

Research Summary

Changes in Smoking Status and Behaviours

After Ten Months of COVID-19 Pandemic in Indonesia

Background:

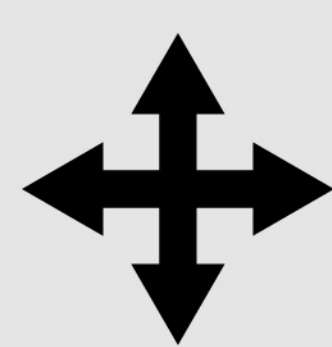
Indonesia is:

- One of the countries with the largest rates of male smokers in the world (2016)
- The country with the largest outbreak of COVID-19 in Southeast Asia: more than 4 million confirmed cases and more than 100,000 deaths
- Facing the increasing number of poor people by 1 million (BPS, 2021) and unemployed workers by 2,6 million (WFP, 2020) during COVID-19 pandemic

Research question:

“How COVID-19 pandemic and its related indicators may associate with changes in smoking status and behaviours among Indonesia population?”

Objectives:



The direction of change

Explore the direction of changes in smoking status and behaviours after ten months of the COVID-19 pandemic in Indonesia.



Descriptive

Explore the COVID-19-related indicators that may be associated with changes in smoking status and behaviours

Methodology:



Data

A phone survey was conducted to gather the smoking-related data during pre-pandemic periode (February 2020) and during the post-pandemic period (interview period in December 2020 to January 2021).



Sampling

We applied stratified random sampling method to obtain nationally representative sample of Indonesian mobile phone users (around 76% of total Indonesia's population (Susenas 2019).

The total sample in this study was 1,082 respondents.



Statistical analysis

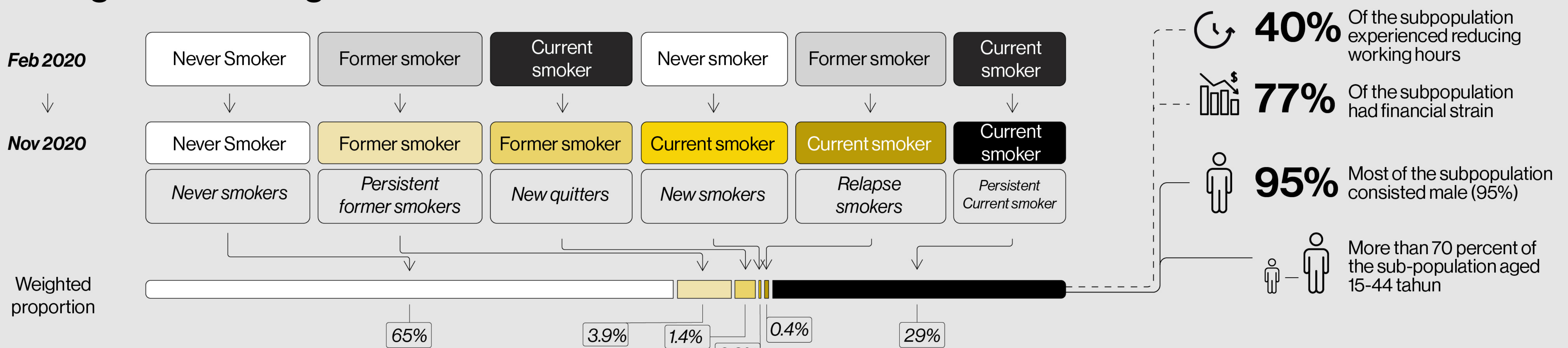
This study employed a descriptive analysis to explore (i) changes in smoking status and behaviours after 10 months of the COVID-19 pandemic; (ii) the economic factors, pandemic-related indicators, and demographic characteristics of the changes in smoking status and behaviours after 10 months of the COVID-19 pandemic.



