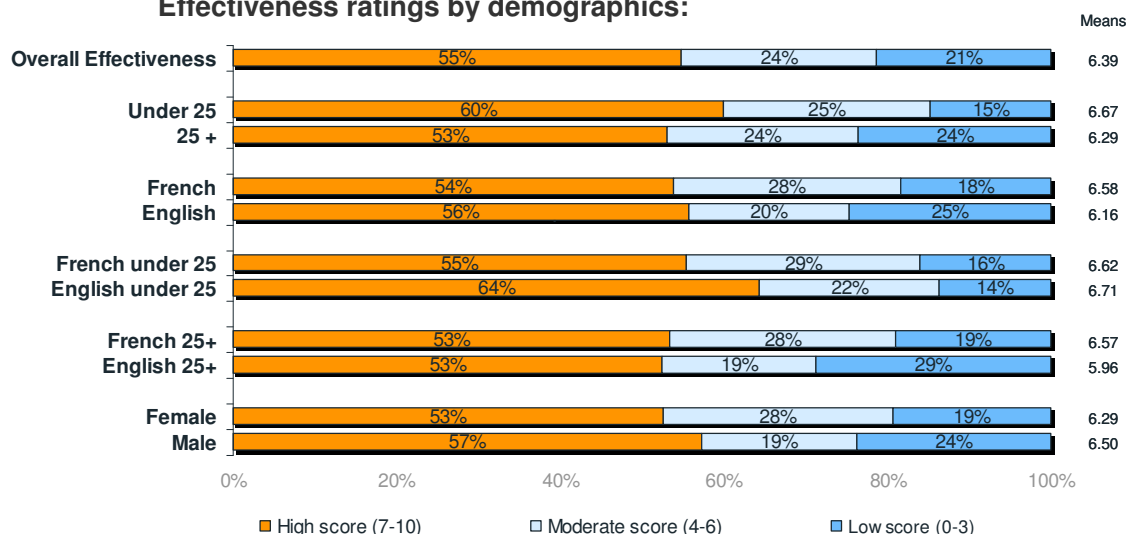
Some interesting demographic differences can be observed when the 0-3 box is considered:

- Adult respondents are more likely than young adults to consider this message ineffective (24% vs. 15%);
- When age and language variables are combined, the trends are more prominent; English-speaking adults are the most likely of all age/language subgroups to rate this message between 0 and 3 in terms of its overall effectiveness (29% vs. 14-19%).

Ratings on key attributes:



Effectiveness ratings by demographics:



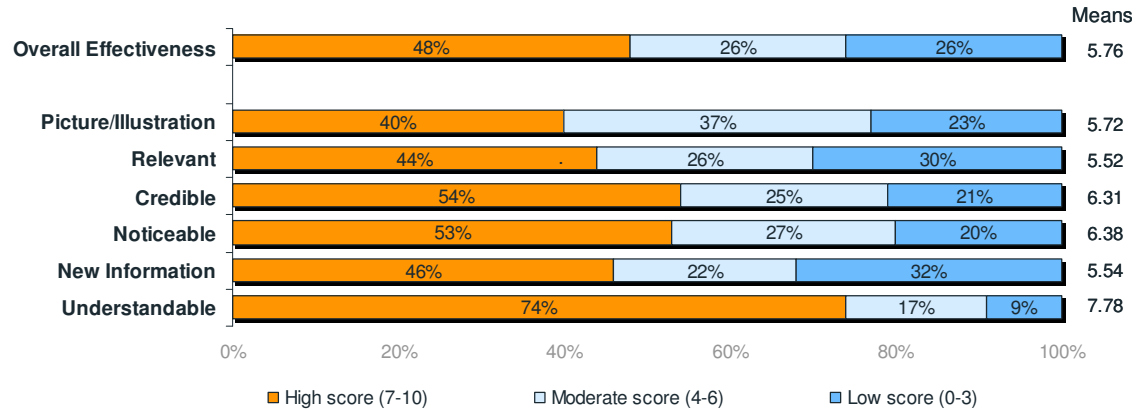
S-41 – Air filters do not eliminate the smaller particles and gases found in tobacco smoke.

In second to last place, this message ranked 40th.

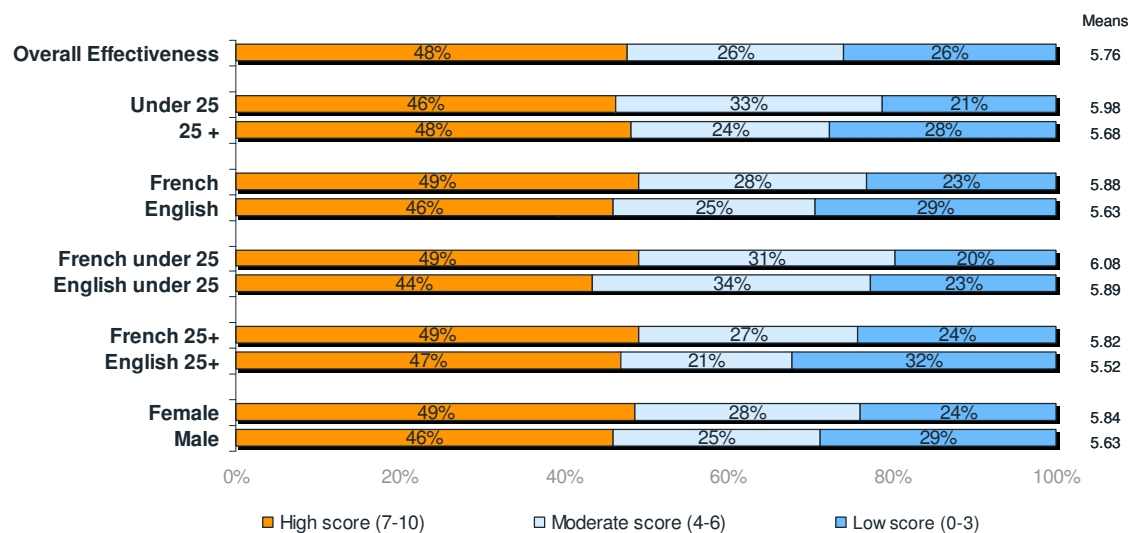
Fewer than half (48%) of respondents felt this message was highly effective, with 26% saying it was moderately so and 26% saying it was ineffective. Although rated as very understandable (mean = 7.78), this message did not receive high ratings on important attributes such as the impact of the picture and the message's relevance (means = 5.72 and 5.52, respectively). In both these cases, only 2 in 5 respondents rated the attributes highly. Just over half of respondents felt the message was credible or noticeable (54% and 53%, respectively) while just under half (46%) thought the information was new.

No noteworthy demographic differences are apparent for this message.

Ratings on key attributes:



Effectiveness ratings by demographics:



Toxic Emissions

The Toxic Emissions series consisted of three Health Warning messages:

- T-50 – Toxic chemicals in tobacco smoke causes serious health problems and suffering (62.07)
- T-51 – Tobacco smoke is a preventable health risk (61.20)
- T-44 – Don't poison me (61.09)

The Toxic Emissions series of messages was the worst rated, with an average effectiveness rating of only 5.86 and overall rankings of 33rd and below. Although the messages were seen to be highly understandable (average of the means = 8.57) and fairly noticeable (means ranging from 7.11 to 7.22), the perceived lack of new information really hurt the message, with mean scores ranging from 3.20 to 3.30. The pictures did have a moderate impact and the messages were seen to be credible (average of the means = 6.26 and 6.55, respectively). Relevance was only rated at 5.99 on average, which might be a function of the lack of new information.



T-50 – Toxic chemicals in tobacco smoke cause severe health problems and suffering.

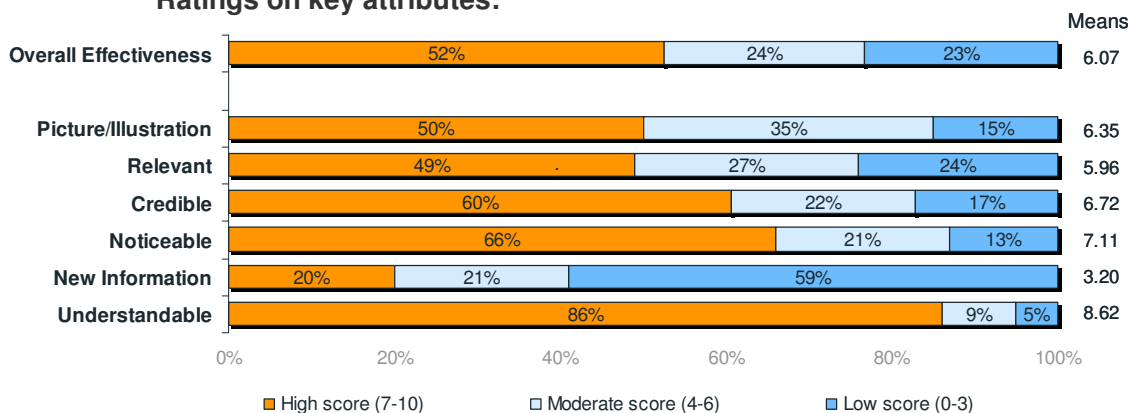
This message ranked 33rd overall and was the best-ranked Toxicity message.

With an average effectiveness rating of 6.07, only half of respondents (52%) rated this message highly. Two-thirds felt it was noticeable and 60% rated it as highly credible. Half of respondents thought the picture had a lot of impact and 35% thought the picture was moderately impactful. However, only 49% of respondents thought this message was relevant to them, and only 1 in 5 perceived the information in this message to be new. Understandability was however very high, with 86% rating this attribute between 7 and 10.

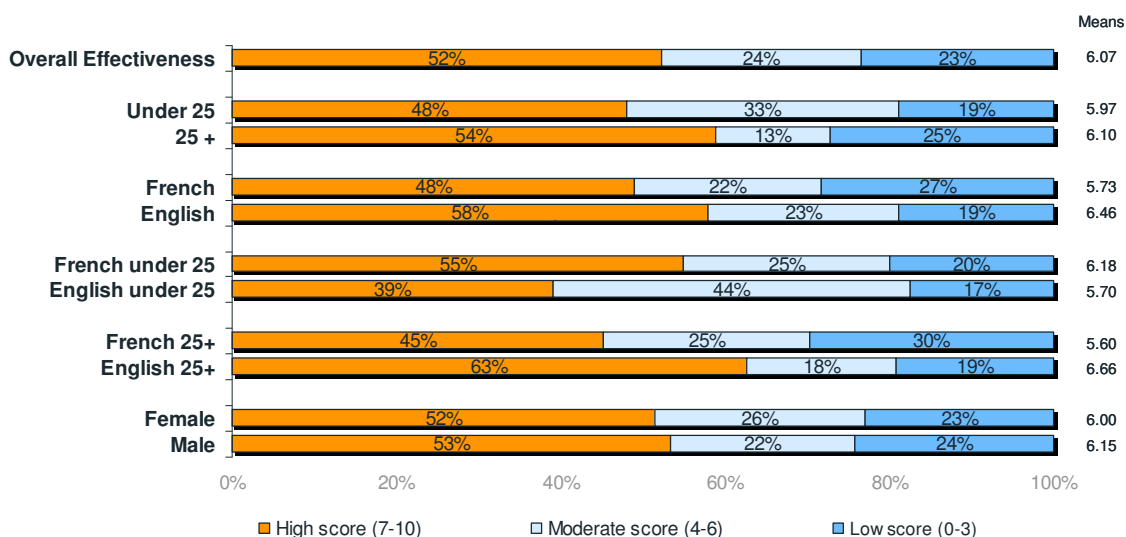
When demographic subgroups are compared:

- Anglophones are more likely to rate this message as effective than Francophones (mean = 6.46 vs. 5.73);
- This trend is furthered when age is also considered; Anglophone adults 25 and older are more likely than Anglophone young adults to find this message highly effective (63% vs. 39%).

Ratings on key attributes:



Effectiveness ratings by demographics:



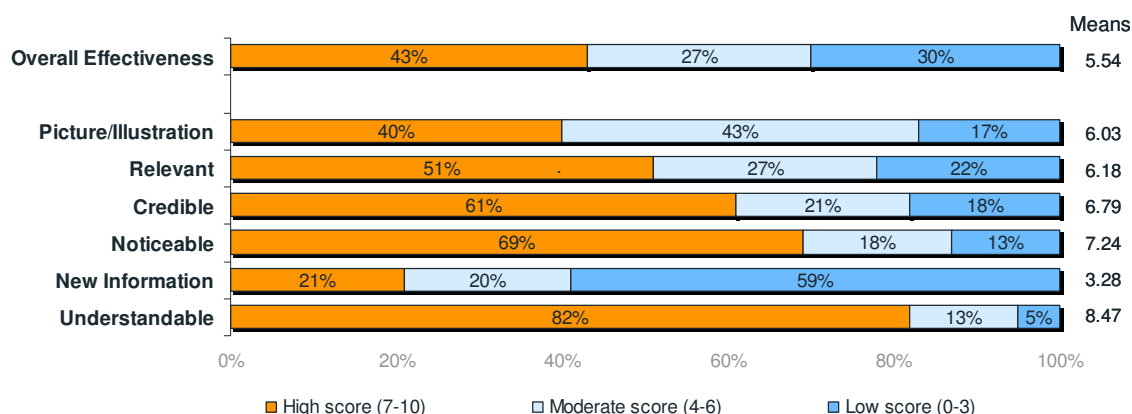
T-51 – Tobacco smoke is a preventable health risk.

This message ranked 36th overall.

