



# Measuring responsible gambling in Massachusetts

Benchmarking with the  
Positive Play Scale

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## EXECUTIVE SUMMARY

### Background

- During September-October 2020, a convenience sample of 1,512 Massachusetts players completed an online survey that included the Positive Play Scale (PPS) the Problem Gambling Severity Index (PGSI), general demographic questions and questions about the frequency of gambling before, during and after COVID-19 lockdown periods when casinos in Massachusetts were closed, as well as attitudes towards and awareness of various responsible gambling initiatives.
- The purpose of the study was to identify the extent of positive play among Massachusetts players, to define specific areas where positive play could be further supported and to identify the extent of positive play among different player segments. In addition, to develop a better understanding of gambling during a pandemic lockdown and how players might be supported during such times.

### Positive play in Massachusetts

- Findings showed that most players in Massachusetts played positively.
- Players scored highest on the *personal responsibility factor of the PPS* followed by *honesty and control, pre-commitment* and lowest on *gambling literacy* factors, respectively.
- Positive play in Massachusetts was similar to what we have observed in four other US states, but was lower than what we have observed in Canada.

## EXECUTIVE SUMMARY

- ❑ Female players scored more positively than male players, but the differences between them were small.
- ❑ Older players scored more positively than younger players (on each of the PPS factors).
- ❑ Players were most motivated to gamble for entertainment (86.6%), to win money (86%) and for excitement (78.9%) and least motivated by supporting good causes (26.5%)
- ❑ Cluster analysis identified two distinct groups of players defined by types of games played and frequency of play.
- ❑ *Higher frequency multi-game players* played more games and at a higher frequency (than *Lower frequency lottery players*) and were more likely to be male, younger and less likely to be white than *Lower frequency lottery players*.
- ❑ *Higher frequency multi-game players* played less positively and reported more gambling-related problems than *Lower frequency lottery players*.
- ❑ Analyses also indicated that the key distinguishing factors between both groups were personal responsibility, gambling literacy, extent of gambling problems, age, and gender.

## EXECUTIVE SUMMARY

- ❑ Players reporting gambling problems were least likely to be positive players.
- ❑ Players with higher levels of satisfaction with gambling, were most likely to accept *personal responsibility, be honest and in control of their gambling and pre-commit to a money and time limit on their play*, but satisfaction was unrelated to *gambling literacy*.

### **Gambling during the COVID-19 pandemic**

- ❑ Gambling for both groups mostly declined whilst the casinos were closed and declined even further when the casinos re-opened again.
- ❑ Two thirds of players (66.4%) reported spending more time with family and/or friends when the casinos were closed due to the COVID-19 lockdown.
- ❑ Almost half of players (44.6%) reported that they saved money whilst the casinos were closed due to the COVID-19 lockdown.
- ❑ Most players reported that they did not miss playing at the casino during the closure period.
- ❑ Of the small number of players who had returned to the casino when they re-opened (N=309), most (59%) were concerned about COVID-19 when returning to play.
- ❑ Around a third of players reported spending more money (32.8%), more time (31.2%) and reported more frequent casino visits (29.2%) when the casinos re-opened again than prior to the casino closures.

## EXECUTIVE SUMMARY

### **Views on responsible gambling tools for online gambling**

- ❑ Less than half of players reported that they would find useful various guidelines about how to gamble responsibly.
- ❑ Around half of players suggested they would find various online responsible gambling tools useful if online gambling was legalized in Massachusetts

### **Recommendations**

- ❑ Future RG efforts such as messaging and player education may be best focused on increasing gambling literacy and pre-commitment amongst younger players, particularly male higher frequency multi-game players.
- ❑ Various ideas are provided to increase gambling literacy and pre-commitment amongst players.
- ❑ Subsequent responsible gambling messages or educational initiatives aimed at increasing gambling literacy and pre-commitment need to be tested for effectiveness before and after implementation.



## Introduction

The Positive Play Scale (PPS; Wood, Wohl, Tabri & Philander, 2017) was designed to optimize responsible gambling (RG) strategy by measuring player's positive gambling-related beliefs and behaviors.

When a player-based sample is assessed using the PPS, effective elements of an RG strategy as well as potential gaps can be identified.

# The Properties of the PPS

THE PPS IS A 14-ITEM SCALE THAT ASSESSES POSITIVE BELIEFS AND BEHAVIORS ABOUT GAMBLING.

There are two beliefs subscales:

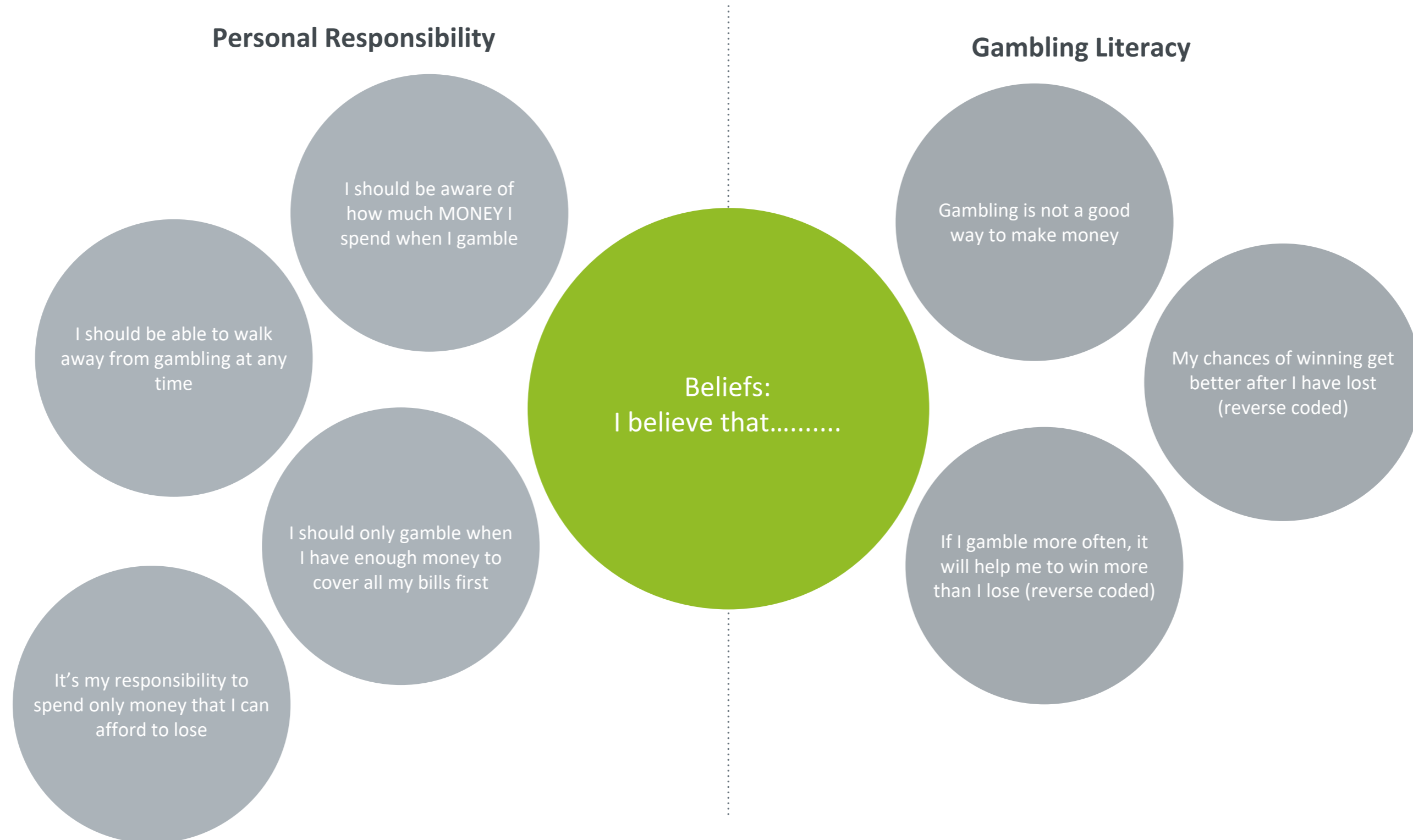


The extent to which a player believes they should take ownership of their gambling behavior



The extent to which a player has an accurate understanding about the nature of gambling

# Items that compose the PPS beliefs subscales





# The Properties of the PPS

THE PPS IS A 14-ITEM SCALE THAT ASSESSES POSITIVE BELIEFS AND BEHAVIORS ABOUT GAMBLING.

There are two behavior subscales:

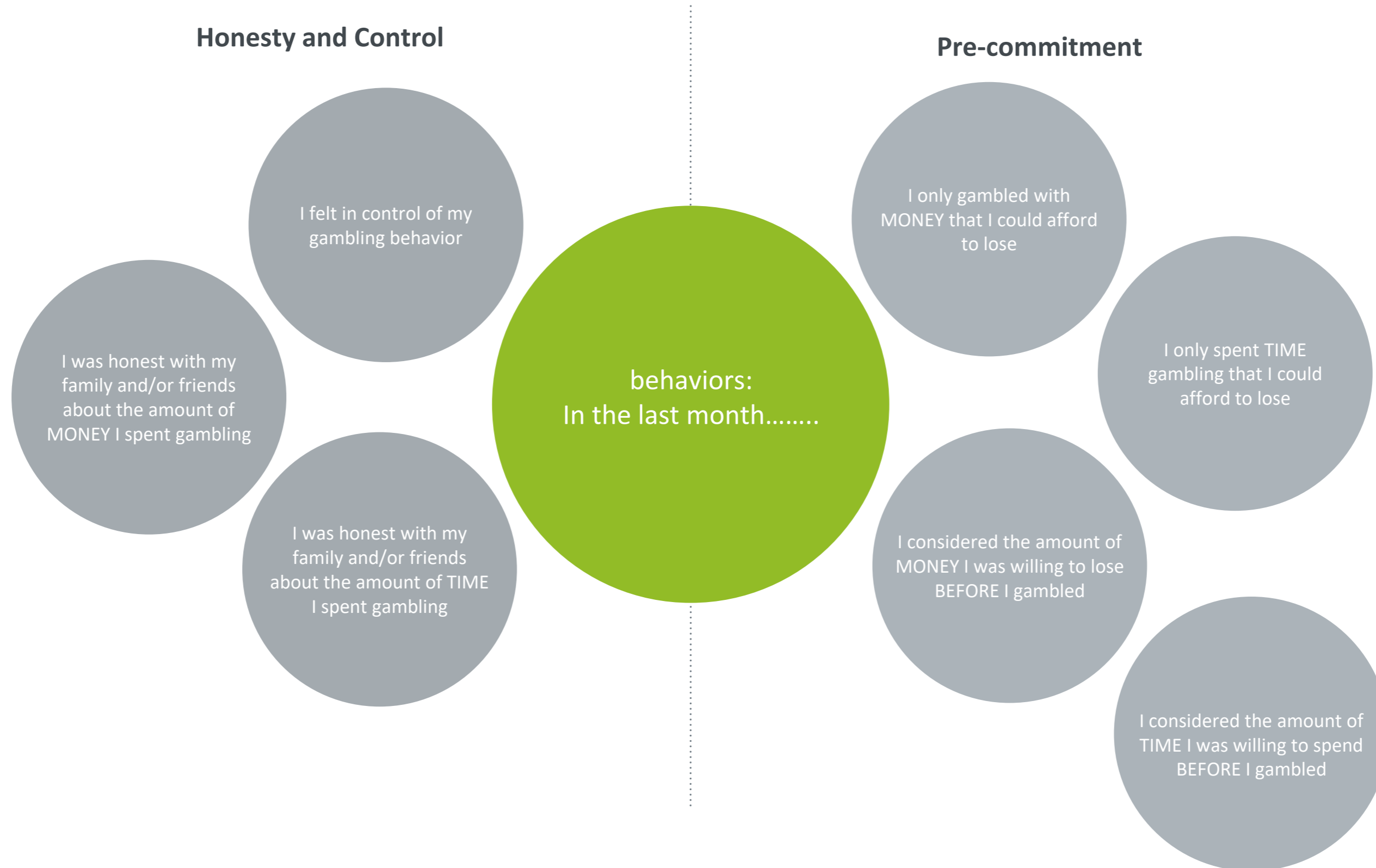


The extent to which players are honest with others about their gambling behavior and feel in control of their behavior

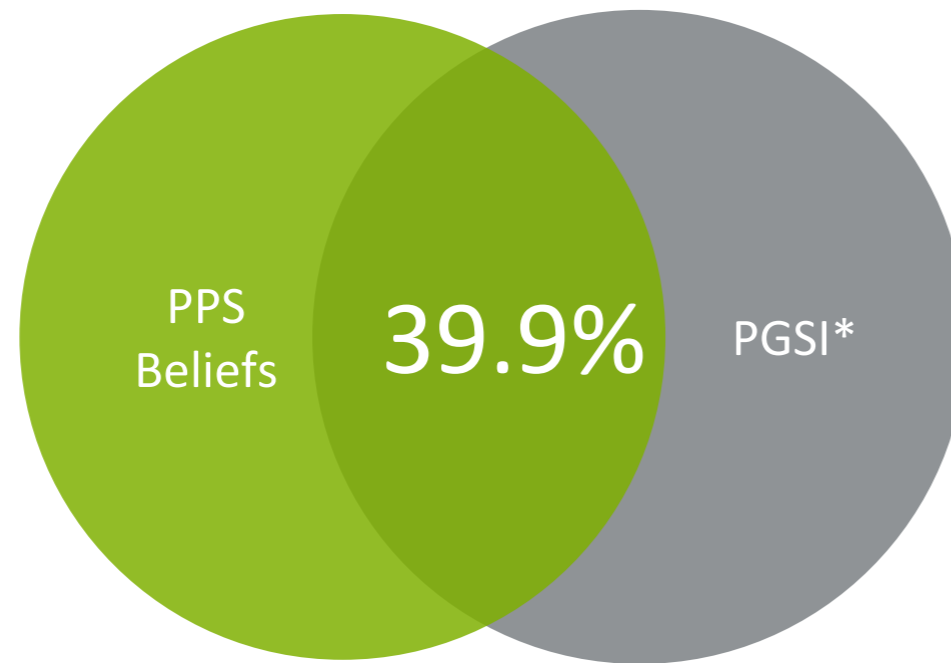


The extent to which a player considers how much money and time they should spend gambling

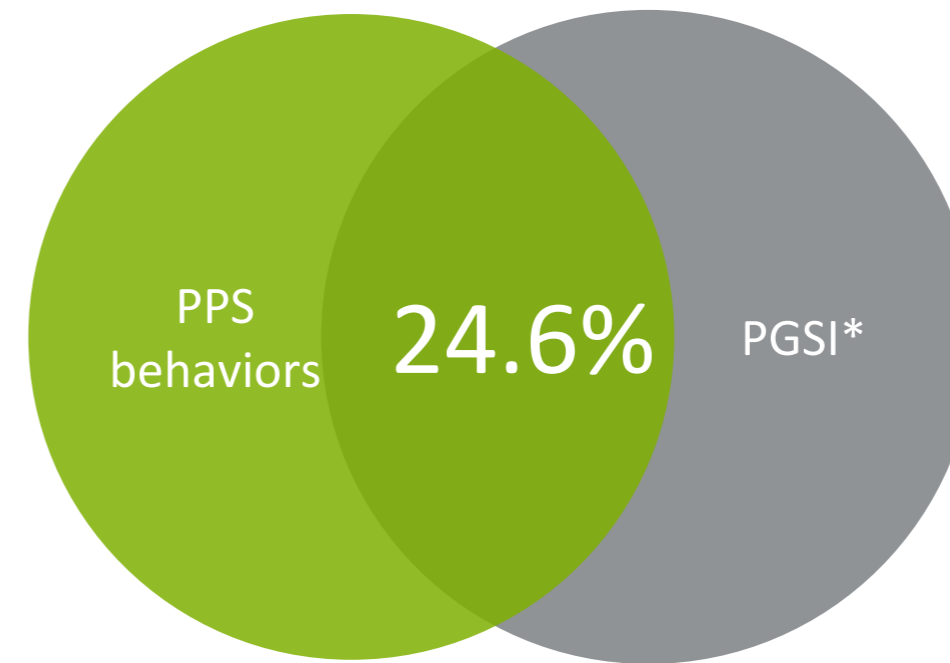
# Items that compose the PPS behaviors subscales