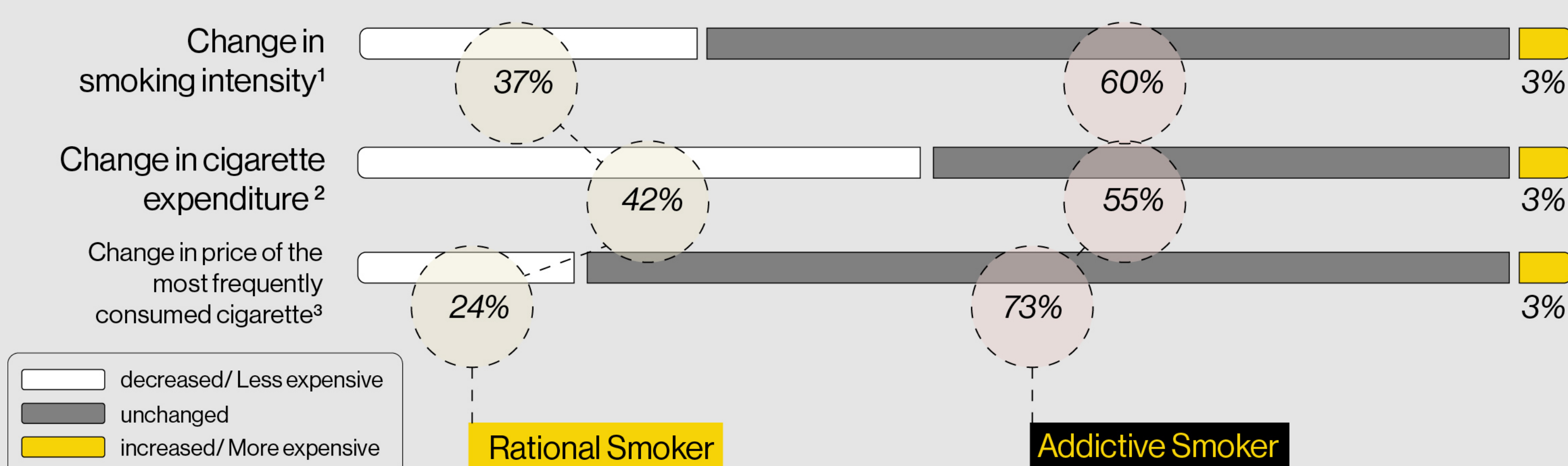
Weight

Post-stratification weight using data of National Socioeconomic Survey (SUSENAS) in 2019 was applied to reflect the population structure of sex and age.

Changes in Smoking Status:



Changes in Smoking Behavior:



The majority of the smokers did not change both smoking intensity (60%) and cigarette expenditure (55%). Around 73% of persistent current smokers also stuck to their preference of cigarette brand or type. People who demonstrated these traits were known as **addictive smokers**.

Nevertheless, significant number of respondents stated that they attempted to adjust the tobacco consumption by decreasing smoking intensity (37%); reducing cigarette expenditure (42%); and changing cigarette brand or type to the cheaper option (24%). Subjects who showed these behaviours were known as **rational smokers**.

1: The average number of cigarettes consumed per week in the current month (post-pandemic) compared to the average number of cigarettes consumed per week in February 2020 (pre-pandemic); in three categories: decrease, stagnant, increase.

2: The average number of cigarette expenditures per week in the current month (post-pandemic) compared to the average number of cigarette expenditures per week in February 2020 (pre-pandemic); in three categories: decrease, stagnant, increase.

3: The price per pack (or stick) of the most-consumed cigarettes in the current month (post-pandemic) compared to the price per pack (or stick) of the most-consumed cigarettes in February 2020 (pre-pandemic); in three categories: switching to lower priced cigarettes, same cigarette price, higher cigarette price.

The Factors Contributing to The Changes in Smoking Behaviours Within Rational Smoker:



Social Restriction

Persistent current smokers who were living in the area with social restriction tended to reduce smoking expenditure (46%), and to switch to the less expensive cigarettes (30%), compared to those who did not experience social restriction.



Employment shock

Persistent current smokers who experienced adverse employment shocks during the pandemic, namely being unemployed, having reduced working hours, or having an inferior job type (switching from formal to informal jobs, or from paid to unpaid jobs), were associated with significantly lower cigarette consumption and spending. Furthermore, experiencing employment shocks was associated with a lower percentage of switching to more expensive cigarettes relative to smokers who did not experience the employment shocks.