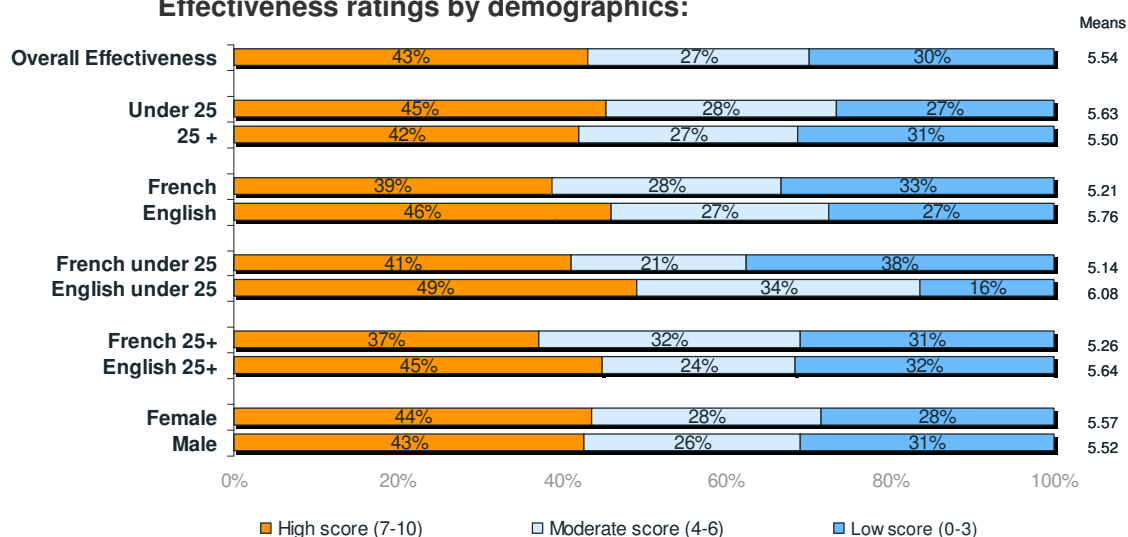
Slightly more than 40% of respondents felt this message was effective, with a low overall effectiveness score of 5.54. Its low overall ranking is due to this, as well as a low rating on other attributes that play an important role in overall impact. Only 40% of respondents felt the image was highly impactful and half thought the message to be relevant (means = 6.03 and 6.18, respectively). Over two-thirds (69%) of respondents did feel this message was noticeable though, boosting its rank. It was also thought to be credible (mean = 6.79) and highly understandable (mean = 8.47). As with the other messages in this series, the newness of the information in the message was rated as very low, with the strong majority of respondents (59%) rating this attribute between 0 and 3.

When demographic differences are considered it becomes evident that this message was more effective for Anglophone young adults than it was for the other subgroups (0-3 box rating 16% vs. 31-38%).

Ratings on key attributes:



Effectiveness ratings by demographics:



T-44 – Don't poison me.

As the worst rated message in the Toxicity series, this message was ranked 37th.

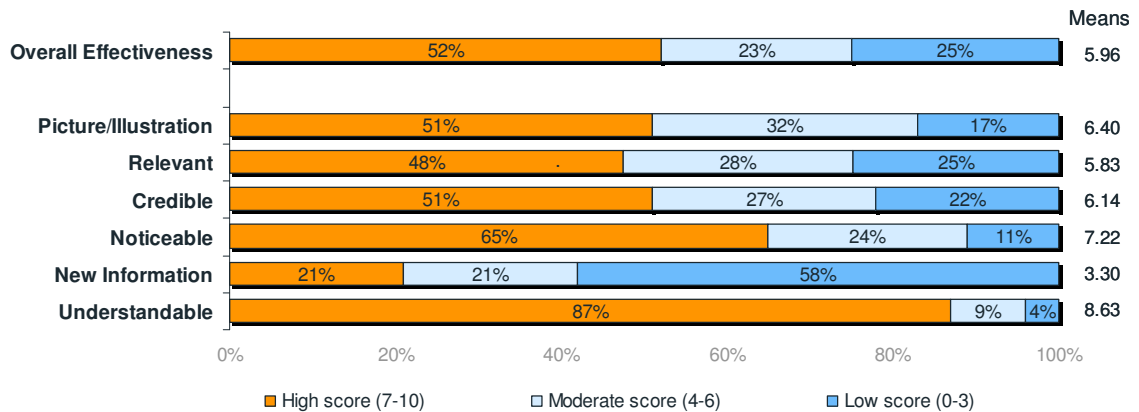
Just over half of respondents (52%) found this message to be effective, with near-equal proportions rating it as moderate (23%) and low (25%). Approximately half of respondents felt the message was credible, relevant and that the picture had a strong impact (means = 6.14, 5.83, 6.40, respectively). Although very noticeable (mean = 7.22) and highly understandable (mean = 8.63), this message scored very low of the newness

of information (mean = 3.30), with only 21% rating it highly on this attribute and 21% rating it moderately so.

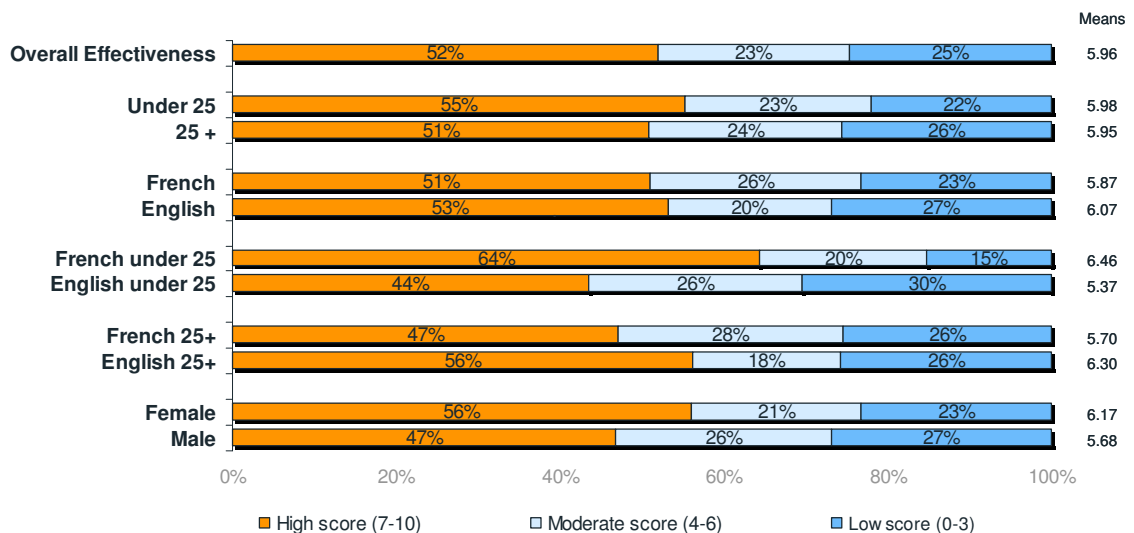
Demographically,

- Francophone young adults rated this message as more effective (7-10) than Anglophone young adults (64% vs. 44%) and Francophone adults (47%).

Ratings on key attributes:



Effectiveness ratings by demographics:



Evaluation of Health Information Messages

Anatomy

There were just two Anatomy Health Information Messages tested, both a variation on the same general concept:

ANAT-02 – How is my body affected? (70.80)

ANAT-02A – How is my body affected? (69.29)

These two messages in the Anatomy series did very well, ranking 1st and 3rd overall amongst Health Information messages. These message scored highly on key drivers of success like noticeability (average of the means = 7.32), credibility (7.28), readability (7.19) and the impact of the illustration (7.02). They were also seen to be very understandable, with average ratings above 8 for all messages in the series. Slightly lower ratings on relevance (6.97) and new information (6.07) may explain why overall effectiveness scored lower than most attributes, at an average of 6.45. With that said, the effectiveness of this series overall is higher than for any other series of HIMs.

ANAT-02 – How is my body affected?

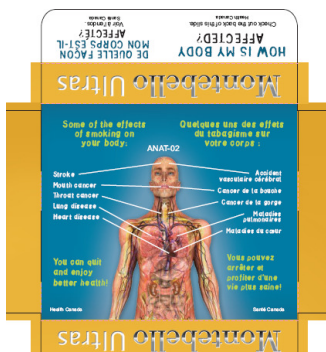
This message was ranked best amongst Health Information Messages.

Three in five respondents gave this message a high effectiveness ranking, with a mean rating of 6.57. Almost one-fifth of respondents (19%) found it moderately effective and another 22% thought it was ineffective. This message was rated highest for its understandability, with almost 80% highly agreeing with this attribute (mean = 8.11). Its noticeability and credibility were also rated quite highly, with mean ratings of 7.45 and 7.43, respectively. The picture was considered to impact the overall message by the majority (66%) of respondents, and it was similarly considered relevant (66%). This message lost impact with many respondents because it was not considered to contain new information. Only 49% highly agreed that there was new information in this message and another 22% moderately agreed.

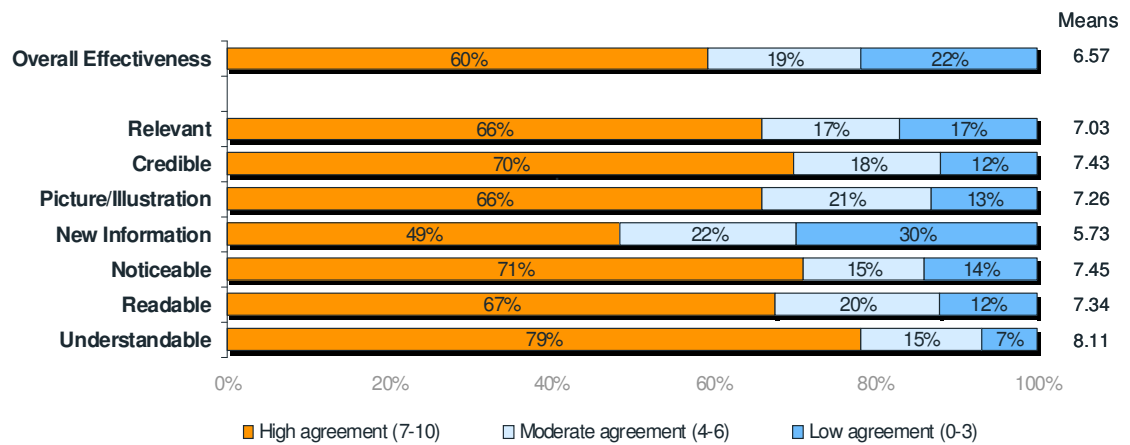
Given the importance of text in the Health Information Messages, they were also rated on their readability. This message was considered to be highly readable, with approximately two-third (67%) highly agreeing with this attribute and another 20% moderately agreeing.

When demographic differences were considered, it became apparent that:

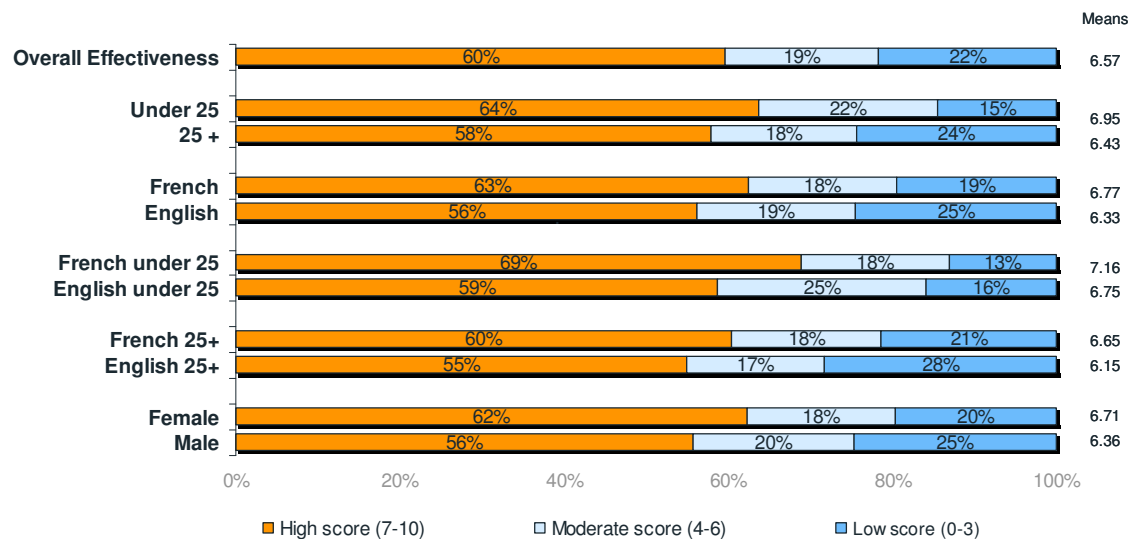
- In general, this message was more effective for younger smokers than for those 25 and older; adults 25 and older were significantly more likely to say that they did not agree that the message was effective (24% vs. 15%).

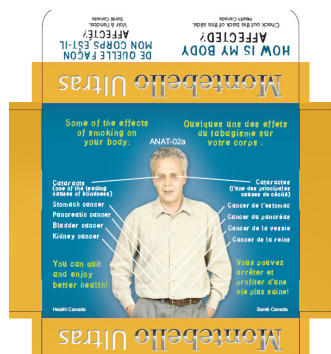


Ratings on key attributes:



Effectiveness ratings by demographics:





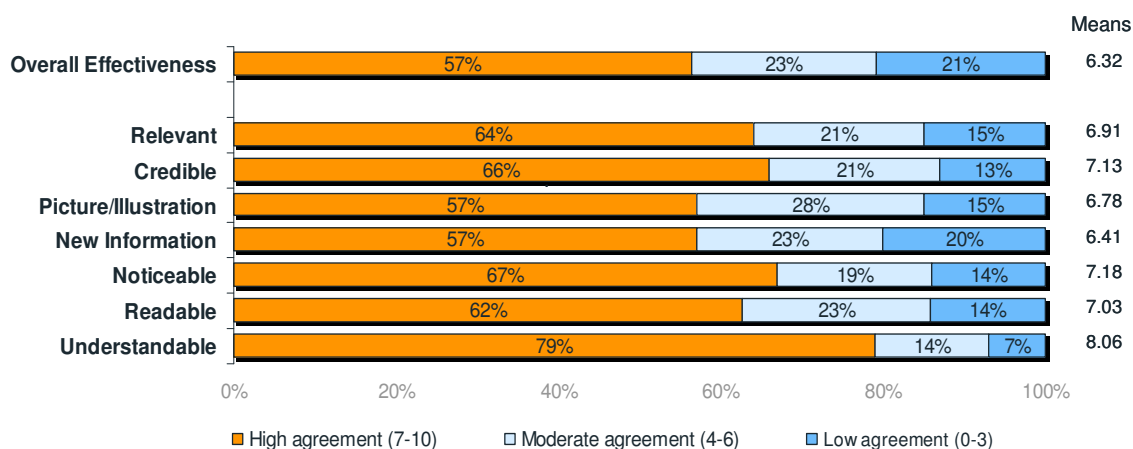
ANAT-02A – How is my body affected?

This was ranked the 3rd best Health Information message.