# The PPS is not a measure of disordered gambling



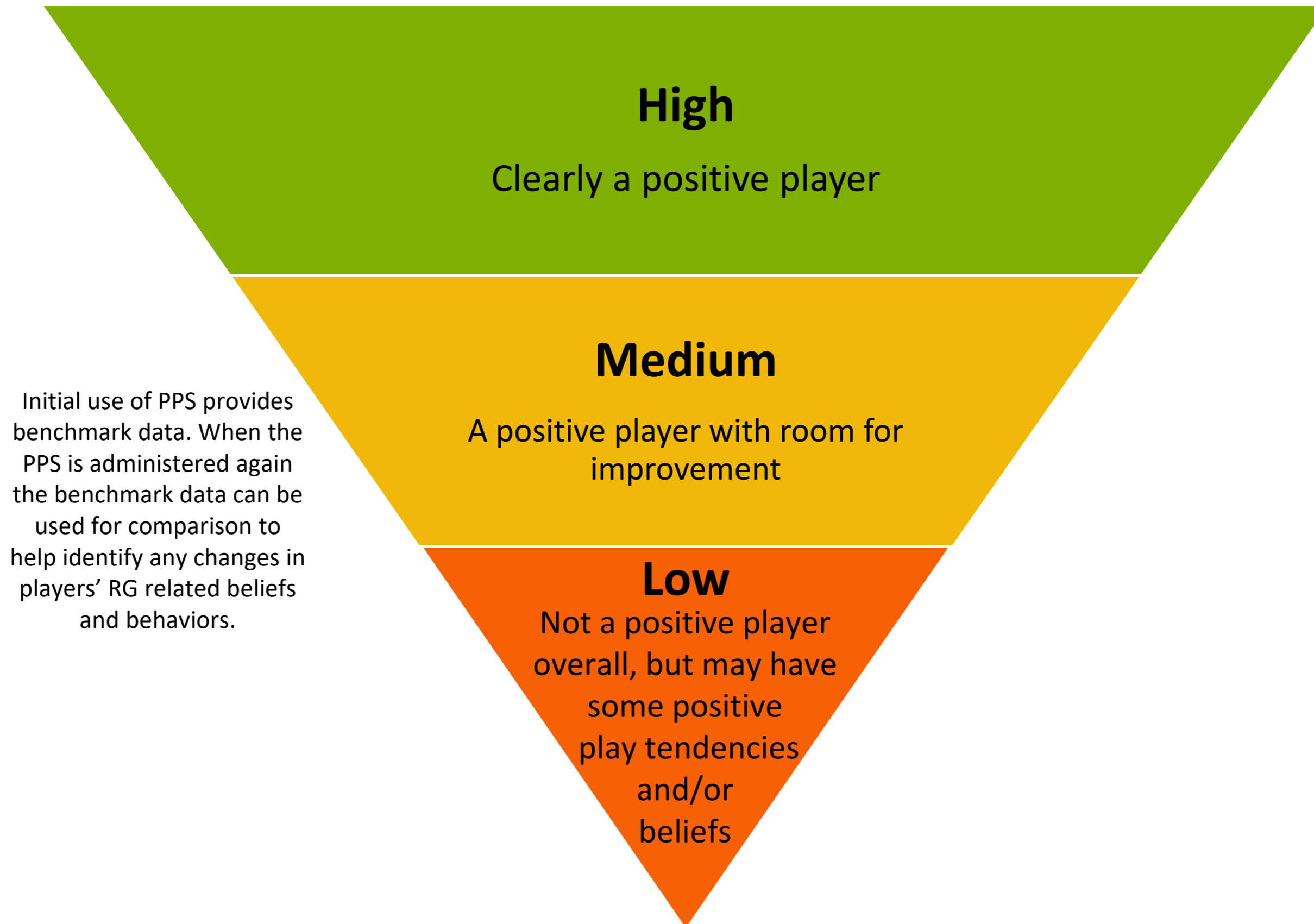
A low PPS score is not an indicator of disordered gambling. However, low positive beliefs and behaviors may contribute to disordered play (over time).



PPS beliefs and behaviors are typically moderately correlated with disordered gambling severity (as measured with the PGSI).

