

TEPAV Monitoring Newsletter on Tobacco Control Policies, January 2023¹

This news bulletin has been prepared by TEPAV with the purpose of sharing data and information on tobacco use in Türkiye. The detailed analysis of tobacco product consumption in Turkey is based on micro data obtained through nationally representative surveys. The data used in the preparation of the bulletin were collected during the October wave of the TEPAV survey. The computer-aided telephone survey, which was conducted in the 12 NUTS-1 regions of Türkiye ((İstanbul (TR1), Balıkesir (TR2), İzmir (TR3), Bursa (TR4), Ankara (TR5), Antalya (TR6), Kayseri (TR7), Samsun (TR8), Trabzon (TR9), Erzurum (TRA), Malatya (TRB), Gaziantep (TRC)) with a total of 2000 participants.

The October wave of the survey was conducted with a revised questionnaire that was expanded to include questions related to the relationship between smoking and self perceptions, as well as cessation behavior. The relevant literature states that people have beliefs about and expectations for their ought and ideal selves that do not always match up with their actual selves. This news bulletin mainly focuses on the psychological and social aspects of smoking, as well as participants' self-related concerns, motivations, and cessation attitudes. The aim is to relate smoking and cessation attitudes to individuals' self-related thoughts in Türkiye.

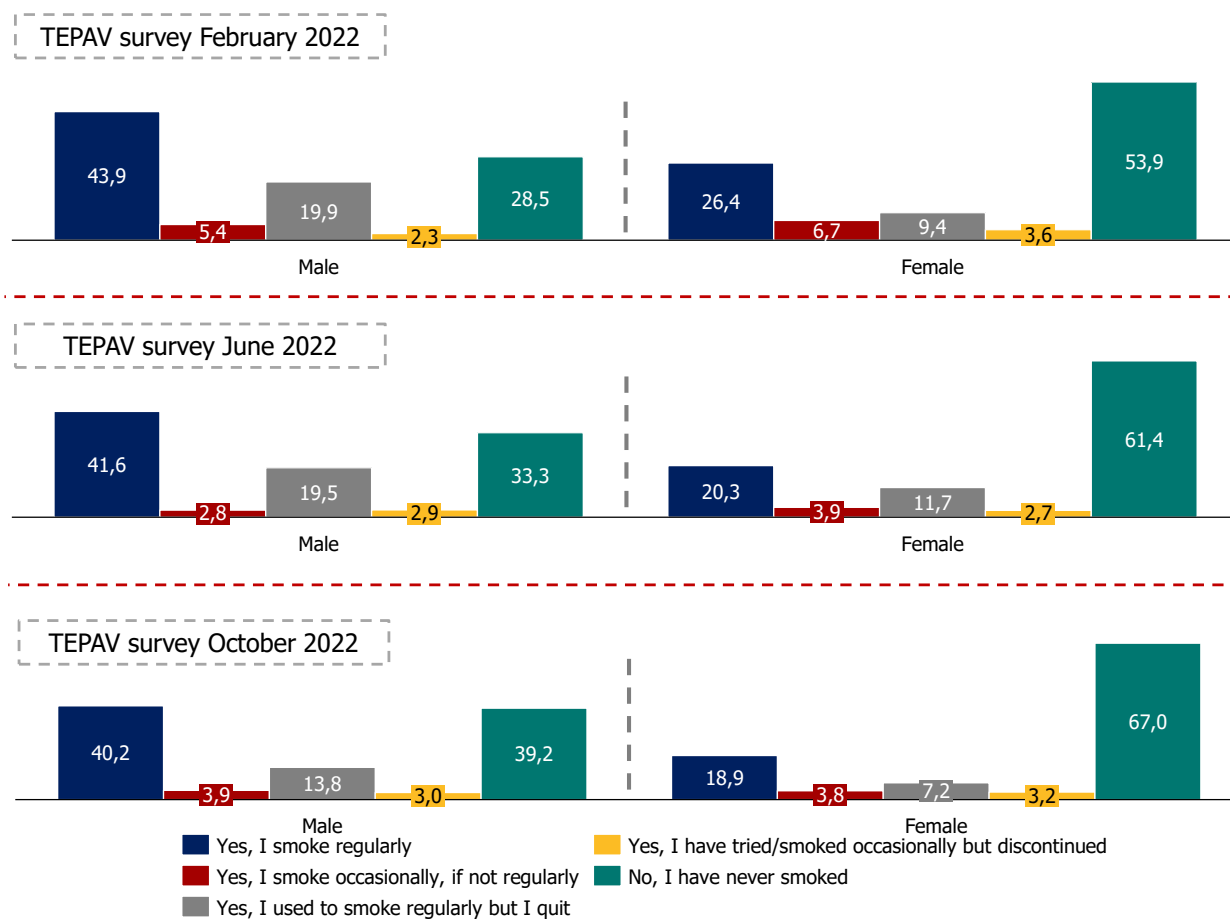
1. Tobacco Use Prevalence and General Information