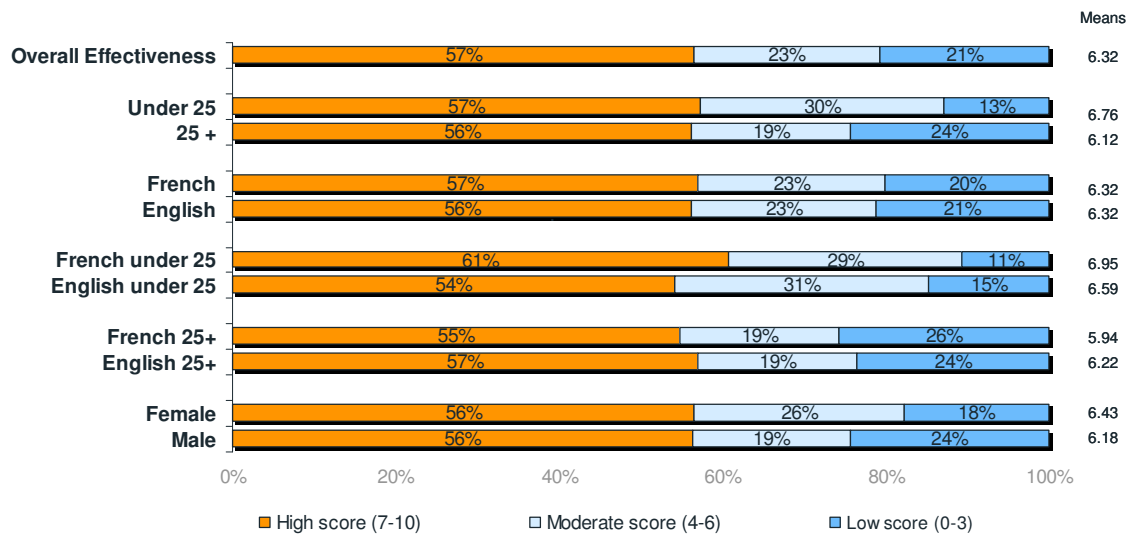
Almost 3 in 5 respondents (57%) felt that this message was effective overall, that is, it was effective at getting them to think about quitting smoking (mean = 6.32). This message was seen as very noticeable (mean = 7.18), very credible (mean = 7.13), and moderately relevant (mean = 6.91); approximately two-thirds of respondents rated each of these attributes as high (7-10). It was also rated as understandable and readable by the majority of smokers (means = 8.06 and 7.03). The newness of the information, as well as the impact of the illustration also led to this message's success, with 57% of respondents rating these attributes between 7 and 10.

When demographic differences are analysed, it becomes evident that this message was more effective for respondents under the age of 25 than for older respondents; 24% of those 25 and older rated the message as ineffective compared to 13% of those under 25.

Ratings on key attributes:



Effectiveness ratings by demographics:



Benefits

Three Health Information Messages were tested in the Benefits series, specifically:

- B-08 – Do you cough in the morning? (69.52)
- B-09 – Your heart will thank you... (68.08)
- B-07 – Planning on having a baby? (65.30)

Two of the messages in this series (“Do you cough in the morning?” and “Your heart will thank you...”) ranked in the top five messages and had high effectiveness ratings of 6.69 and 6.38, respectively. The third message however ranked lower, at 9th place. The top two were thought to be very understandable, relevant, credible, and readable. They also received moderate ratings for the impact of the illustrations, the newness of information, and their noticeability. The lower ranking message in this series fared comparably on most attributes (noticeability, credibility, understandability, readability, and the illustration), however its perceived lack of relevance, new information, and overall effectiveness hindered its overall score.

B-08 – Do you cough in the morning?

This was the 2nd best Health Information Message and the highest ranked message in the Benefits series.

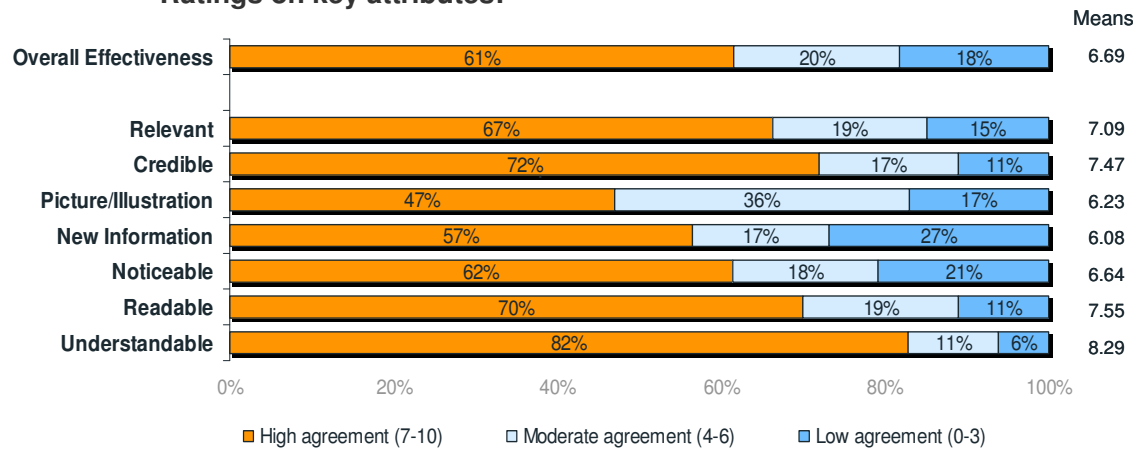
Overall, 61% of respondents rated this message as highly effective and another 20% thought it was moderately so (mean = 6.69). This message’s strong showing is in part due to its high ratings on key attributes, such as its credibility (mean = 7.47) and relevance (mean = 7.09). It was also thought to be easy to understand and readable (means = 8.29 and 7.55, respectively). The noticeability of this message, as well as the newness of the information fared well, with approximately 3 in 5 respondents rating these attributes highly. This message could have been improved with a stronger illustration; slightly fewer than half (47%) felt the image was impactful.

When demographic trends are considered:

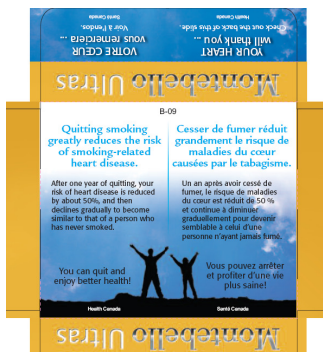
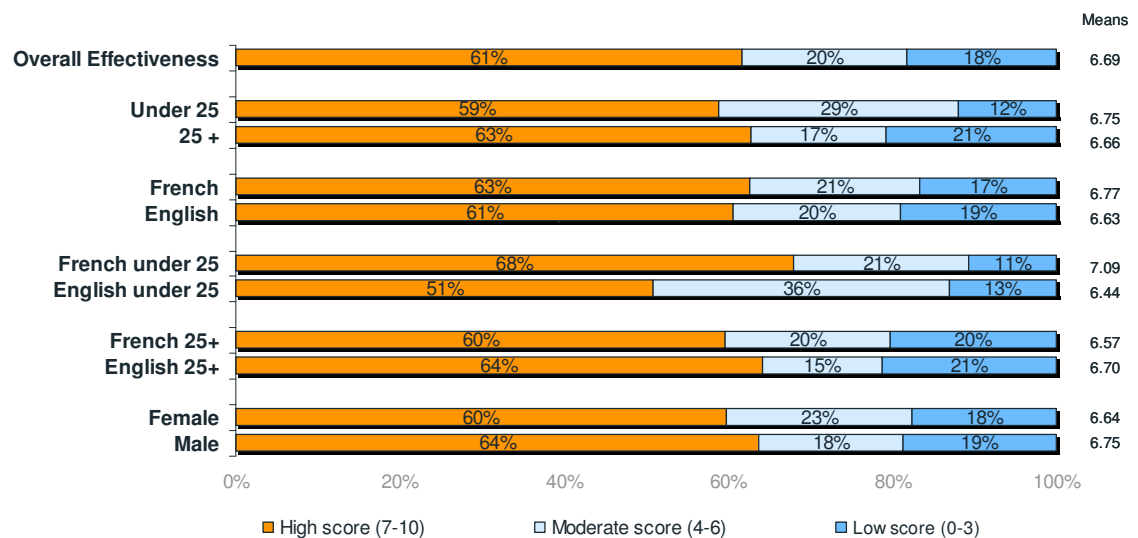
- Older respondents are more likely to rate this message low on overall effectiveness as compared to the young adults segment (21% vs. 12%);



Ratings on key attributes:



Effectiveness ratings by demographics:



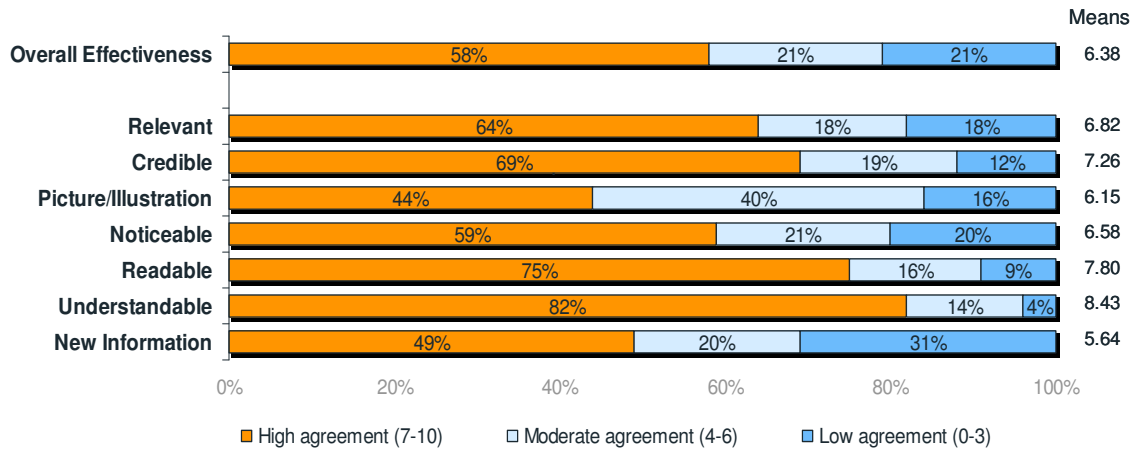
B-09 – Your heart will thank you...

This message ranked 4th out of the 18 messages tested.

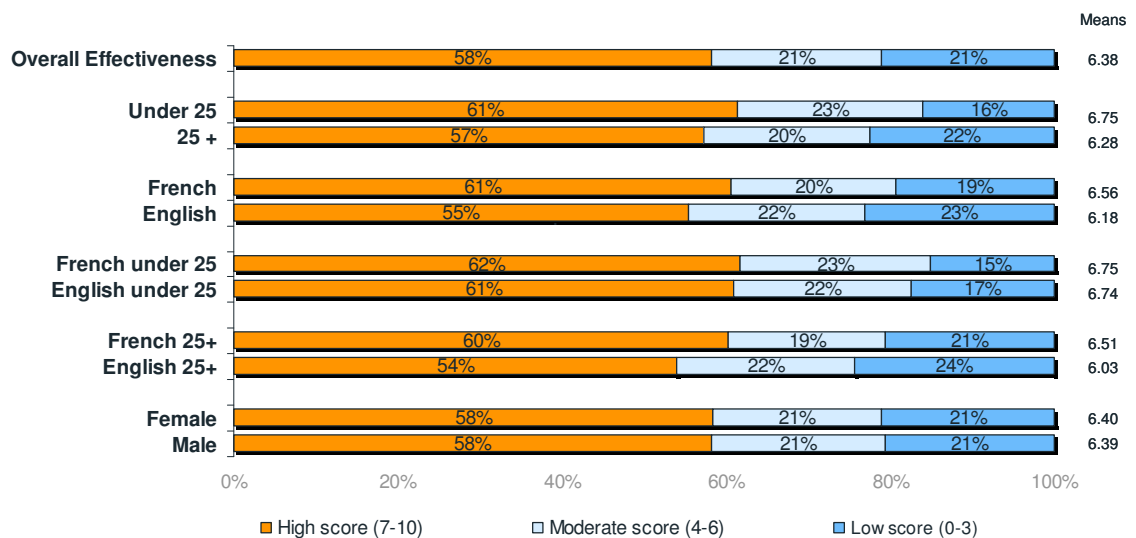
Fifty-eight percent of smokers felt this message was effective, resulting in a moderate mean rating of 6.38. It scored highly on attributes that lead to a message's overall impact, such as credibility (mean = 7.26). It was also rated as very understandable and readable (means = 8.43 and 7.80, respectively), and thought to be moderately relevant (mean = 6.82). Interestingly, the impact of the picture was lower for this message than it was for the B-08, which used the exact same image (mean = 6.15 vs. 6.23). Noticeability was moderate, with an average rating of 6.58, and only half of respondents felt the information was new, resulting in a low mean of 5.64.

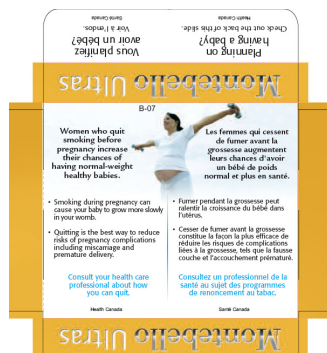
No differences for effectiveness ratings between subgroups are observed.

Ratings on key attributes:



Effectiveness ratings by demographics:





B-07 – Planning on having a baby?

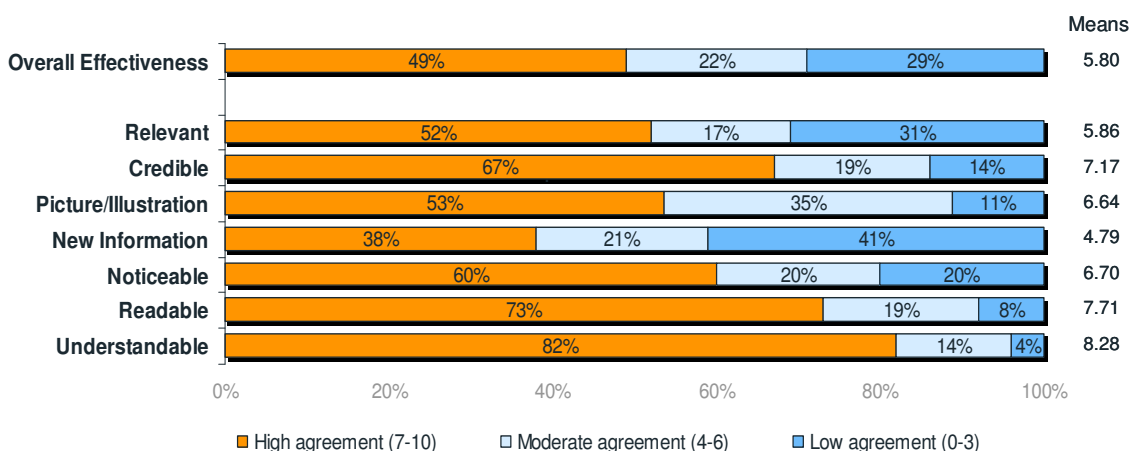
This message ranked 9th overall, placing it noticeably behind the other messages of this series.