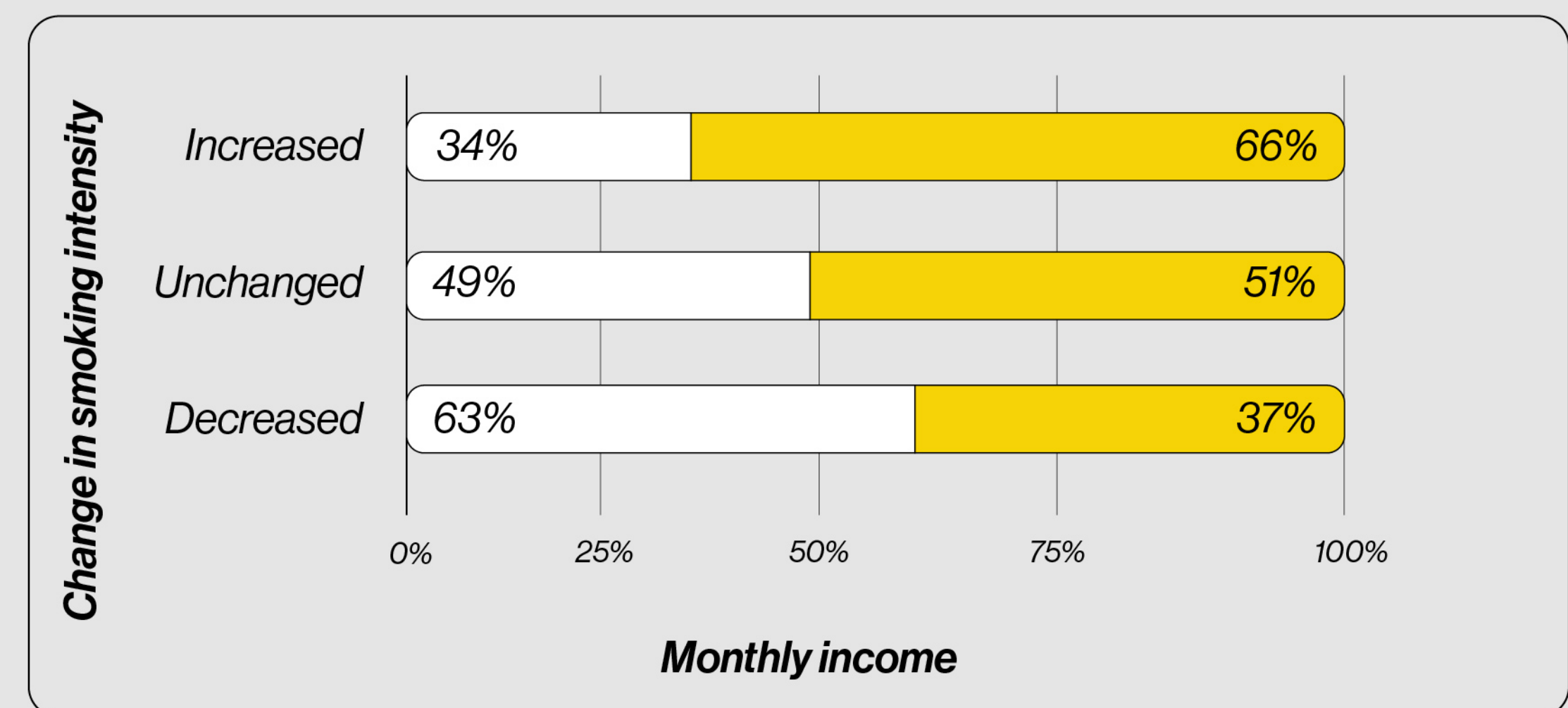
These results indicate that employment shocks might have brought about economic consequences for the smokers, which in turn motivated them to lower their cigarette consumption.



Financial strain

Persistent current smokers who experienced financial strain also had a higher percentage of decreased smoking intensity (41%) and decreased cigarette spending (47%), relative to those who did not experience financial shocks.

Income Group and Smoking Intensity:

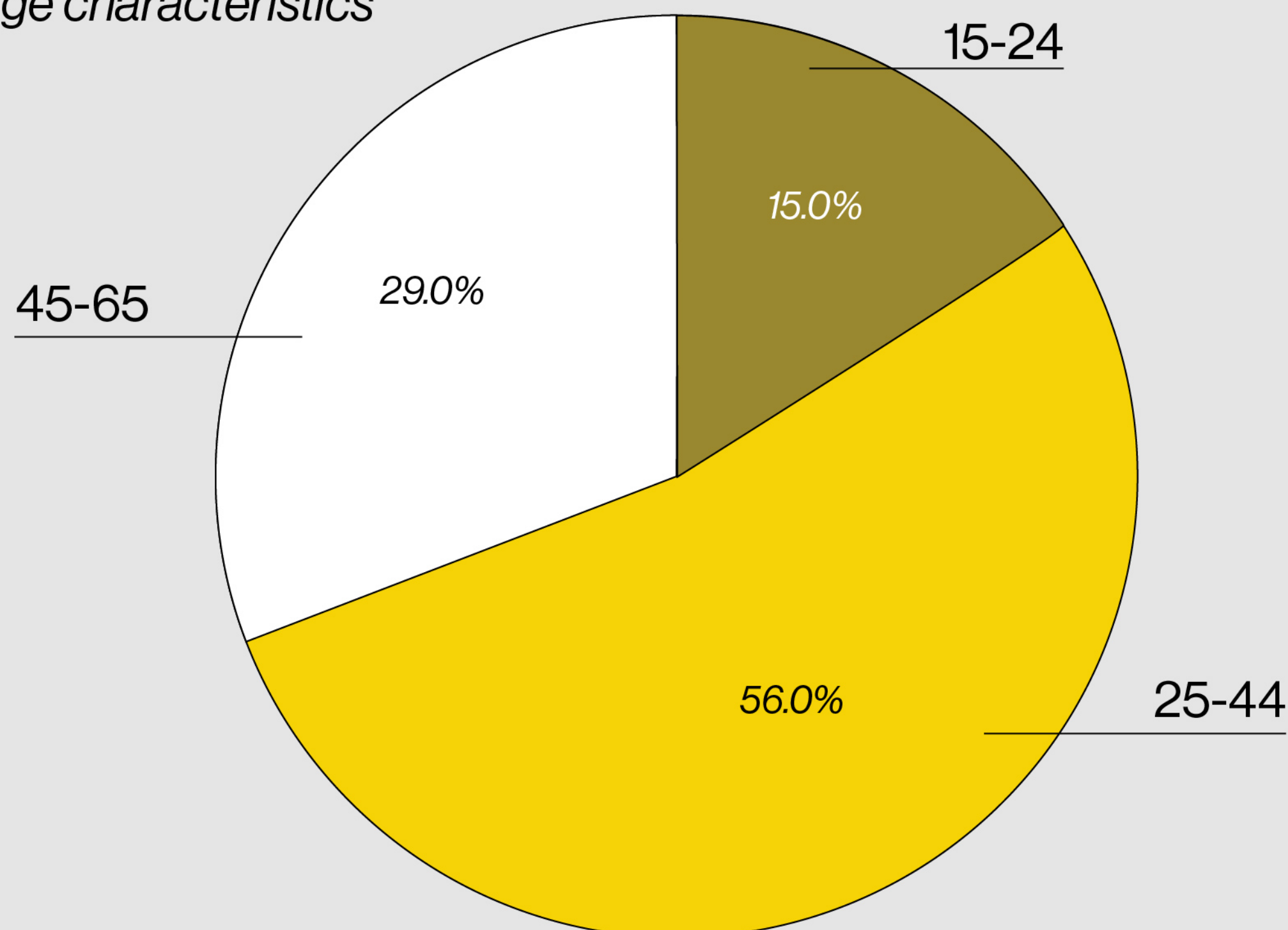


The proportion of persistent current smokers who decreased smoking intensity was likely to be higher in the population who has monthly income 0 to three million rupiah, compared to those who have monthly income more than three million rupiah.

These findings suggest that smokers from the lower-income group was more vulnerable to the economic changes. They tended to adjust their smoking intensity during the pandemic.