The prevalence rates of smoking estimated in the October survey were comparable to those estimated in the earlier waves of the survey, reassuring us of the quality of the design and successful implementation of the survey. About 40-44% of men and 19-26% of women were found to be regular smokers. Occasional smokers had a much smaller share, about 3-5% among men and 4-7% among women (Figure 1). Respondents are categorized into five groups based on their answers to the "Do you or did you smoke?" question: "regular smokers", "occasional smokers", "past smokers", "tried in the past but did not continue", and "never smokers". It is observed that almost half of the men use tobacco daily, while more than half of the women do not use tobacco products. Among women, the percentage of women that are

¹ Disclosure: This study was funded with a grant from the Foundation for a Smoke-Free World, Inc. ("FSFW"), a US nonprofit 501(c)(3) private foundation. FSFW had no role in the planning or execution of this study, data analysis, or publication of results.

regular or occasional users decreased from February to June, whereas there is no statistically significant change from June to October. More detailed analyses are shared in the following parts of the newsletter.

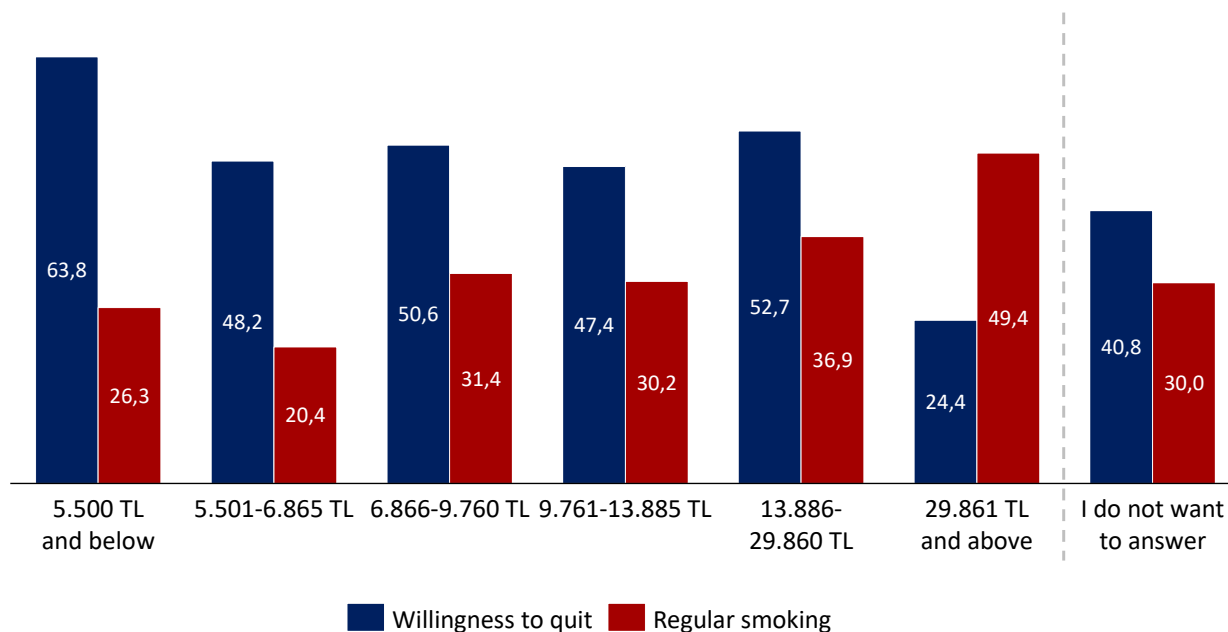
Figure 1. The percentages of responses to the question “Do you or did you smoke?” by gender, February 2022, June 2022, October 2022, %



Source: TEPAV survey (February 2022, June 2022, October 2022), TEPAV calculations

While the prevalence of regular smoking increases with income, the willingness to quit smoking decreases. The responses to the question “Do you or did you smoke?”, evaluated according to monthly household income, show that the percentage of regular users was 26.3 in the lowest income group, whereas it was 49.4 percent in the highest income group. The percentage of respondents who answered “Yes” when asked whether they wanted to quit smoking was 24.4 percent in the highest income group, whereas it was a much higher 63.8 percent in the group with the lowest income (Figure 2).

Figure 2. The percentage of people who responded “Yes, I smoke regularly” to the question “Do you or did you smoke?” and “Yes” to the question “Do you want to quit smoking right now?” by income groups, October 2022, %



Source: TEPAV survey (October 2022), TEPAV calculations

2. The Psycho-Social Aspects of Smoking and Cessation

In this section of our analyses, the data collected in the October survey was analysed, and the focus was only on regular smokers.