Only half of respondents (49%) rated this message as highly effective overall, resulting in a moderate mean rating of 5.80. The relevance rating (mean = 5.86) could explain the lower overall ranking since this attribute plays a large role in determining a message's impact. Given the nature of the message, men and older respondents were less likely to feel it was relevant to them and scored it accordingly. The message was seen to be very credible, with two-thirds (67%) of respondents rating it as such (mean = 7.17). The impact of the picture, at a mean of 6.64, was moderately rated. Understandability and readability were both high, with means of 8.28 and 7.71, respectively. Noticeability was rated moderately well (mean = 6.70), with 60% scoring it between 7 and 10; however, many respondents did not feel the information was new, with 41% rating it poorly on this attribute (mean = 4.79).

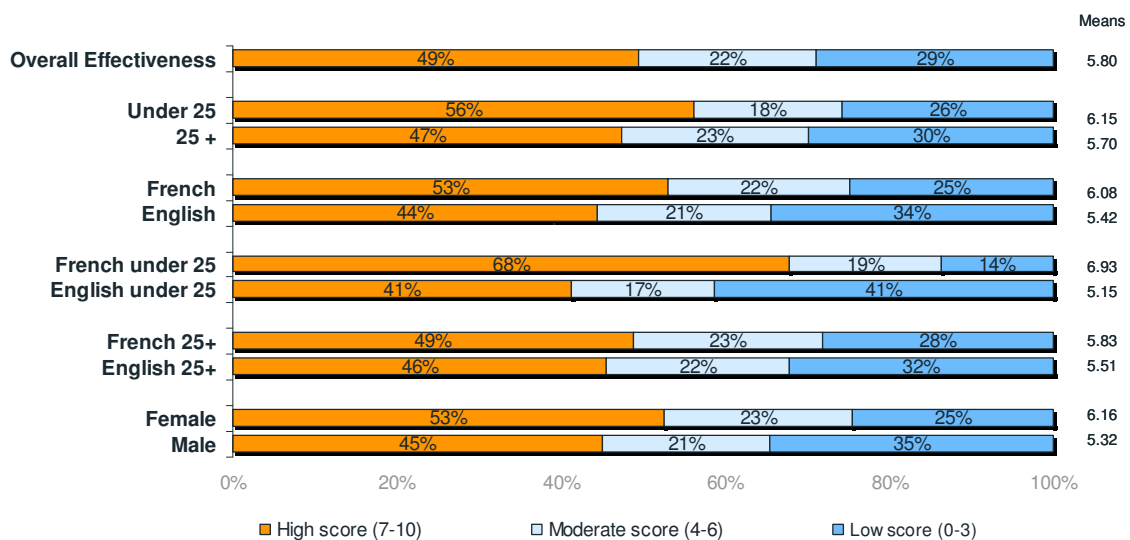
Numerous demographic trends are noted:

- This message is more effective amongst Francophones than Anglophones (mean = 6.08 vs. 5.42);
- Woman are more likely to rate this message highly than men (means = 6.16 vs. 5.32);
- Francophone young adults rated this message more effective than any other subgroup (mean = 6.93 vs. 5.15 – 5.83).

Ratings on key attributes:



Effectiveness ratings by demographics:



There was only one message tested in the Humour series. Its overall composite score was 62.19.

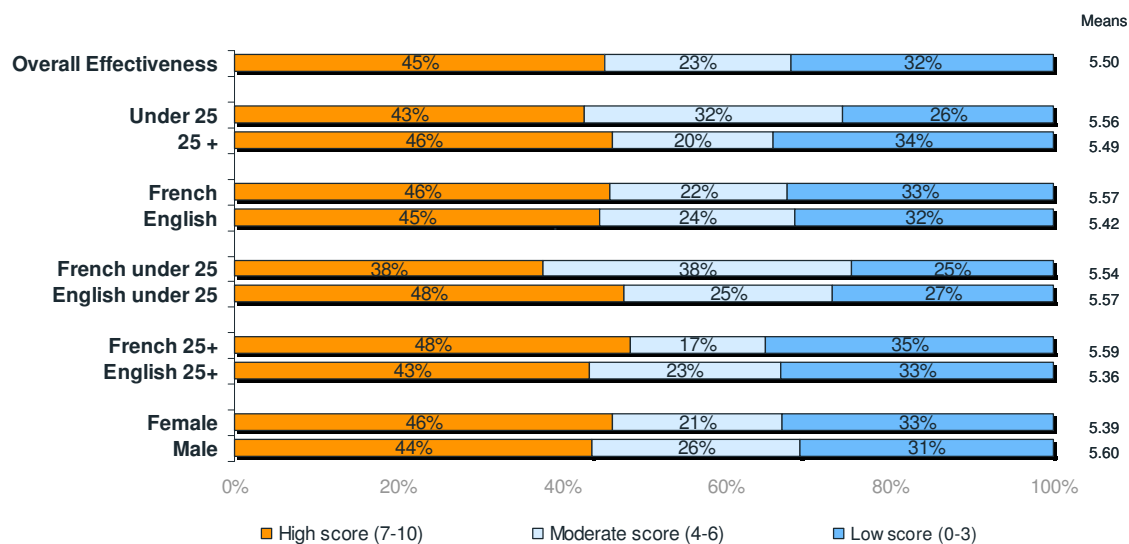


Fewer than half of respondents (45%) felt this message was effective and almost one-third (32%) rated it between 0 and 3 (mean = 5.50). About half of respondents rated this message as highly relevant (53%), credible (54%), and thought it had an impactful illustration (51%), resulting in moderate mean scores of 6.16, 6.36, and 6.07, respectively. Almost equal proportions of respondents felt the information was new (40%) as those that felt it was not so (38%). This message scored fairly well on its noticeability (mean = 6.80) and readability (mean = 6.84), and highly on its understandability (mean=7.64), although these attributes have less weight than some others when composing the overall impact score of the message.

No notable significant differences between subgroups are observed.

Criteria	High agreement (7-10)	Moderate agreement (4-6)	Low agreement (0-3)	Means
Overall Effectiveness	45%	23%	32%	5.50
Relevant	53%	23%	24%	6.16
Credible	54%	23%	23%	6.26
Picture/Illustration	51%	26%	23%	6.07
New Information	40%	22%	38%	5.01
Noticeable	62%	19%	19%	6.80
Readable	60%	23%	17%	6.84
Understandable	72%	17%	11%	7.64

Effectiveness ratings by demographics:



Join the Club

There was only one message tested in the Join the Club series. Its overall composite score was 61.18.

JTC-01 – Join the smoke free revolution.

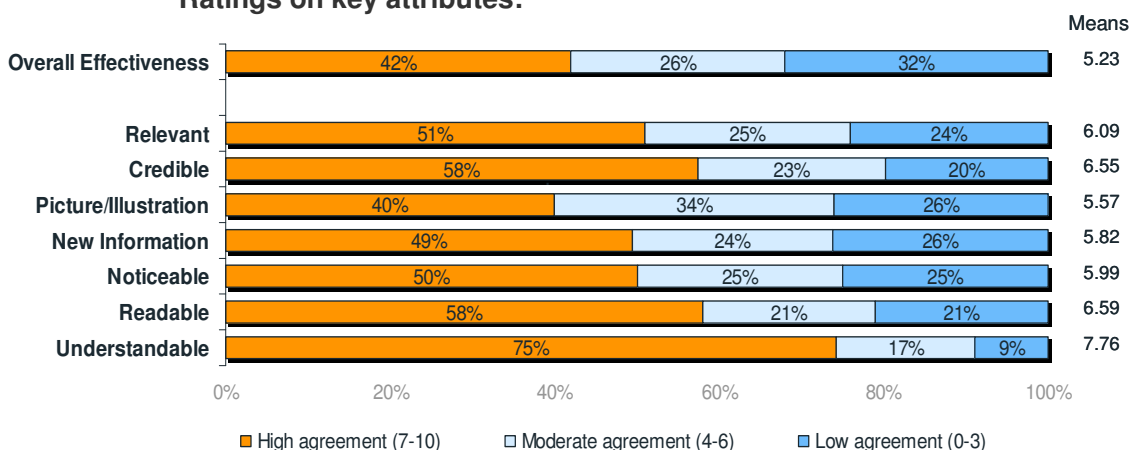
This message ranked 16th overall, second to last amongst all Health Information messages.



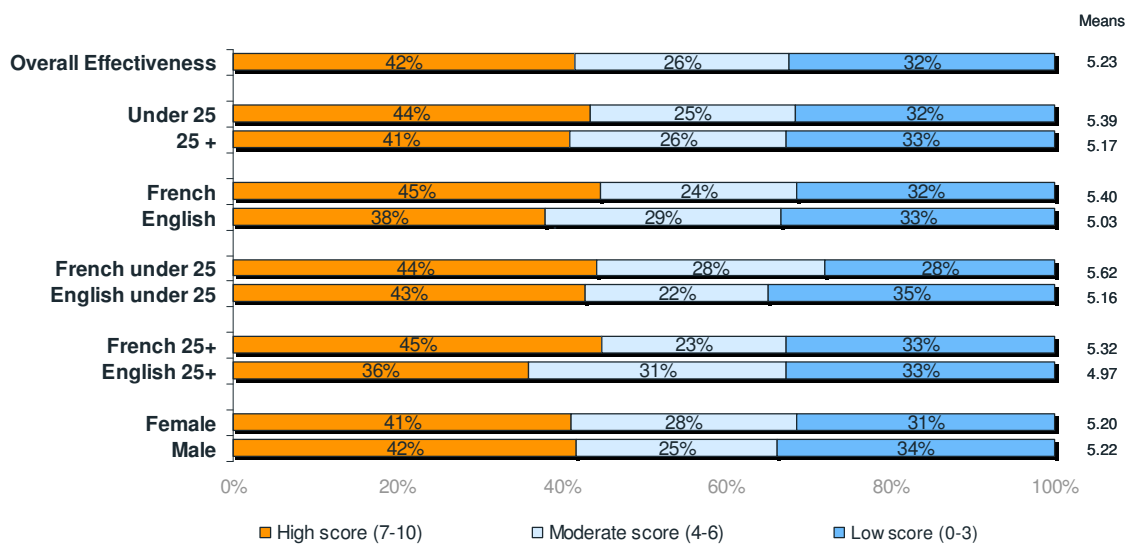
It was perceived to be effective by only 42% of respondents, and 32% thought it to be ineffective. Although smokers saw the message as being understandable (75%), much fewer thought the message was readable; only 58% said as much, leading to the conclusion that the content of the message is clear but the formatting is not. Almost 3 out of 5 respondents felt this message was highly credible (58%) and relevant (51%), resulting in moderate mean scores of 6.55 and 6.09, respectively. The newness of information and the message's noticeability were rated similarly, with approximately half rating these attributes highly, one-quarter rating them moderately, and one-quarter rating them poorly. The illustration was perceived to be one of the weaker elements of this message, with only 40% of respondents agreeing that it was impactful.

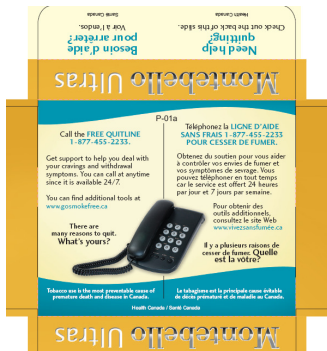
No significant differences between subgroups are noted.

Ratings on key attributes:

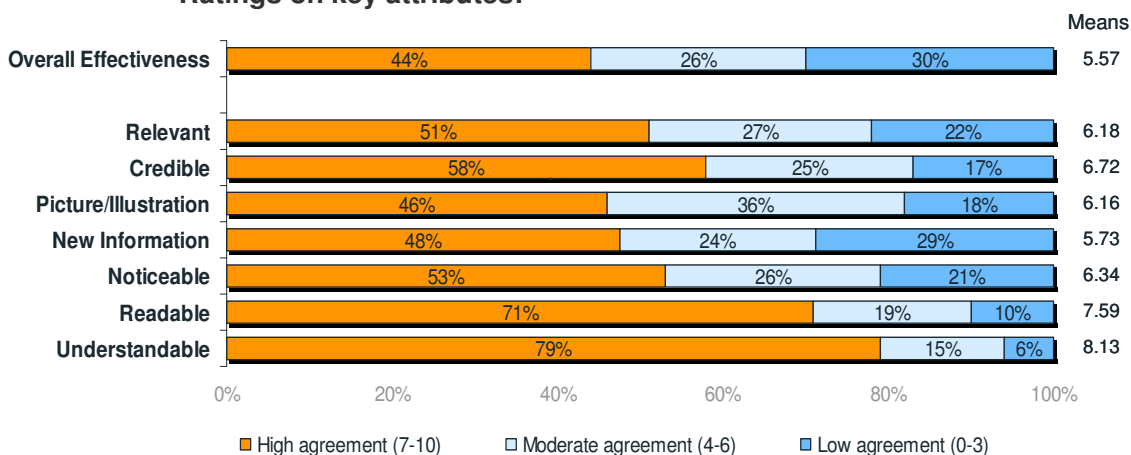


Effectiveness ratings by demographics:

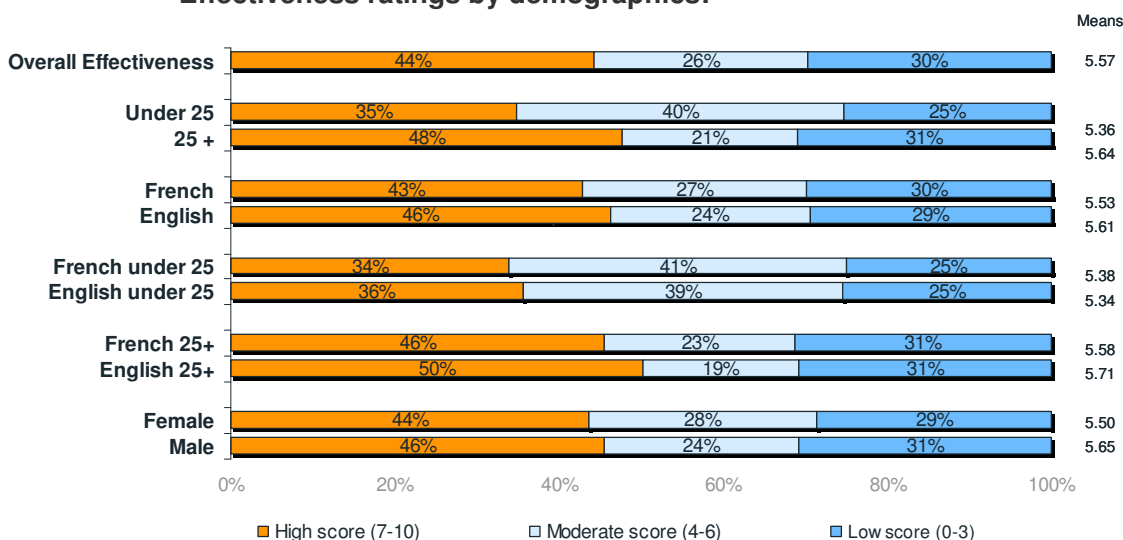




Ratings on key attributes:



Effectiveness ratings by demographics:



P-01B – Need help quitting?