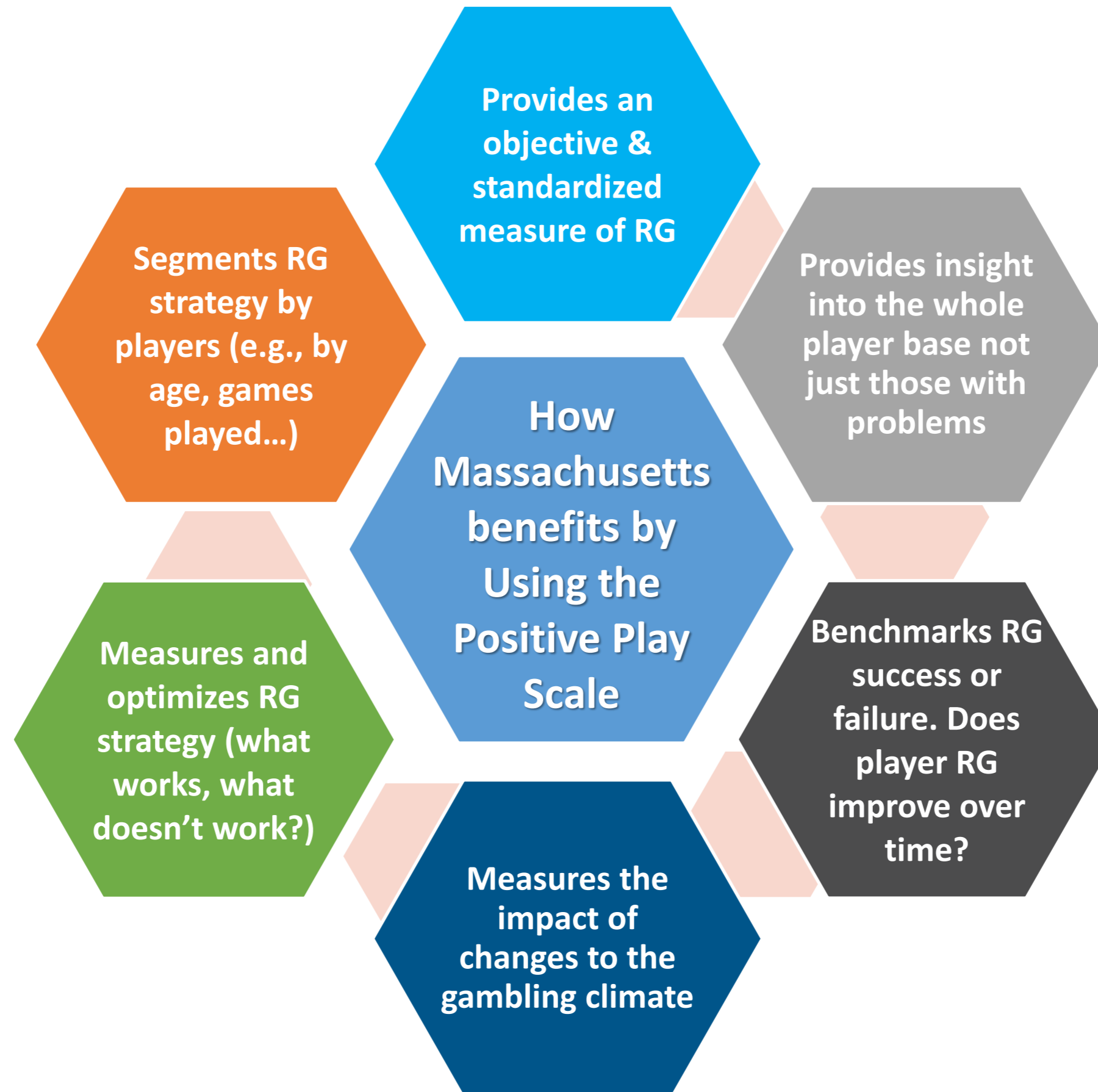
\* PGSI = Problem Gambling Severity Index

# Players can be placed into positive play categories



## Benefits of using the PPS

- ✓ The PPS offers the opportunity to more effectively examine the beliefs and behaviors of the full spectrum of players. Thus, the PPS can be contrasted against existing measures that can only assess symptoms of disordered gambling.
  - For example, measures like the PGSI (i.e., problem gambling screens) are constructed to identify non-typical (disordered) players, who only comprise a small proportion of players.
  - In contrast, the PPS was designed to assess the beliefs and behaviors of players who gamble without problems (i.e., the majority of players).
  - The PPS can be used to assess the utility of new RG initiatives (e.g., an education campaign aimed at dispelling gambling fallacies)