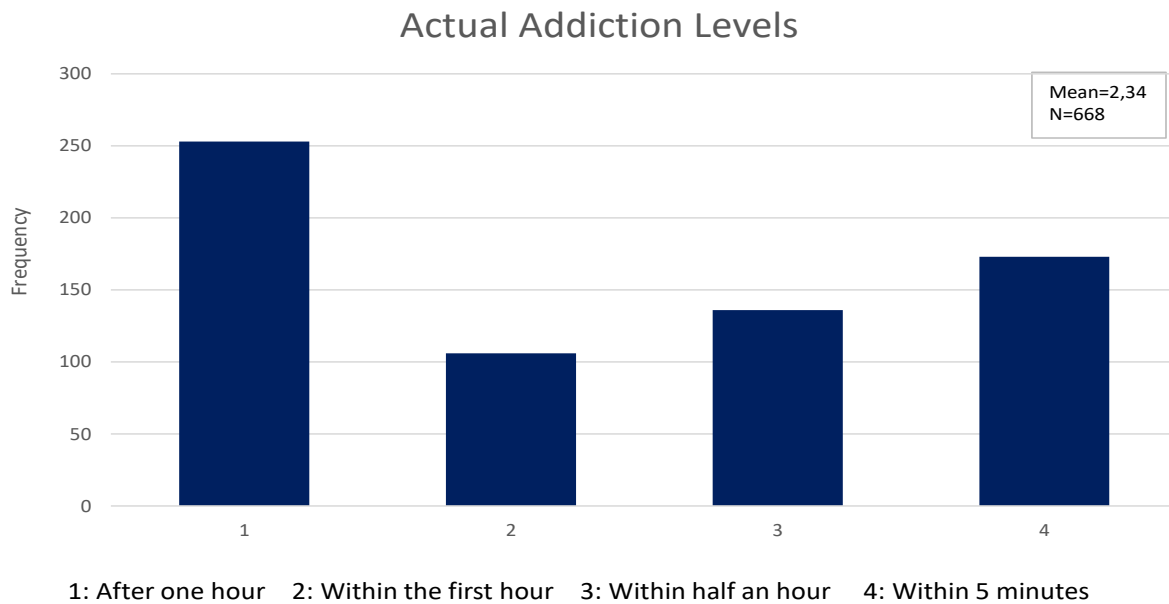
A person’s “smoker self” may not coincide with his or her “ideal self”, referring to a set of characteristics idealized by the individual, or “ought self”, referring to a set of characteristics expected by the general society. The “actual self” consists of the attributes that the person himself or herself actually possesses. The “actual” in this case may refer to the objective attributes of a person (e.g., the number of cigarettes a person smokes in one day) or more subjective attributes as perceived by the same individual (e.g., the level of addiction as perceived by the individual). The “ideal self” consists of the attributes that the person would like to have in an ideal situation. Lastly, the “ought self” consists of the attributes that the person would like to possess from the eyes of others. The others may include family and friends, as well as the general society. The ought self refers to the person’s social identity.

In this newsletter, the focus is on the participants who are currently regular smokers who may or may not have tried quitting in the past. This sample consists of 668 individuals, of whom 34 percent are females. The mean education level in this sample is around high school completion, reflecting the average Turkish population. The mean age is 35.6, with the minimum of 18 and the maximum of 70. In addition, the mean household income level is around the category of 3.7 between 1 and 6, which corresponds to 9-

10 thousand Turkish liras per month. Considering that the average disposable household income in Türkiye is around 6.5 thousand Turkish liras per month, the sample can be said to be a bit richer than the average. A “No Opinion” option is added throughout the questionnaire in this section for those who do not have a prominent answer. The “no-opinion” answers were coded as missing cells in the analysis.

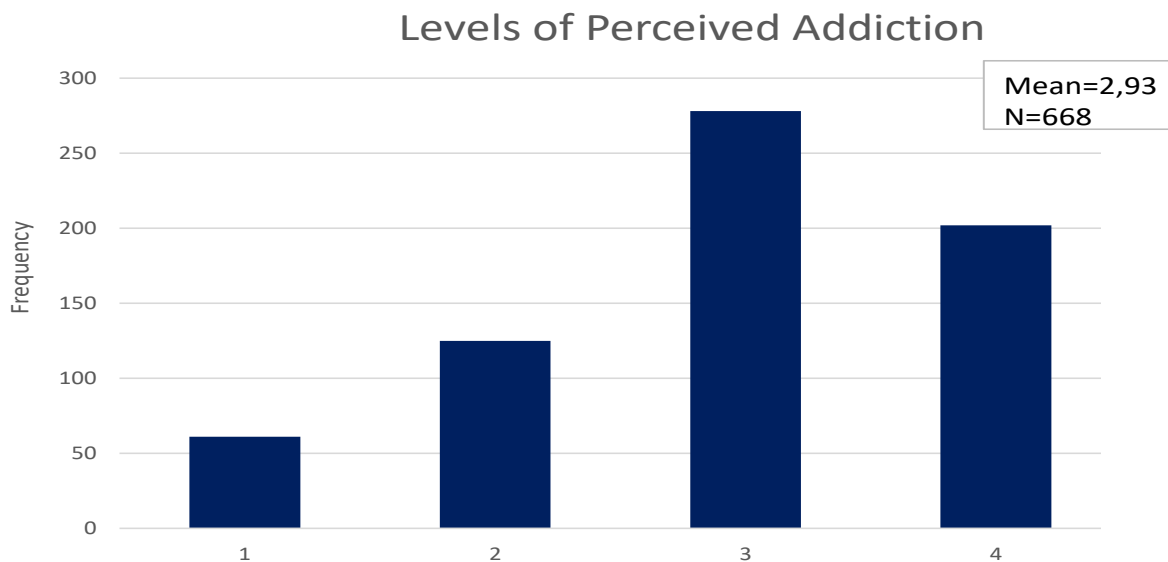
For the level of addiction, we define two different measures; actual addiction, which is defined according to the duration until the first cigarette smoked in the morning, and perceived addiction, which is measured by asking if the person agrees with the following three statements: “I think I am addicted”, “Smoking is addictive”, and “Quitting is hard”. As seen in the related literature, addiction is a highly loaded term. If the individual smokes the first cigarette within five minutes of waking up, the score is 4, reflecting the highest level of actual addiction. The score is 3 for the first cigarette within half an hour, 2 for within the first hour, and 1 for after one hour, indicating the lowest level of actual addiction. On the other hand, addiction can also be a subjective, or perceived, concept. It is possible that people perceive themselves as addicted although in fact they smoke little, or, alternatively, they may perceive themselves as not addicted although actual indicators suggest that they are highly addicted. This variable is called “perceived addiction” in our study. The score for perceived addiction is calculated by taking the average of the answers given to these three questions. This score ranges from 1 to 4. Figure 3 and Figure 4 show the frequencies of actual and perceived addiction scores. Figure 3 represents the actual addiction levels, based on the duration until first cigarette smoked in the morning. Frequency of people who smoke their first cigarette after one hour of waking up is the highest, followed by the people who smoke their first cigarette within 5 minutes of waking up, which indicates that a high number of people are highly addicted to smoking. Figure 4 represents the levels of perceived addiction, and the frequency of people who rank 3 at perceived addiction scale is the highest.