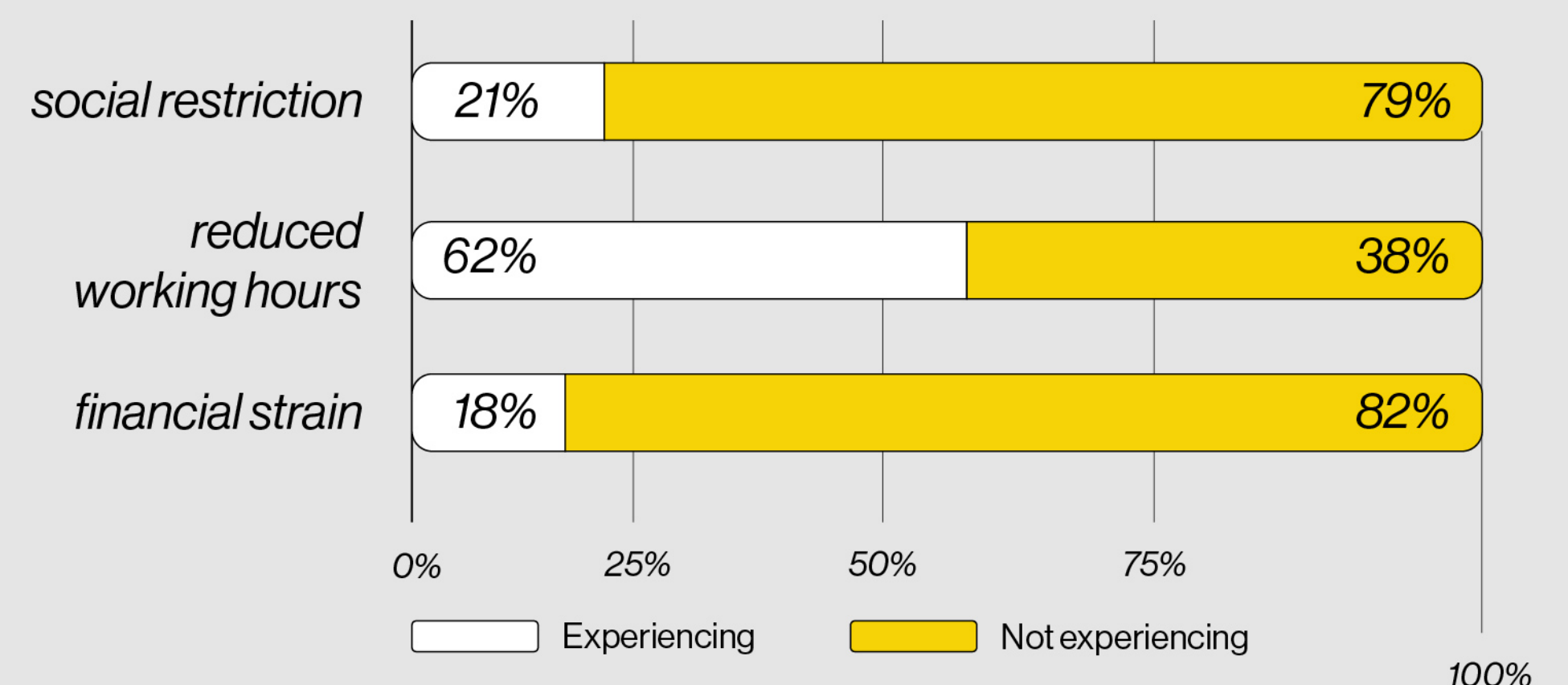
Smokers Switching To The Less Expensive Cigarettes

Age characteristics



Due to the age characteristics, most of the smokers switching to the less expensive cigarettes were those aged 25-44 years old.

The majority of the persistent current smokers who switched to the less expensive cigarettes was those experiencing social restriction (79%) and financial strain (82%)



Switched to other cigarette types with cheaper prices 25%

From	To	Percentage
White cigarettes	Kretek cigarettes	7%
White cigarettes	Other cigarettes	1%
Kretek cigarettes	Other cigarettes	17%

Significant number of persistent current smokers who switched to the less expensive cigarettes simultaneously changed the cigarette type from kretek cigarettes to the other cigarettes which are apparently sold at cheaper price. These products are such as local cigarette products, unpopular brand, or traditional tobacco products (klobot, awung, etc).

Conclusion:

29%

Persistent current smokers

Present study identified 29% of the population was persistent current smokers during the ten-month period of the COVID-19 pandemic

4 out of 10

Persistent current smokers

Around 37-42% of persistent current smokers decreased smoking intensity and cigarette expenditure

1 out of 10

Persistent current smokers

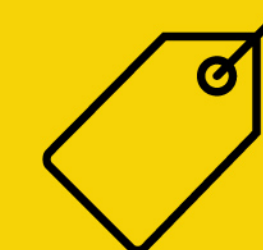
Around 24% of persistent current smokers switched to the less expensive tobacco products during the ten-month period of the COVID-19 pandemic

Switched to the less expensive cigarettes

Despite the majority of the persistent current smokers did not change their smoking behaviours (addictive), around one fourth of the persistent current smokers was rational smokers who were susceptible to the economic changes. They tended to change smoking behaviour.

However, the price variation within cigarette products (cheap to expensive) seems to facilitate the switching manner to the less expensive cigarette products.

Policy Recommendations:



Reduce the price variations

One factor that leads to stagnant cigarette consumption during a pandemic is the availability of less expensive alternatives; and therefore, the government needs to reduce the price variations through simplification of excise tiers



Increase cigarette price

Rational smokers and smokers who have lower income were susceptible to the economic changes, thus these groups tended to decrease or to adjust their smoking consumption during the hardship.

This fact may provide insight for the Indonesian government regarding the effort to reduce smoking prevalence by significantly increase cigarette excise tariffs and prices to reduce affordability.