01

Positive Play in  
Massachusetts

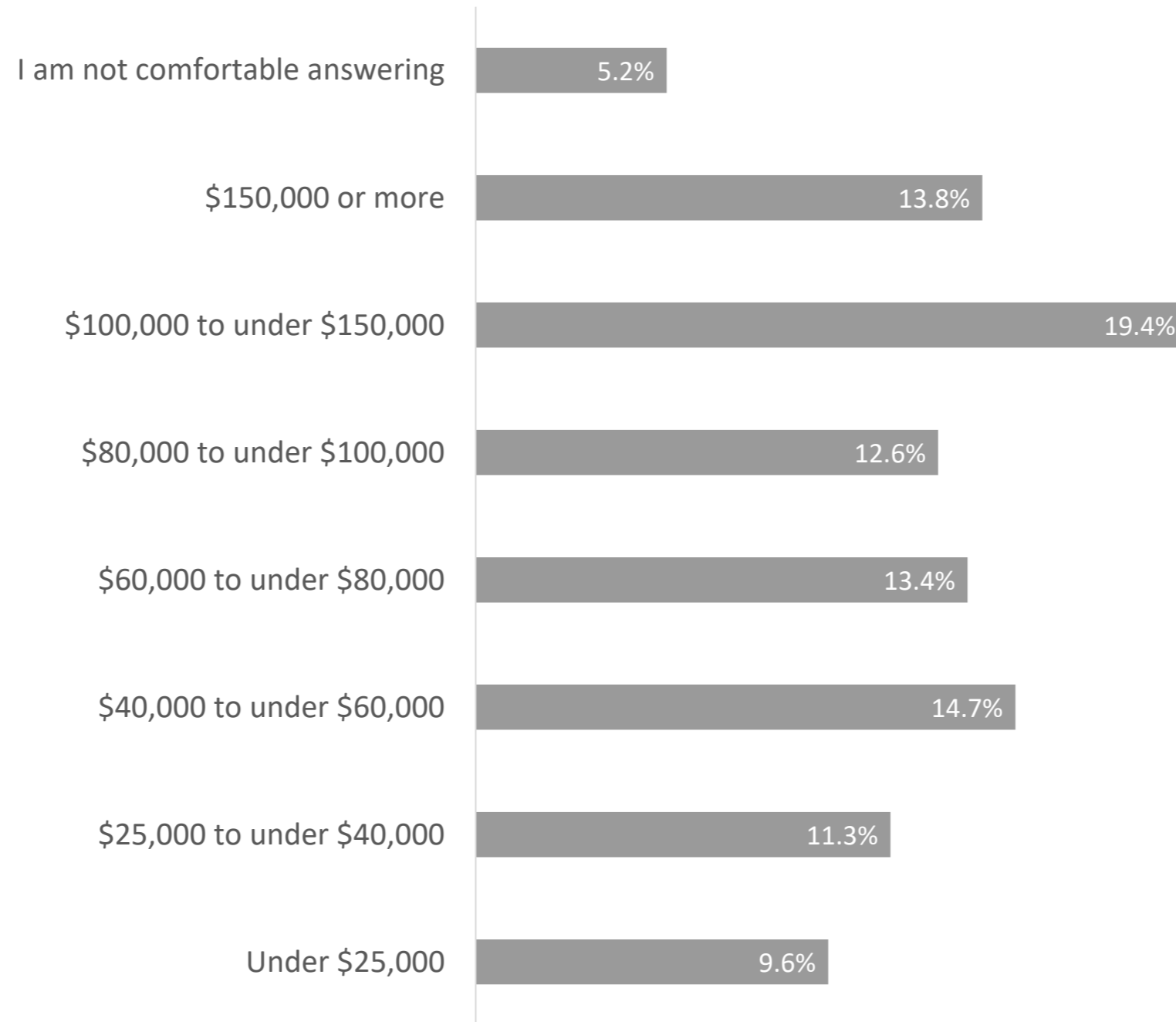


## Measuring responsible gambling in Massachusetts

- ✓ During September-October 2020, a convenience sample of 1,512 Massachusetts players were recruited by a third-party survey company.
- ✓ 100% of the sample had played on at least one game in the last 12 months and 50% had gambled at a Massachusetts casino in the last 12 months. There was an equal number of males/females and the sample was representative by age group.
- ✓ The survey was conducted online and included both the PPS the Problem Gambling Severity Index (PGSI), general demographic questions and questions about the frequency of gambling before, during and after COVID-19 lockdown periods when casinos in Massachusetts were closed, as well as attitudes towards and awareness of various responsible gambling initiatives.
- ✓ The purpose of the study was to identify benchmark PPS scores (i.e., how responsible are Massachusetts players?), to identify specific areas where responsible gambling could be further supported and to discover which player segments were most and least responsible. In addition, to develop a better understanding of gambling during a pandemic lockdown and how players might be supported during such times.