This Promotional message ranked 15th overall.

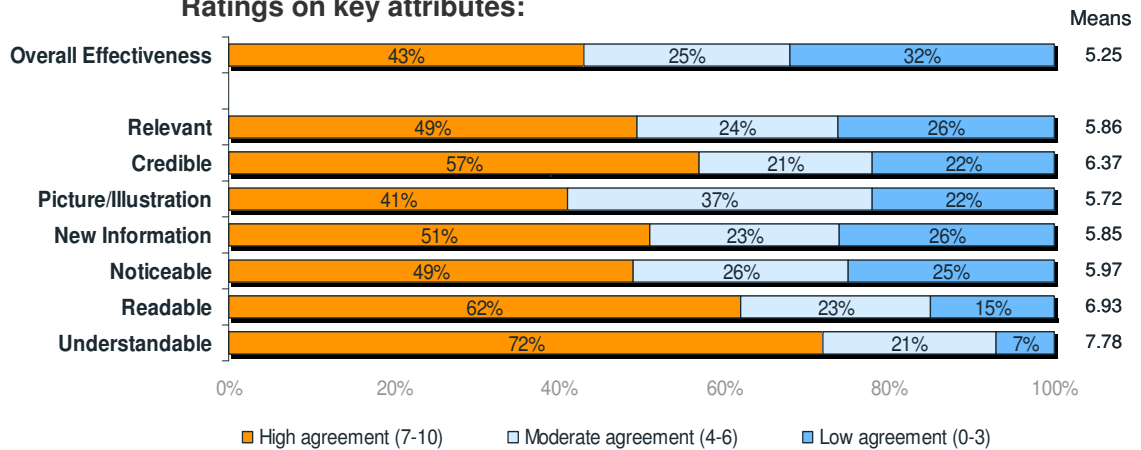
With only forty-three percent of respondents rated this message as highly effective, the mean effectiveness score is low at 5.25. Half of respondents (49%) thought this message to be relevant and noticeable but the average ratings were still low (means = 5.86 and 5.97, respectively). The strong majority found it to be very understandable (mean = 7.78), but the lower score on readability signifies the design of the text could be improved (mean = 6.93). The credibility of this message was moderate, at a mean of 6.37. Half of respondents felt the information was new, but only 41% felt the illustration had a significant impact on the message.



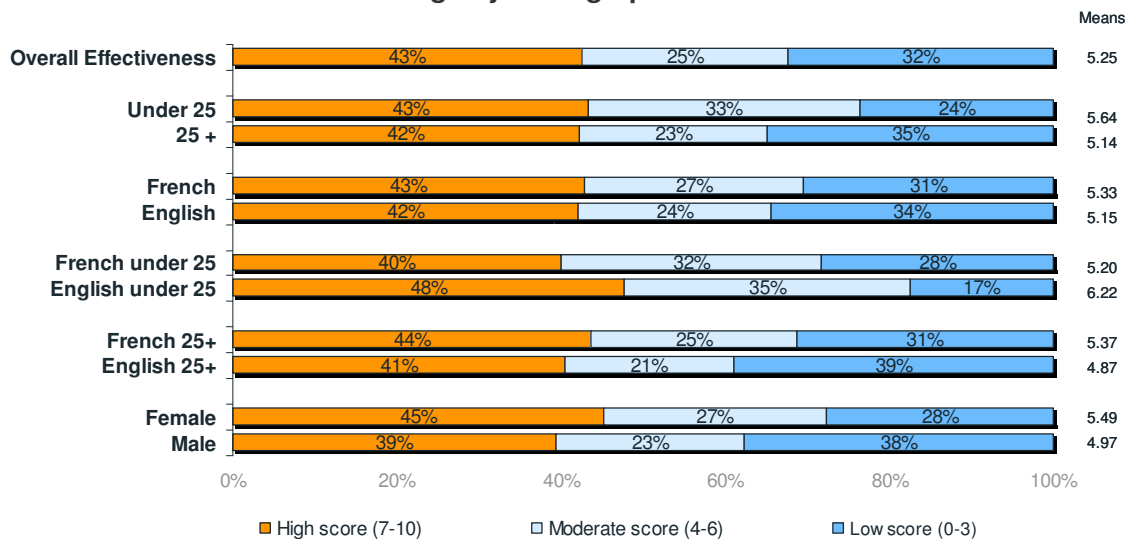
Demographically:

- Men are more likely to rate this message as ineffective than women (35% vs. 24%);
- Adults 25 and older are more likely to rate the effectiveness of this message between 0 and 3 than younger respondents (35% vs 24%).

Ratings on key attributes:



Effectiveness ratings by demographics:



True or False

Three true or false Health Information messages made up this series:

QA-03 – Quitting could increase life expectancy (66.62)

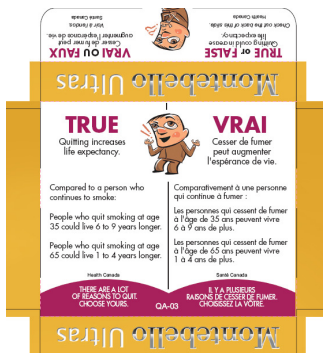
QA-04 – Smoking adds more stress to your body (65.45)

QA-02 – Every quit attempt is closer to success (65.11)

The True or False series did moderately well overall, with all messages in the series ranking in the middle range of all HIMs. For the most part, ratings for each message are comparable across all attributes, however the “Quitting could increase life expectancy” was seen to be slightly more readable, understandable, and noticeable than the others. On average, the strongest attributes of this series were its understandability (average of the means = 7.98), readability (7.51), credibility (6.87), noticeability (6.87), and relevance (6.62). Scoring slightly lower, with averages between 5.59 and 5.96, were the remaining attributes, namely overall effectiveness, presence of new information, and impact of the illustration.

QA-03 – True or False: Quitting could increase life expectancy.

This message ranked 7th overall and was the best of the True or False series.

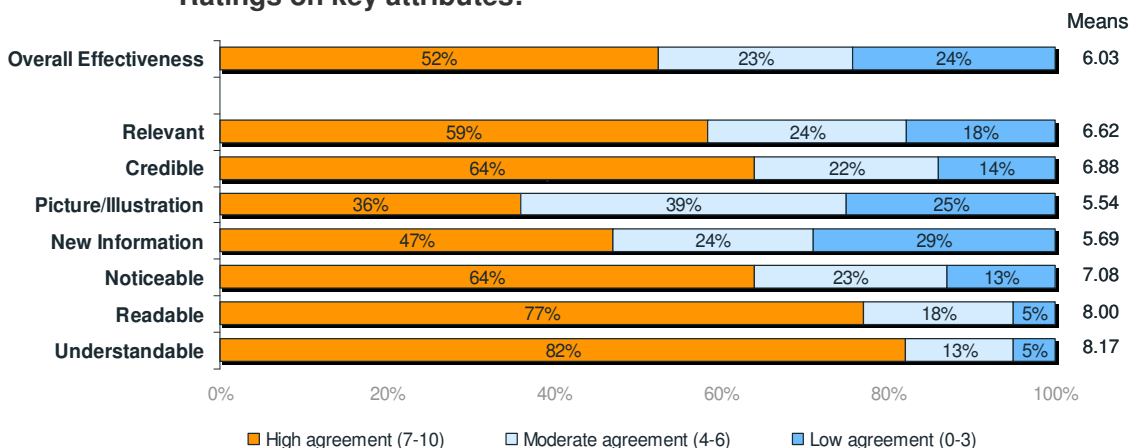


Just over half of respondents (52%) agreed that this message was highly effective at making them think about quitting smoking (mean = 6.03). This message was rated highly on its noticeability (mean = 7.08), and moderately well on its credibility (mean = 6.88), and its relevance (mean = 6.62); almost two-thirds (64%) of respondents rated the message as highly noticeable and highly credible, and 59% thought it to be very relevant. This message also received high ratings for its understandability and readability, with mean scores of 8.17 and 8.00, respectively. Just under half of respondents felt that information in this message was new (mean = 5.69). Detracting from this message was the illustration; only 36% of respondents found it to be highly impactful (mean = 5.54).

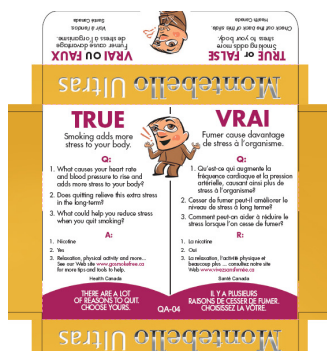
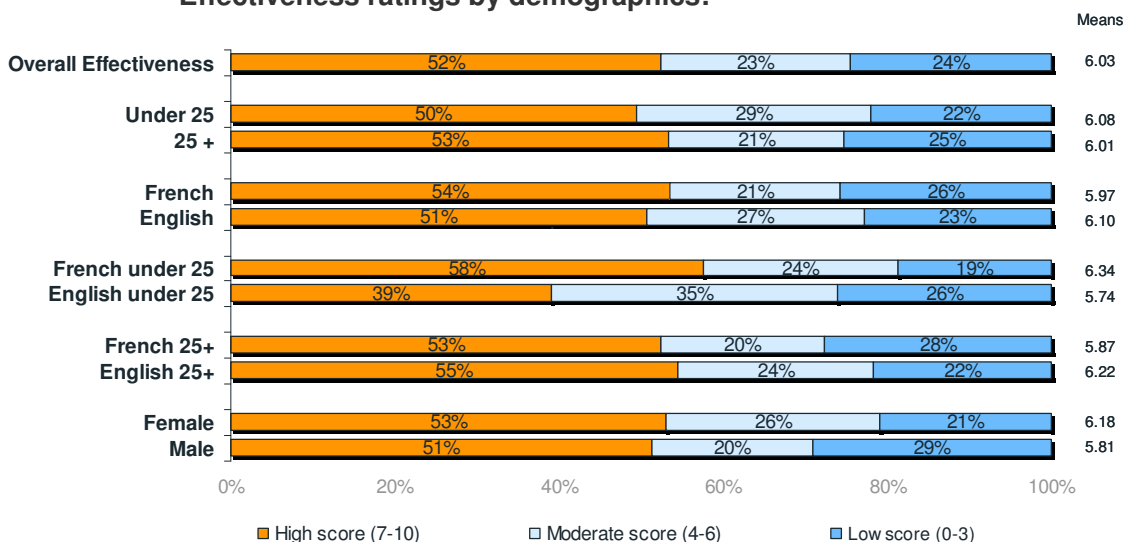
When demographic differences are analysed:

- Men are more likely than women to rate this message’s effectiveness as low, with ratings between 0 and 3 (29% vs. 21%).

Ratings on key attributes:



Effectiveness ratings by demographics:



QA-04 – True or False: Smoking adds more stress to your body.

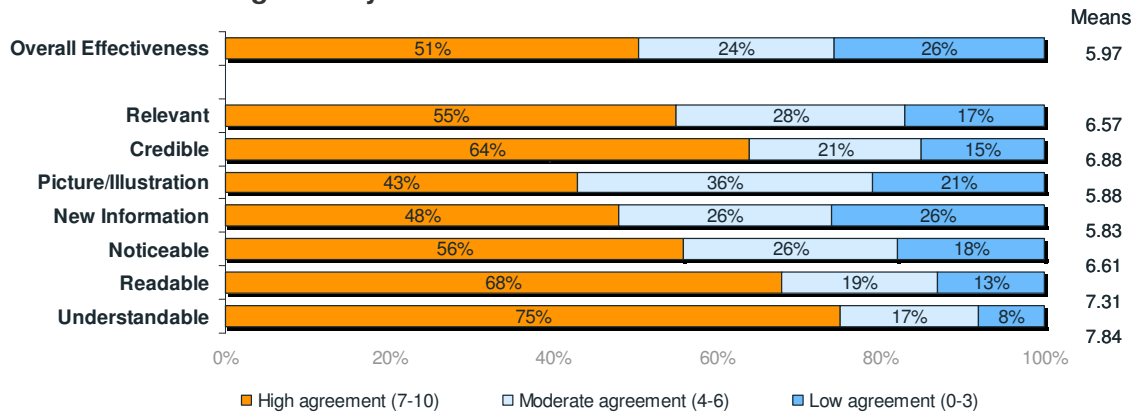
This message was ranked 8th overall, narrowly behind the QA-03 message of this series.

Half of respondents (51%) rated this message as effective overall, resulting in a moderate mean rating of 5.97. As compared to the above message (QA-03) this message did not rate as highly on some attributes, such as relevance (mean = 6.57), noticeability (mean = 6.61), readability (mean = 7.31) and understandability (mean = 7.84). However, when looked at in isolation, this message fared moderately well on relevance and noticeability, and very well on readability and understandability. Interestingly, the illustration rated higher in this message than it did in QA-03 (mean = 5.88 vs. 5.54), despite the fact that the exact same illustration was used. The information contained

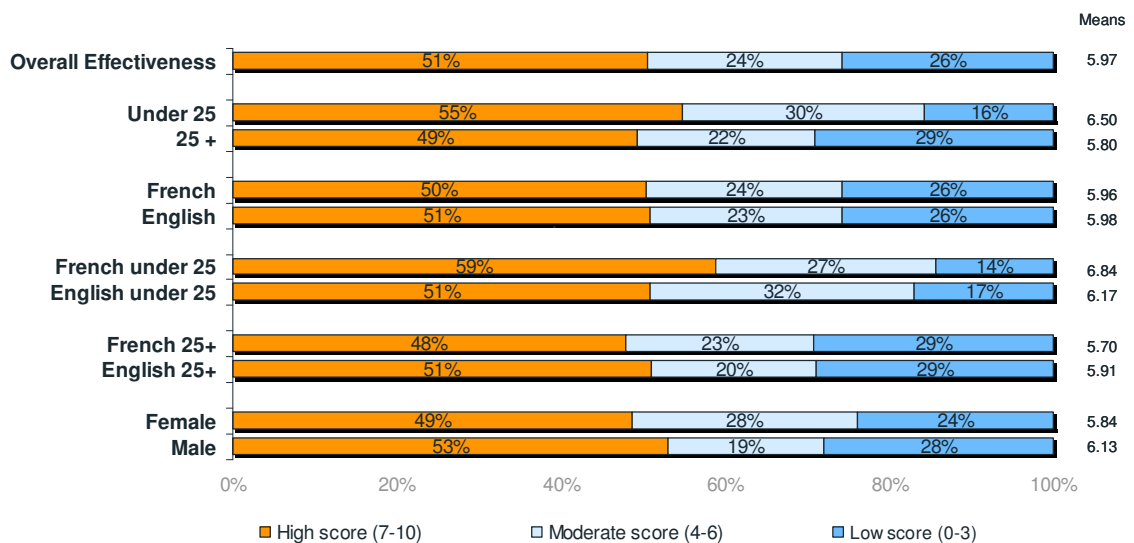
in this message was also thought to be newer than the information in QA-03, with almost half of respondents (48%) rating it highly on this attribute (mean = 5.83).