Figure 3. The frequency of actual addiction levels based on the duration until the first cigarette smoked after waking up (between 1 and 4), October 2022



Source: TEPAV survey (October 2022), TEPAV calculations

Figure 4. The level of addiction as perceived by the individual, an arithmetic average of three statements in the questionnaire, October 2022

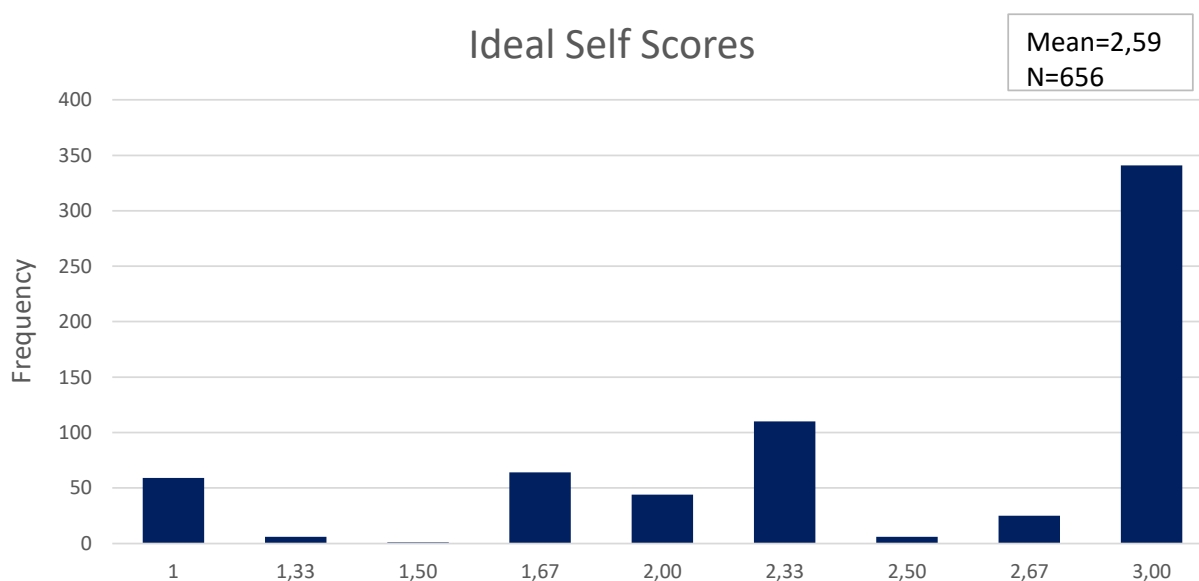


Source: TEPAV survey (October 2022), TEPAV calculations

Most people have an image of a non-smoker ideal self for themselves. The participants were asked questions to evaluate the actual, ideal, and ought selves of individuals and relate these scores to their smoking behavior. Based on the psychology and consumer behavior literatures, the actual self of a smoker