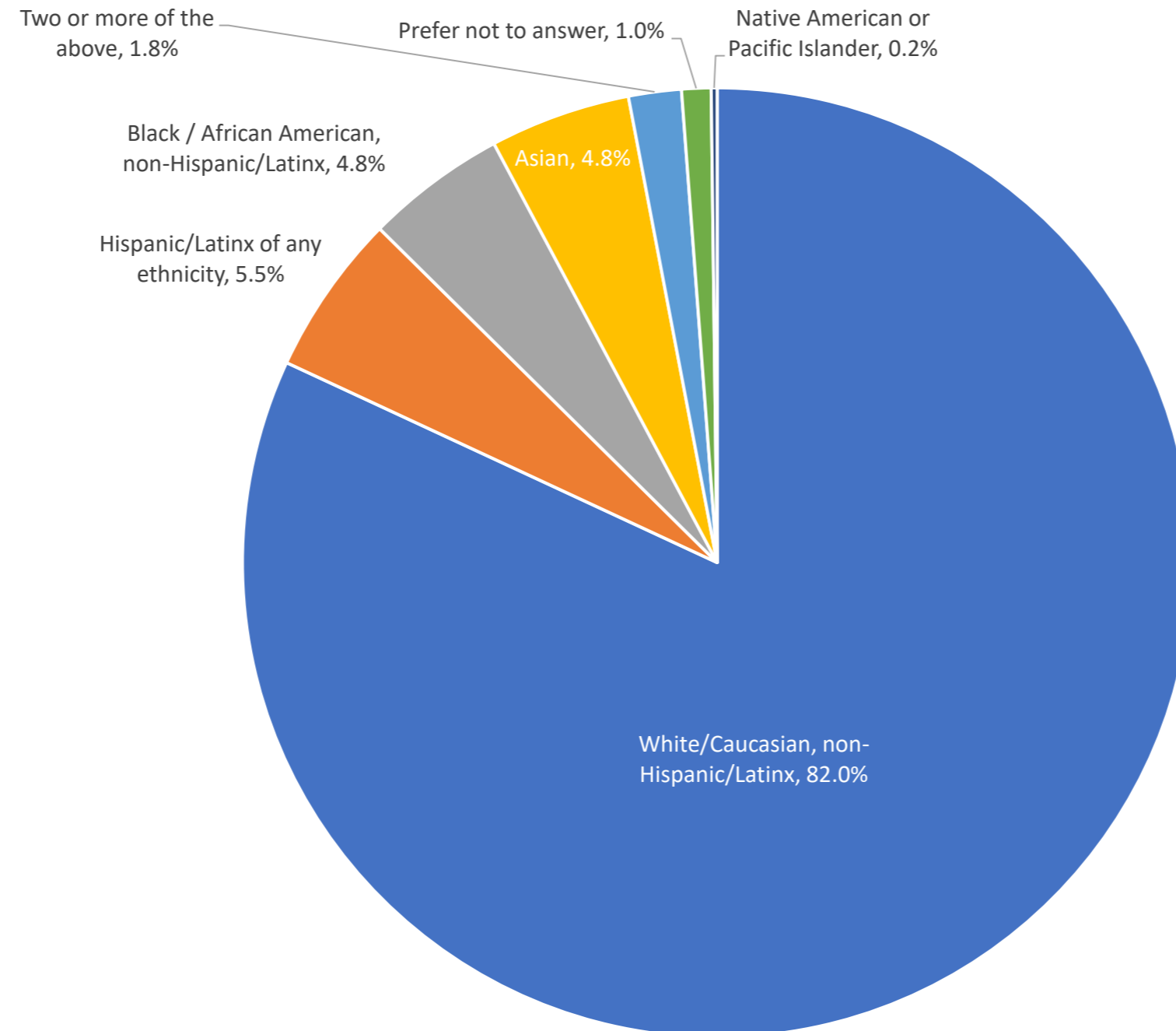


### Household income range (before tax)



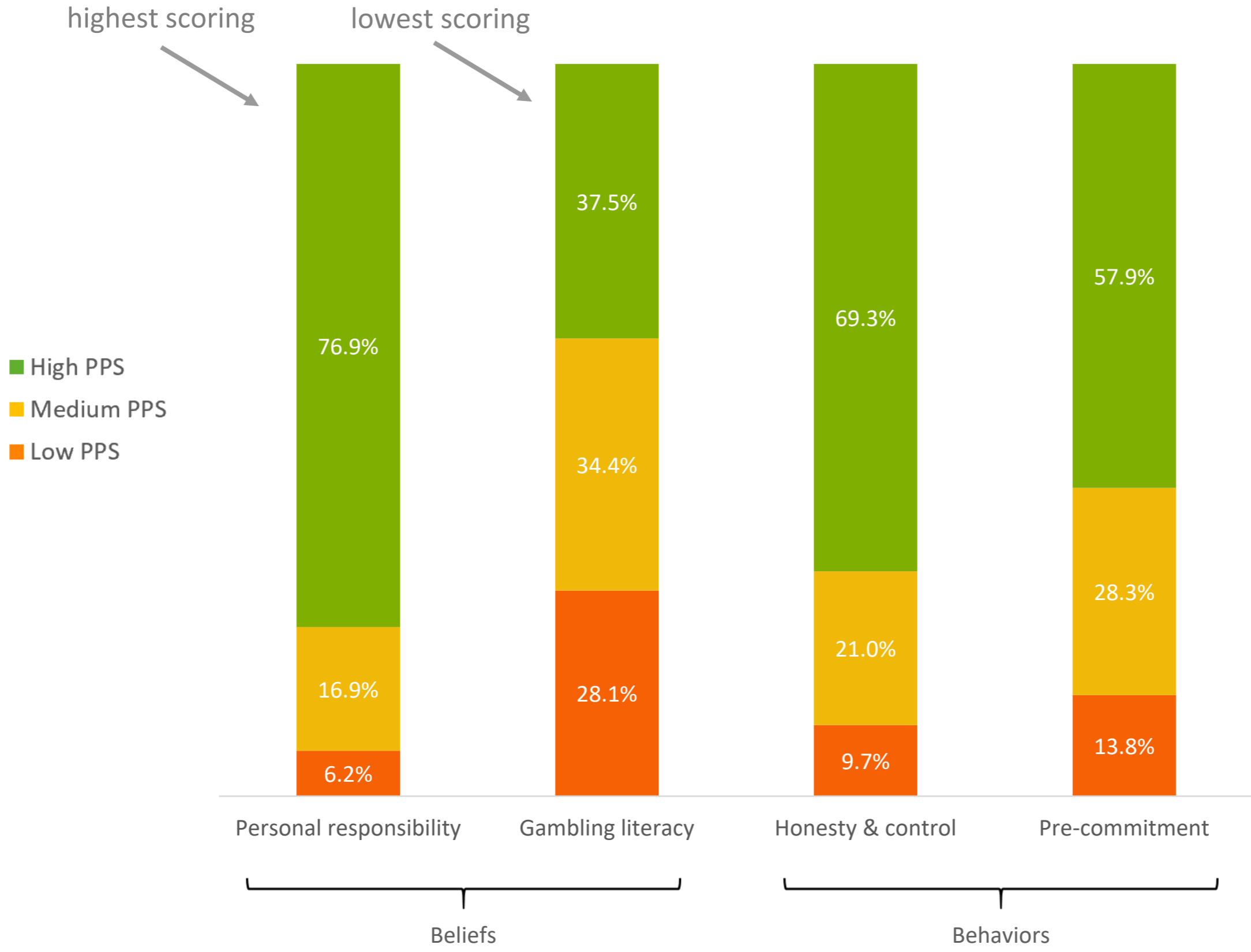
The correlation between income and PPS scores amongst players generally was small