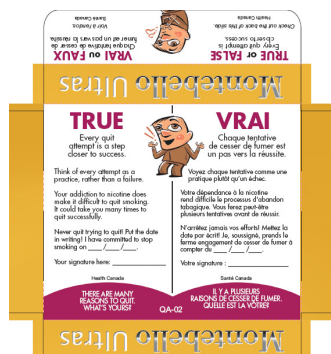
The only noteworthy significant subgroup difference is between age categories, where older respondents were more likely to rate this message as ineffective than respondents under 25 (29% vs. 16%).

Ratings on key attributes:



Effectiveness ratings by demographics:





QA-02 – True or False: Every quit attempt is closer to success.

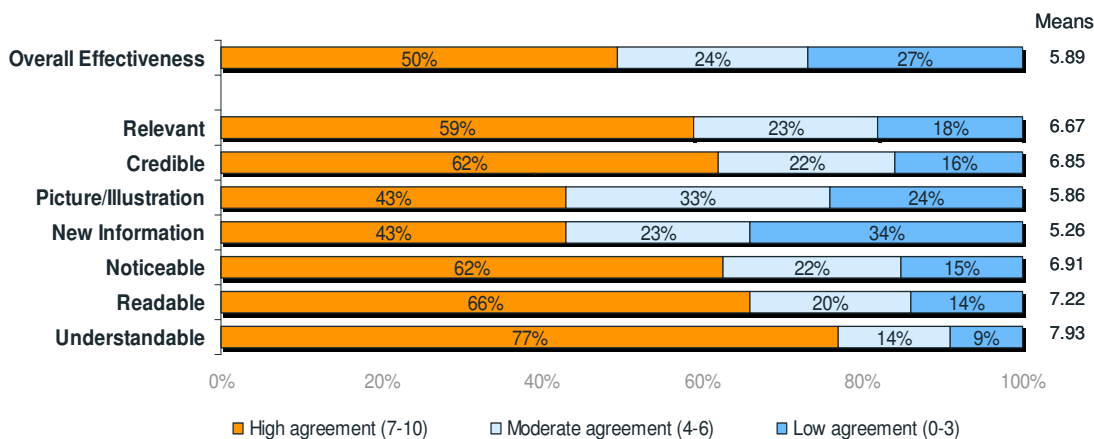
This message ranked 10th overall and was the lowest ranking message of the True or False series.

Exactly half of respondents thought the message to be highly effective overall, with another 24% rating it as moderately effective, resulting in a moderate mean rating of 5.89. The message rated fairly well on driving attributes such as relevance (59% rating it highly) and credibility (62%), with mean scores of 6.67 and 6.85 respectively. Understandability of the message was also high, with a mean of 7.93, however comparatively its readability was rated notably lower, at 7.22. Respondents felt this message was fairly noticeable (mean = 6.93), but did not think very highly of the illustration, giving a mean rating of 5.86 (comparable to the rating in QA-04, and higher than that of QA-03). The newness of the information in this message was considered to be low by one-third of respondents, resulting in a mean rating of only 5.26.

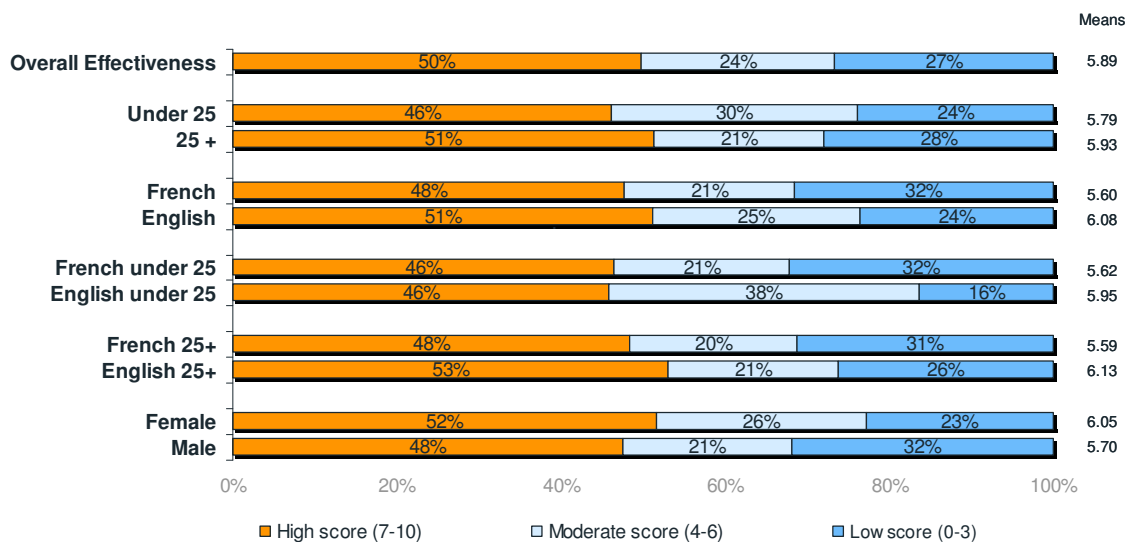
When demographic differences are considered, the following trends are observed:

- Men are more likely than women to rate this message's overall effectiveness between 0 and 3 (32% vs. 23%);
- Anglophone young adults are the least likely to rate this message as ineffective, and the most likely to rate it as moderately effective.

Ratings on key attributes:



Effectiveness ratings by demographics:

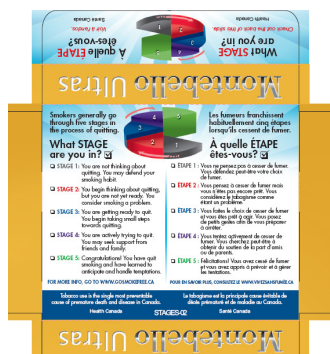


Stages

There was only one message tested in the Stages series. Its overall composite score was 64.76.

STAGE-02 – What stage are you in?

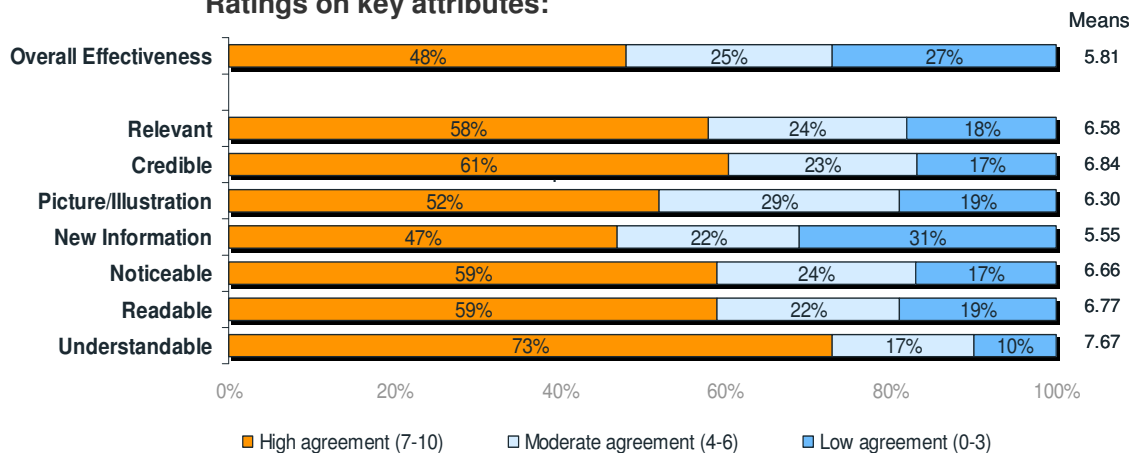
This message was ranked 11th overall, putting it in the bottom half of Health Information messages.



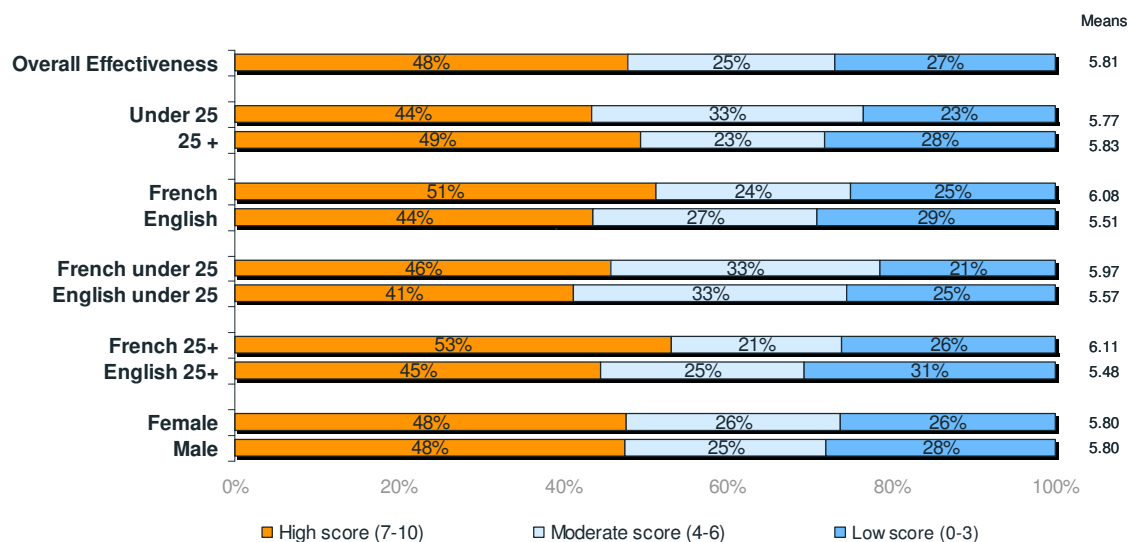
Less than half of respondents (48%) felt this message was effective at getting them to think about quitting smoking and more than one-quarter rated it as ineffective (mean = 5.81). However, on important attributes such as credibility and relevance this message fared moderately well, with means of 6.84 and 6.58, respectively. As has been seen with other HIMs, although the understandability of the message was high (mean = 7.67) the readability was notably lower (mean = 6.77) signifying that the text or presentation of information could be improved to encourage reading. Just over half of respondents (52%) felt the picture to have a high impact resulting in a mean rating of 6.30 and 59% felt the message was noticeable (mean = 6.66). The newness of the information was mixed, with 47% perceiving it to be high, 22% thinking it was moderate, and 31% saying it was low; however overall the mean rating for this attribute was low at 5.55.

No significant subgroup differences are observed.

Ratings on key attributes:



Effectiveness ratings by demographics:



Testimonial

The Testimonial series consisted of three Health Information messages:

T-16 – I didn't have to do it alone...(61.54)

T-18 – I crossed the finish line...(58.12)

T-17 – My reason for quitting...(57.76)

The Testimonials were the worst rated series, with two messages of the series rated the bottom two overall and one in 14th place. The overall effectiveness ratings of the messages in this series range from 5.18 to 5.61, with an average of 5.37. The series' best features were the understandability of the messages as well as their credibility (average of the means = 7.63 and 6.52, respectively). Relevance and readability did not hurt the messages, but did not particularly strengthen them either (average of the means = 6.01 and 6.19, respectively). The pictures detracted from the messages in this series, with ratings ranging from 5.24 to 5.71. Despite this, the noticeability rated higher, at an average of 5.84. The messages were also thought to lack new information; the average rating on this attribute of 4.77 is lower than that of any other HIM series.

T-16 – I didn't have to do it alone...

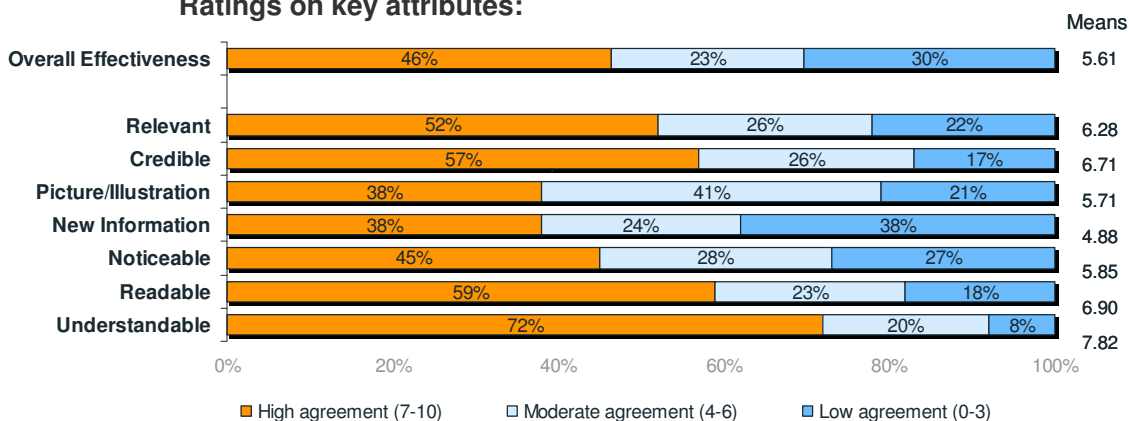
At 14th place, this message was the best ranked of the Testimonial series.