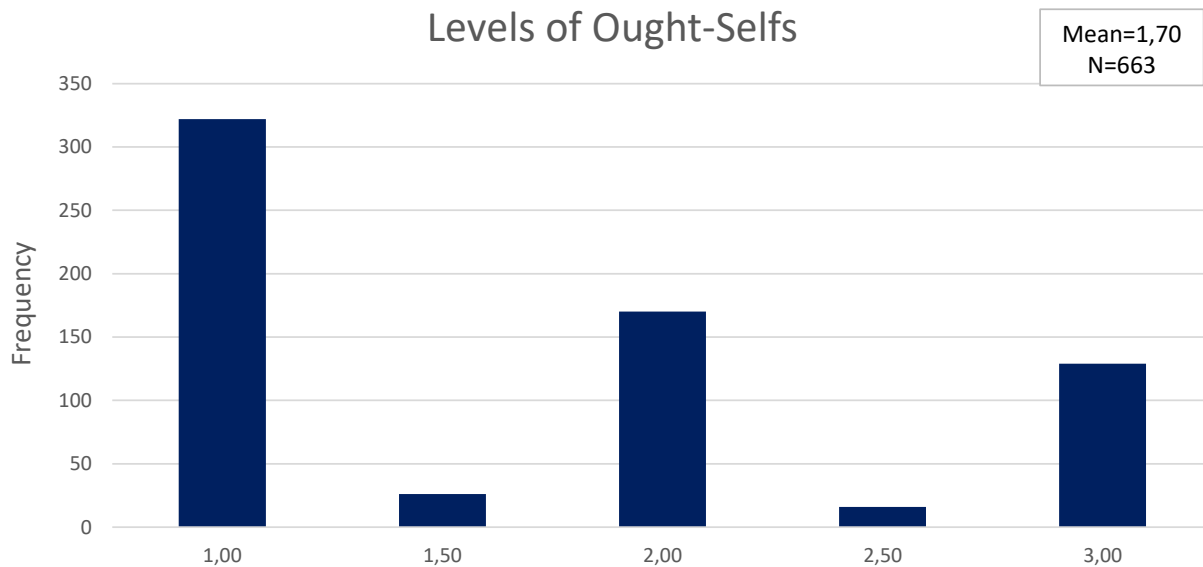
(who is actually and perceptually addicted) may be different from the idealized image of a person, in other words, his or her ideal self. The ideal self may or may not be smoking, depending on the person's aspirations, plans, self-thoughts, and self-related imagination. Three questions were asked to identify the extent to which the ideal self is a non-smoking individual: "I would not smoke in the ideal situation," "I think I look good when smoking," and "My ideal self does not smoke". Data points range from 1 to 3. The score of ideal self is calculated by taking the arithmetic average of responses to these questions. As the ideal self score increases, the person becomes more inclined towards a non-smoker image. The score on ideal self represents the strength of a non-smoker's ideal self. Figure 5 below shows the frequencies of measured ideal self scores.

Figure 5. The ideal-self scores, October 2022



Source: TEPAV survey (October 2022), TEPAV calculations

Despite the higher scores for actual addiction levels, most people desire to be perceived as a non-smoker. A similar yet distinct construct is the ought self, which is more related to the social and interpersonal component of a person's identity. While the ideal self is related to an individual's *personality*, the ought self is more related to the individual's *social identity*. The ought self is measured using two questions: "Comments people make about my smoking bother me," "I feel embarrassed smoking in front of people." Here, the ought self score is calculated by taking the average of these two items, which are coded from 1 to 3. In the context of smoking, a person may be a heavy smoker and highly addicted according to the actual measure (high score for the actual addiction), and s/he may perceive himself or herself as a heavy smoker (high score for the perceived addiction), while at the same time, s/he may think that his or her ideal is a non-smoker (s/he thinks s/he should be a strong person with healthy dieting and regular exercise) (high score for the ideal-self score). Moreover, this person may also think that friends and family members do not like him/her as a smoker (high score for the ought self).

Figure 6. The ought-self scores, October 2022

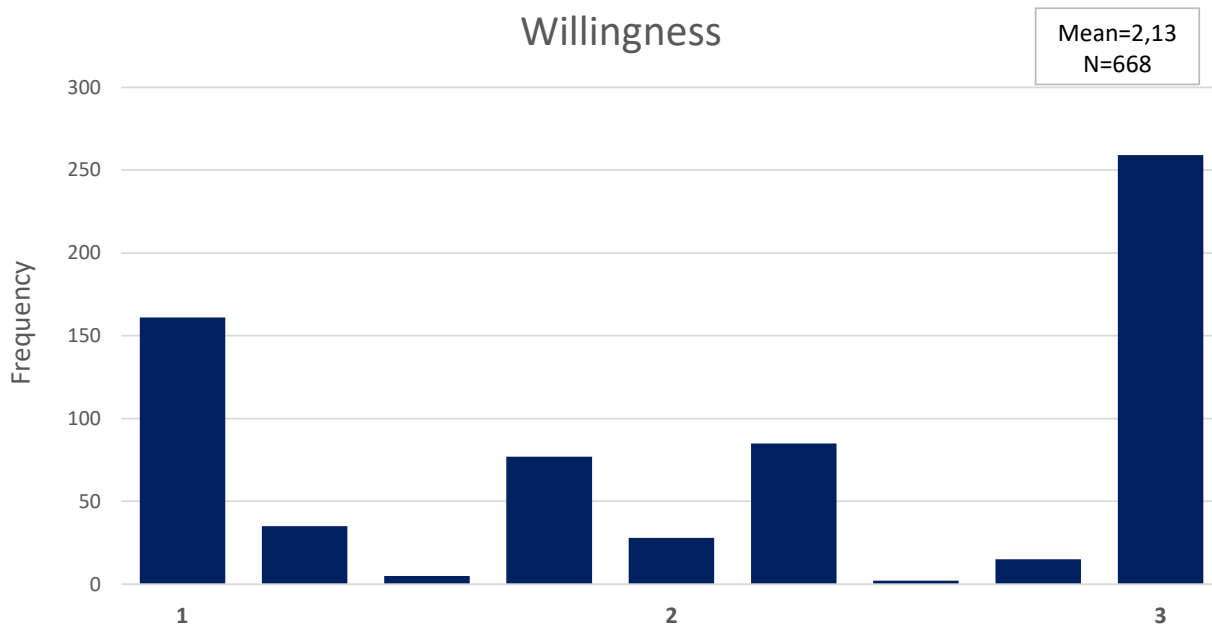
Source: TEPAV survey (October 2022), TEPAV calculations