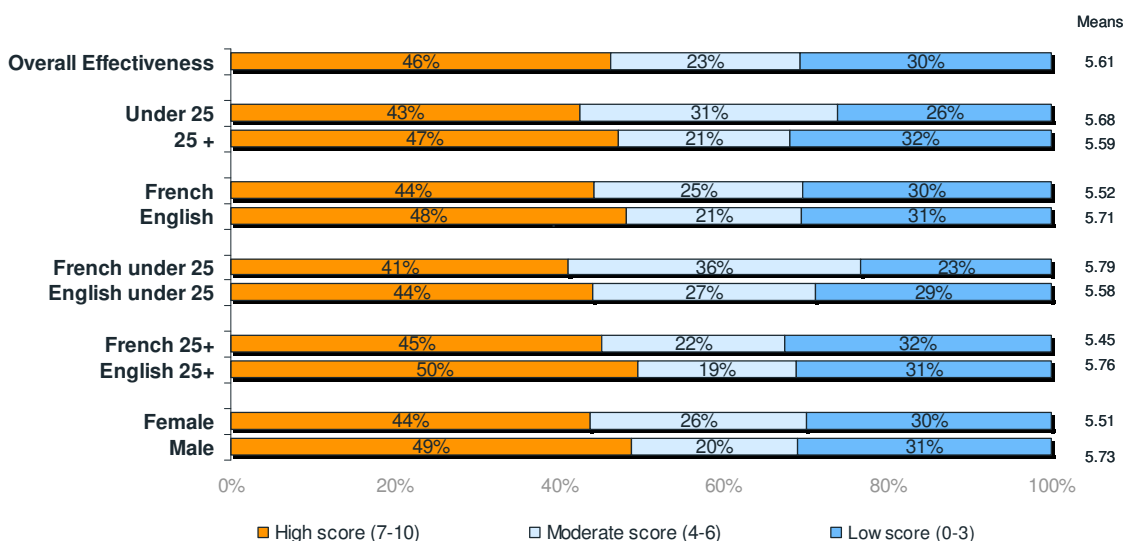
Fewer than half of respondents (46%) found this message to be highly effective, compared to 30% that rated it between 0 and 3 (mean = 5.61). It was thought to be highly credible by 57% of respondents (mean = 6.71) and highly relevant by 52% (mean = 6.28). Although respondents rated their understanding of this message as high (mean = 7.82), it was perceived to be significantly less readable, likely due to the amount of text on the message (mean = 6.90). Respondents did not find this message particularly noticeable and rated the impact of the picture as very low, two attributes that are closely related. Only 45% of smokers said they found the message to be noticeable (mean = 5.85) and the highest proportion of respondents (41%) rated the impact of the picture as moderate (mean = 5.71). This message scored particularly low on the newness of its information, with equal proportions of respondents rating it high (7-10) as low (0-3) (38% for both, mean = 4.88).

No notable significant differences are observed between demographic subgroups.

Ratings on key attributes:



Effectiveness ratings by demographics:



T-18 – I crossed the finish line...

As the second worst HIM, this message ranked 17th overall.

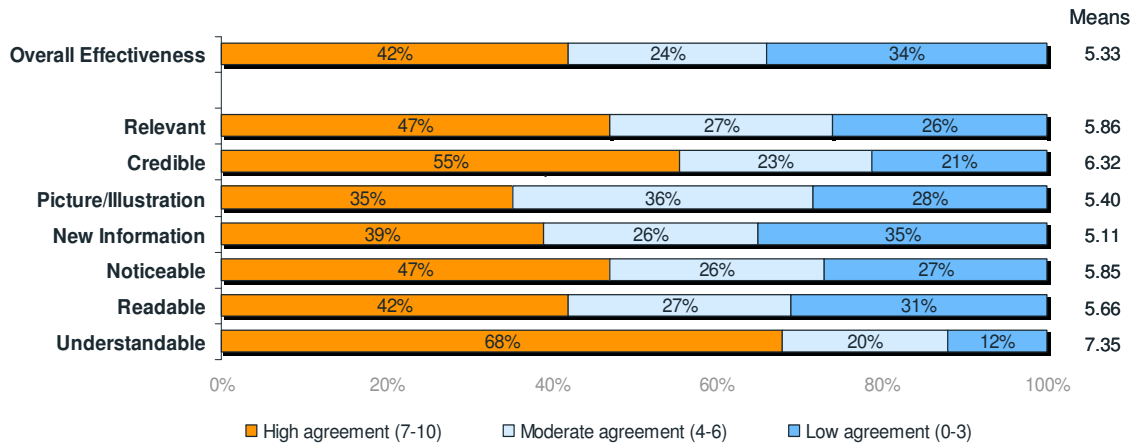
Just over 2 out of 5 respondents (42%) agreed that this message was effective at making them think about quitting smoking and one-third felt it was ineffective, resulting in a low mean rating of 5.33. Although more than half of respondents (55%) rated this message as credible (mean = 6.32), only 47% felt it was relevant and noticeable (means = 5.86 and 5.85, respectively). Over two-thirds rated the message as understandable (mean = 7.35), however a very low 42% felt it was readable (mean = 5.66). This message definitely lost some appeal because of its image, only 35% of respondents said it was highly impactful and 28% said it had low impact (mean = 5.40).

The information in this message was not perceived to be new, with only 39% of respondents rating it highly on this attribute, and a low mean score of 5.11.

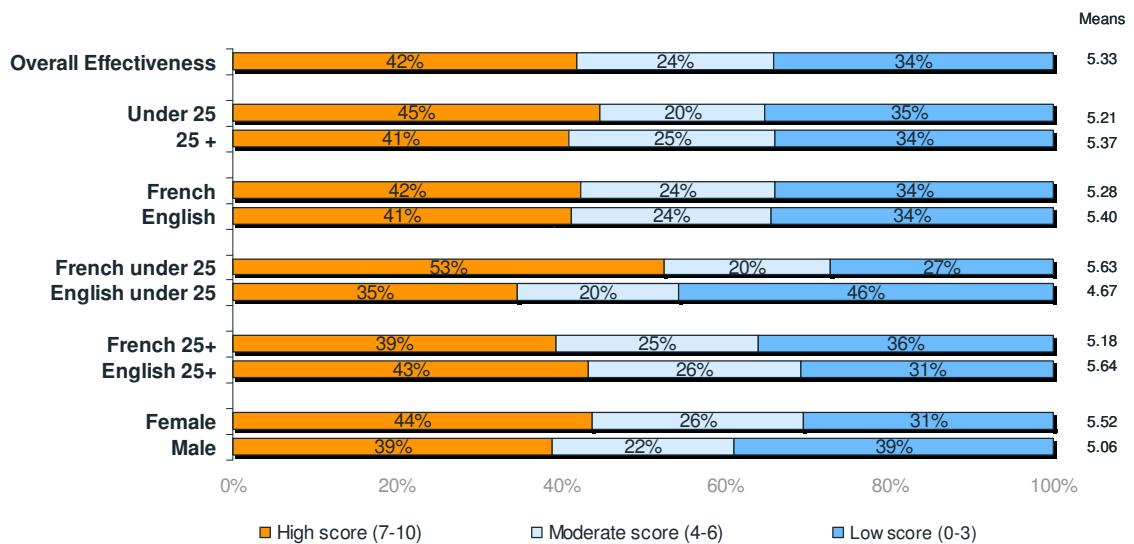
When demographic subgroups are analysed, the following trends are present:

- Francophone young adults are less likely to rate this message as ineffective (27%) when compared to Anglophone young adults (46%).

Ratings on key attributes:



Effectiveness ratings by demographics:





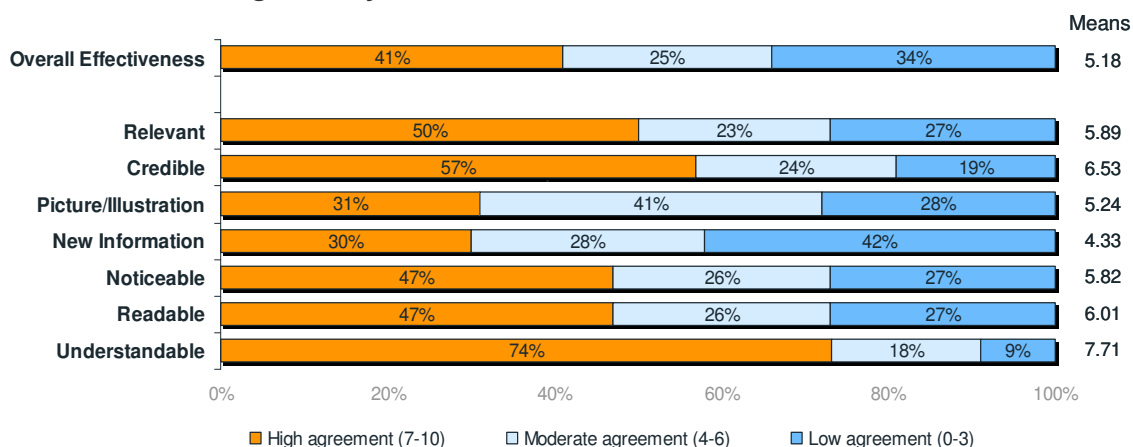
T-17 – My reason for quitting...

This was the lowest ranking Health Information message, in 18th place.

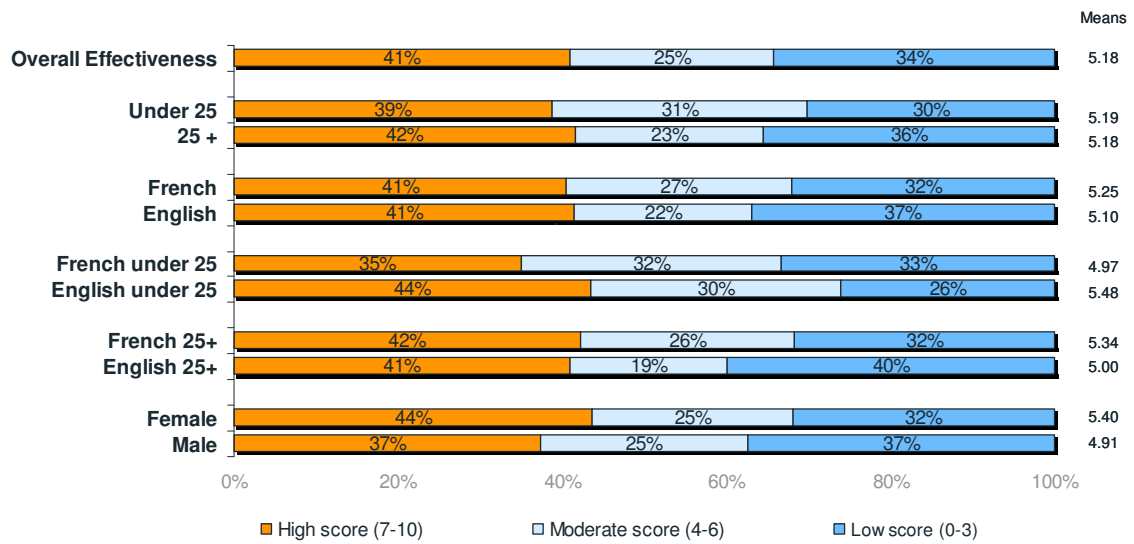
Only 41% of respondents felt this message was effective, with another 34% saying it was ineffective (mean = 5.18). Evaluations of this message's attributes are mixed, with some scoring moderately well and others scoring relatively low. Credibility was its best feature, with a moderate mean score of 6.53. It was also seen to be moderately relevant and noticeable, with approximately half of respondents rating these attributes highly (means = 5.89 and 5.82, respectively). Similar to the other messages in this series, it was rated as understandable (mean = 7.71) but significantly less readable, with only 47% rating this attribute as high (mean = 6.01). Where this message really falls short is with the impact of its illustration and the newness of its information; less than one-third (31%) of respondents scored these attribute between 7 and 10. The highest proportion of respondents (41%) rated the impact of the picture as moderate, and 42% rated the newness of information as low (means = 5.24 and 4.33, respectively).

No significant differences between demographic subgroups are observed for the effectiveness ratings of this message.

Ratings on key attributes:



Effectiveness ratings by demographics:



Withdrawal Cravings

Two Health Information messages about withdrawal cravings made up this series:

WC-02 – They peak during the first 48 hours...(67.88)

WC-01 – It reaches the brain in about 10 to 20 seconds...(66.78)

The Withdrawal Cravings series was also one of the strongest series of Health Information Messages, with the two messages ranking 5th and 6th overall. This series rated particularly well on its understandability (average of the means = 8.01) and readability (7.28). Credibility, noticeability, and relevance also ranked fairly well (6.99, 6.96, and 6.71, respectively). Overall effectiveness was rated at 6.18 for the series. The impact of the illustration and the newness of information might have detracted from the messages' impact slightly, given that the average ratings for these attributes are below that of overall effectiveness, at 6.12 and 6.11.

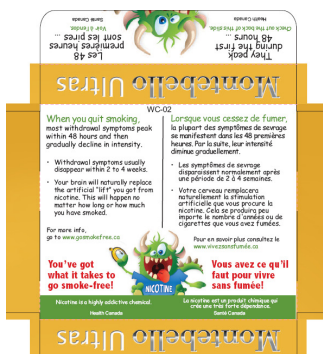
WC-02 – They peak during the first 48 hours...

Ranked as 5th overall, this was the strongest message in the Withdrawal Cravings series, slightly ahead of the WC-01 message.

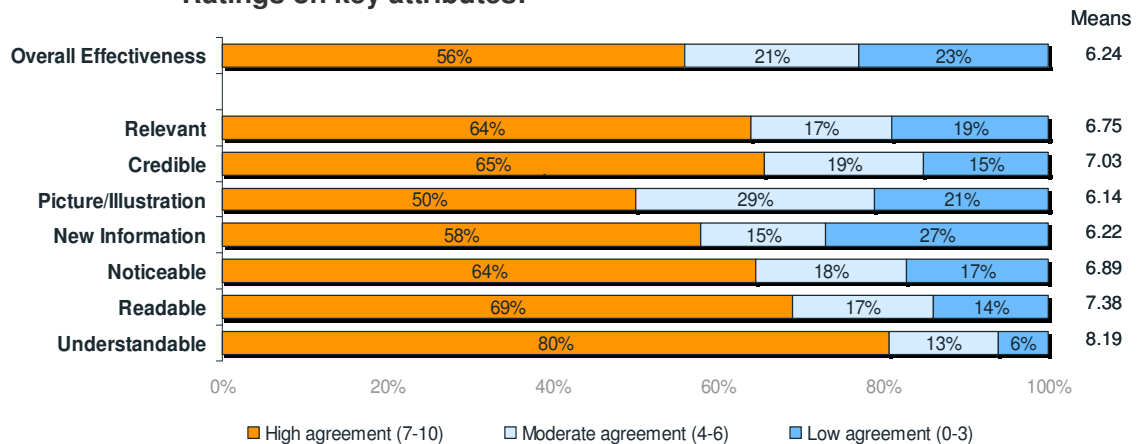
Fifty-six percent of respondents rated this message as highly effective, leading to a mean rating of 6.24. Approximately two-thirds of respondents found this message to be highly relevant (64%) and credible (65%), resulting in mean scores of 7.03 and 6.75, respectively. Four out of five respondents said the message was very understandable (mean = 8.19) and 69% found it easy to read (mean = 7.38). Despite only half of smokers perceiving the illustration to be impactful, the message still fared fairly well on noticeability (mean = 6.89). Close to 3 in 5 respondents (58%) considered the information to be new (7-10) and another 15% thought it was moderately so.