Ideal self and ought self are considered to be separate, and distinct components by our respondents. To make sure that the ideal and the ought selves are seen as separate constructs by our participants, a factor analysis using the Principal Components Method and varimax rotation was ran. Results show that the ideal and the ought self are considered to be distinct concepts by respondents. This indicates that our respondents distinguish between the characteristics of their idealized personalities and the characteristics of their socially-approved personalities.

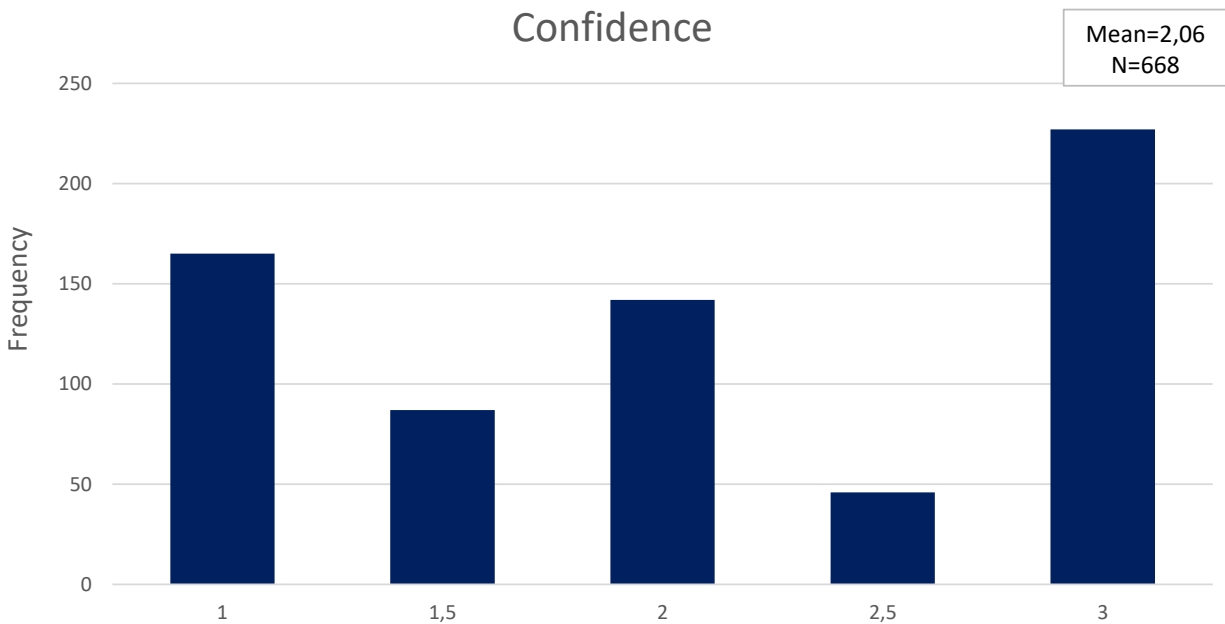
3. Cessation

The survey findings indicate that about half of the smokers are willing to quit smoking; however, cessation intentions and respondents' confidence in quitting are not in tandem with each other. Smokers who declare to have an "intent to quit" cannot be grouped in one single category since there is a variety of different perspectives on quitting. As such, we have identified two distinct aspects of cessation. One is the *willingness to quit*, indicated by the extent to which the person is inclined towards quitting. This concept is measured by asking three questions: "I want to quit," "I want to stop smoking," and "I want to reduce smoking". Data points range from 1 to 3, and the score is calculated by taking the average of the three questions. The other aspect is the belief in one's self that she or he can indeed quit, i.e., the individual's *confidence in quitting*, indicated by the extent to which a person agrees with the following statements: "I am able to stop smoking if I want to" and "I can quit if I want to." Again, the score is calculated by averaging the two questions the answers to which range from 1 to 3. We attempted to differentiate between these two aspects and came up with a factor analysis which confirms our expectation that willingness and confidence are perceived to be different concepts. The willingness and the confidence scores are indicated below in Figure 7 and Figure 8.