The following demographic trend was observed:

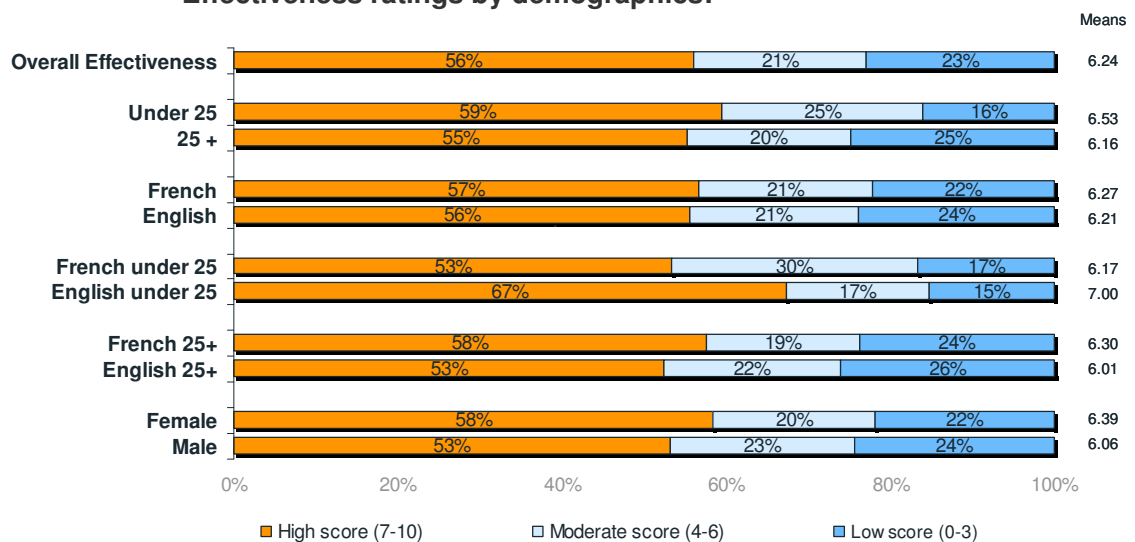
- Older respondents are more likely to rate this message as ineffective (0-3) than younger respondents (25% vs. 16%).



Ratings on key attributes:



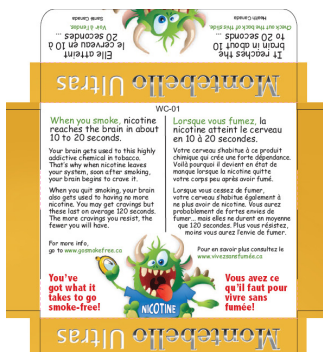
Effectiveness ratings by demographics:



WC-01 – It reaches the brain in about 10 to 20 seconds...

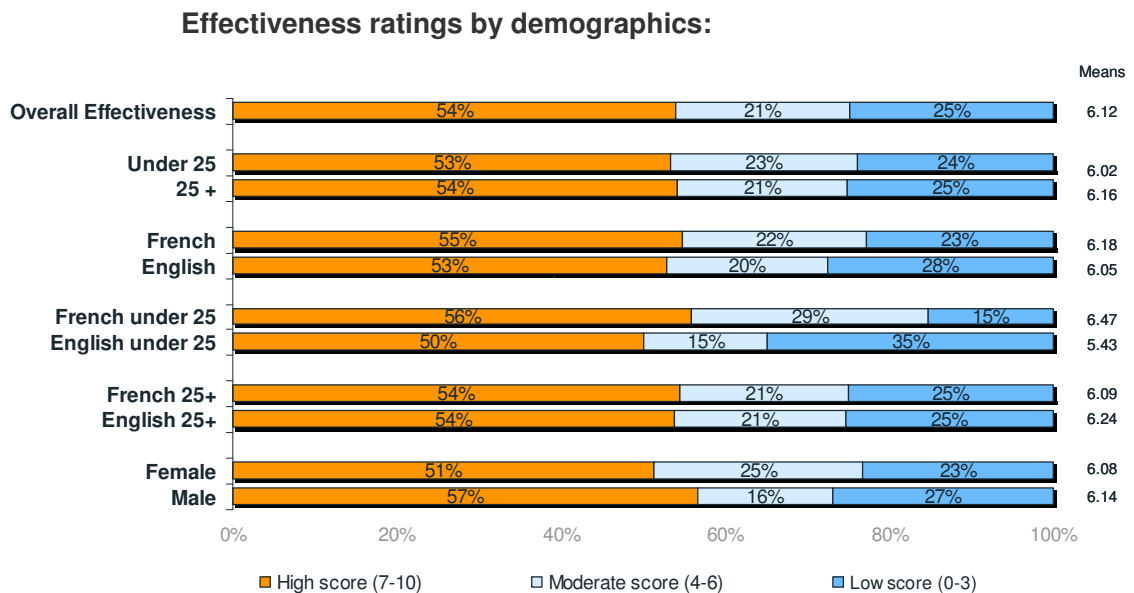
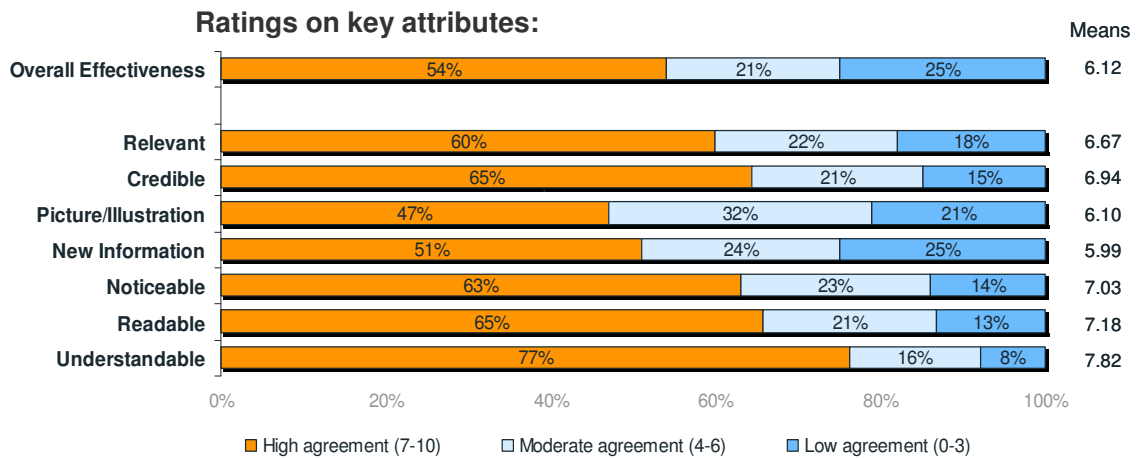
Ranking just below the other message in the series, this message was 6th overall.

More than half of respondents (54%) felt this message was effective, leading to a mean score of 6.12. This message was rated moderately well for its credibility (mean = 6.94) and relevance (mean = 6.67), and highly for its noticeability (mean = 7.03). In addition, the strong majority respondents felt it to be very understandable (77%) and readable (65%). Although slightly fewer than half of smokers (47%) were impacted by the illustration on the message, 32% felt it was moderately impactful, resulting in a mean score of 6.10. The information was considered new to half of respondents (mean = 5.99).



Observed demographic differences include:

- Women are more likely than men to feel this message was moderately (4-6) effective (25% vs. 16%);
- Francophone young adults were less likely than Anglophone young adults to rate this message's effectiveness as low (15% vs. 35%).

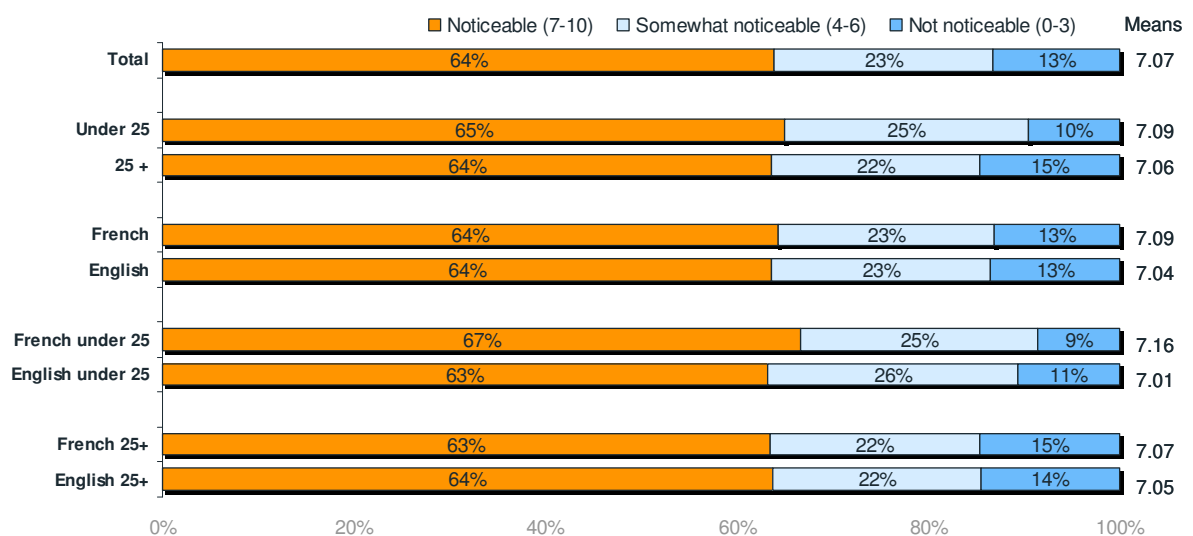


Evaluation of Contact Information

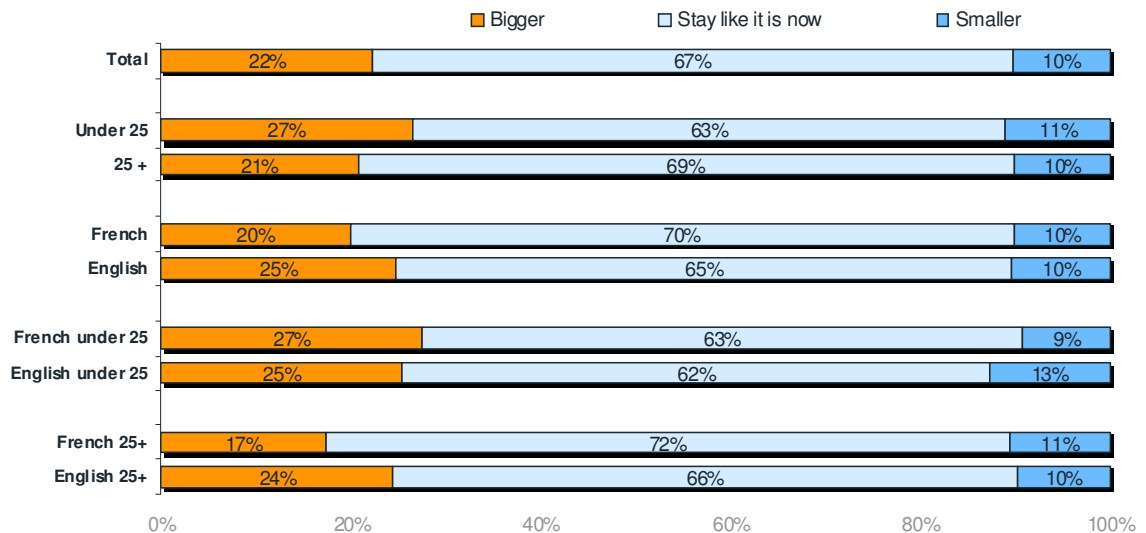


In addition to testing Tobacco Health Warning Messages and Health Information Messages, this study also evaluated the effectiveness of the contact information on the cigarette package.

Respondents were first asked to what extent the section caught their attention, that is, how noticeable it was. Approximately two-thirds of respondents (64%) felt that it was noticeable and another 23% felt it was somewhat noticeable. On average, the contact information's noticeability was rated as 7.07. Very few differences are seen when demographic variables are considered; the only noteworthy one is that French-speaking smokers under the age of 25 found the information slightly more noticeable than their counterparts (67% rated it as noticeable vs. 63-64%, with an average score of 7.16 vs. 7.01 vs. 7.07).



Respondents were next asked whether they thought the space occupied by this section on the pack should be bigger, smaller, or stay as it is. They were asked this in the context of whether changing the size would further encourage interested smokers to use the contact information or not. The majority (67%) agreed that it was an appropriate size and should not be changed. About one-quarter (22%) felt it should be bigger, while only 1 in 10 thought it should be smaller.



Younger Canadians were more likely to say that the contact information should be bigger than older Canadians (27% vs. 21%), however the proportion who felt it should be smaller was comparable for both groups. English Canadians were also more likely to say this section should be made bigger when compared to French Canadians (25% vs. 20%), and again, this difference is accounted for in the 'stay like it is now' category, and not the 'smaller' category which was found to be 10% for both groups. The largest demographic difference is highlighted when both age and language are considered; whereas the language divide amongst younger respondents is minimal (27% vs. 25% saying it should be bigger), the difference between French and English adults 25 and older is significant (17% vs. 24% saying it should be bigger). No differences are seen when gender is considered.

Lastly, respondents were asked how important it was to them that this kind of information be included on cigarette packages. For the most part, Canadians feel the presence of this contact information is either important (63%) or somewhat important (20%). Almost 1 in 5 (17%) said that this information is not important, resulting in a mean rating of 6.99.

Younger Canadians are much more likely to feel this information is important than older Canadians, with 70% (vs. 61%) rating it important and another

18% (vs. 20%) rating it somewhat important (mean = 7.46 vs. 6.83). Overall, French-speakers are slightly more likely to feel that it is somewhat important (22% vs. 18%), and English-speakers are more likely to feel that it is not important (19% vs. 16%). Only minor differences between groups are noted when both age and language variables are considered, and men are more likely to feel the information is not important than are women (20% vs. 15%).