Figure 7. Willingness to Quit, October 2022



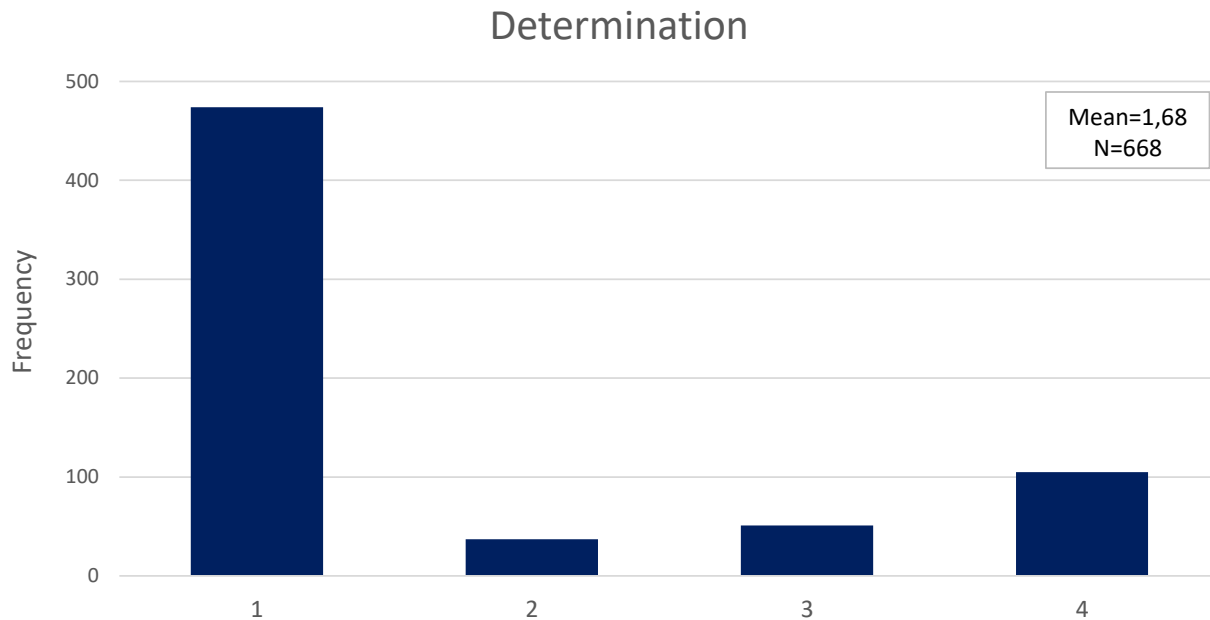
Source: TEPAV survey (October 2022), TEPAV calculations

Figure 8. Confidence in Quitting, October 2022

Source: TEPAV survey (October 2022), TEPAV calculations

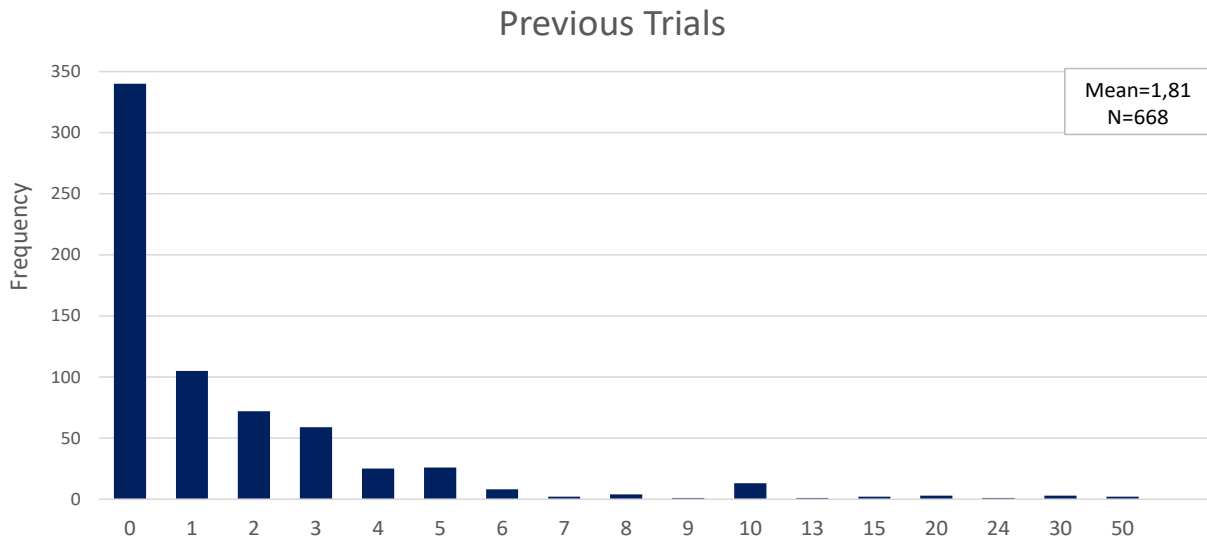
Most participants did not provide an exact time period for cessation, which is an indicator of how determined people are on quitting smoking. It is identified that there is a need to distinguish between a positive attitude towards cessation and a more concrete intention to actually quit. For this reason, the respondents were asked if they would like to try quitting, and if so, when. The number of months until the planned cessation indicated the strength of this intention. There was a noticeable separation in data at the one-month and the one-year periods. Figure 9 below indicates the average scores for the determination for quitting. Scores are determined as follows:

- Score 1: If the participant did not provide an exact time period for cessation (475 individuals)
- Score 2: If the participant provided a duration between 12 months or more, indicating a long time period (37 individuals)
- Score 3: If the participant provided a duration between 2 and 11 months, indicating a stronger dedication (51 individuals)
- Score 4: If the participant provided a duration of one month or less (105 participants)

Figure 9. Determination to Quit, October 2022

Source: TEPAV survey (October 2022), TEPAV calculations

Most of the participants do not have a past successful attempt in quitting. According to the results, some currently regular smokers have relapsed; therefore, the data on the number of attempts to quit may be useful in understanding the different facets of cessation behavior. The respondents were asked about the number of times they have tried to quit. Since the sample consisted of regular smokers, it can be safely assumed that their attempts to quit were not successful. Previous attempts were scored as 1 (no such attempt in the past), 2 (only one attempt), 3 (between 2 and 9 attempts), and 4 (10 or more attempts). These numbers were assumed to represent a scale variable for the sake of simplicity in our statistical analysis. Please refer to Figure 10 below to see the frequency of previous quit attempts.

Figure 10. Previous Quit Attempts, October 2022

Source: TEPAV survey (October 2022), TEPAV calculations

People are generally willing to quit; they feel that they have the confidence; but only 25% of participants have a specified time frame to quit and many have tried quitting in the past at least once. These results provide clues about whether and how people may or may not be encouraged for quitting. For instance, there are hundreds of individuals who have not attempted to quit smoking, yet a majority of them are willing and determined to quit.

4. Analyses by Socio-Demographic Groups

Significant differences were captured across different groups of gender, age, income, and education. Independent samples t-tests were conducted in order to compare whether there are significant differences among different demographic groups. Results are presented in Table 1 below. The gender differentiation is made between male and female participants. The mean age in the sample was around 35 and the median age was 34, so “older” participants were assumed to be those above age 35. The education level ranged from 1 to 7, where the mean category was around 3 and the median education category was 3. So, “high education” was defined as high school or a higher level of education. Lastly, the monthly household income ranged from 1 to 6, where the mean and the median were around the category and the mode was 1. Therefore, we decided to include category 3 to be in the low-income side in order to better represent the data distribution. So, we assigned categories 1-3 to the low-income group, and the categories 4-7 to the higher-income group. The mean differences between specified groups are indicated in the cells in Table 1 below.

Table 1. Group Differences in terms of Gender, Age, Education, and Income^a, October 2022

Gender	Age	Education	Income
--------	-----	-----------	--------

	Female – Male	35 or older – Younger	University or higher – Lower	9,700 or higher – Lower
Actual Addiction	-0.29**	-0.05	-0.35**	-0.03
Perceived Addiction	0.12*	0.15**	-0.20**	-0.005
Ideal Self	0.13**	0.13**	-0.18**	-0.17**
Ought Self	0.54**	0.26**	-0.24**	-0.35**
Willingness	0.14**	0.16**	-0.25**	-0.21**
Confidence	0.01	-0.07	0.06	0.02
Determination	0.01	-0.07	-0.03	-0.1
Previous Trials	-0.09	0.12*	-0.09	-0.16*

Source: TEPAV survey (October 2022), TEPAV calculations

^a * the difference significant at .1 level, ** the difference significant at .05 level

Actual and perceived addiction scores varied across gender, age, and education groups. Female participants feel themselves more addicted, however, generally, they are not actually more addicted compared to others. Older individuals are not significantly more addicted actually, but they feel more addicted compared to younger individuals. Also, highly educated people are both actually and subjectively less addicted. There are no significant differences in terms of income.

The ideal- and ought-self scores, represented as powerful forces towards cessation, are significantly higher among females and for highly educated people, but the self relation is significantly lower among higher income people. This may indicate that the self-related forces may undermine the confidence in more vulnerable individuals, requiring strong health policies. This may indicate that individuals may go through several different definitions of their selves. The intricate relations among these demographic variables and cessation attitudes may require different approaches and strong health policies to effectively cover distinct groups of smokers.

The willingness to quit is significantly higher for females and older individuals. Together with the result presented above, more sensitive groups can be targeted since they think less deeply about their smoker selves and they are more willing to quit. On the other hand, they do not show significantly higher levels in terms of their confidence in quitting; therefore, creating programs for their positive orientation may prove to be useful.

The willingness and the determination to quit are significantly lower among individuals with higher education and higher income. These groups also have a weaker score for their ought selves, too. Therefore, educated people with more income may not be aware of their roles as smokers in public. Policies and programs may target individuals with low ought-selves and may attempt to increase their willingness to quit.