# Ethnicity



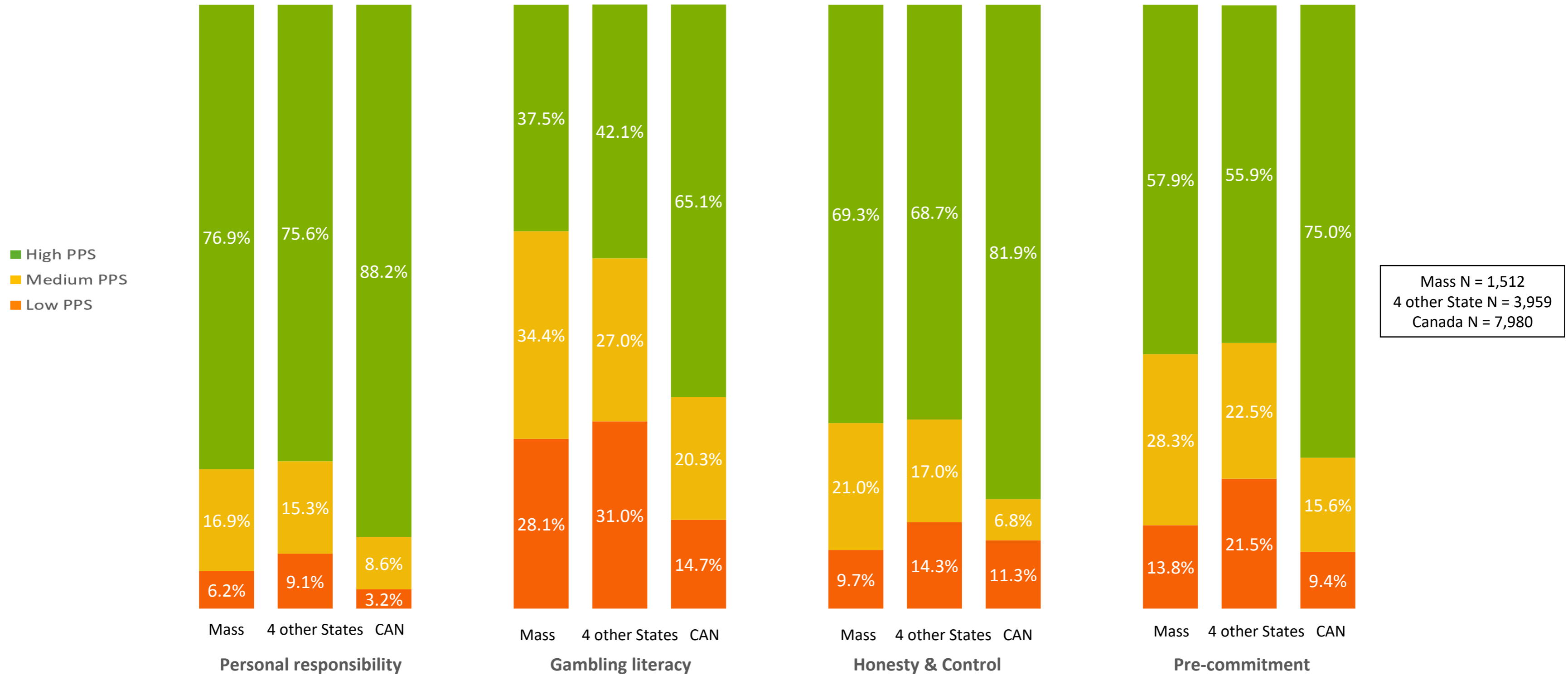
The samples mimic the MA gen pop in terms of age and gender, but not ethnicity. Also, the small number of non-white participants in the study means that a valid comparison of PPS scores for ethnic minority groups was not possible. Future studies may want to over sample amongst these groups to further explore any possible relation between ethnicity and PPS scores.

# PPS scores: all players



These results suggest that strategies to improve players' *gambling literacy* and *pre-commitment* should be considered for Massachusetts players

## PPS scores: Comparison of players in Massachusetts with players in four other US states and Canada



Positive play scores in Massachusetts were similar to those observed in four other US States

# Positive play: all players

## Key findings:

Most players scored high on *personal responsibility* (the highest scoring sub-scale) as well as *honesty and control* and to a lesser extent *Pre-commitment*. However, most players scored medium or low on *gambling literacy* (the lowest scoring sub-scale).

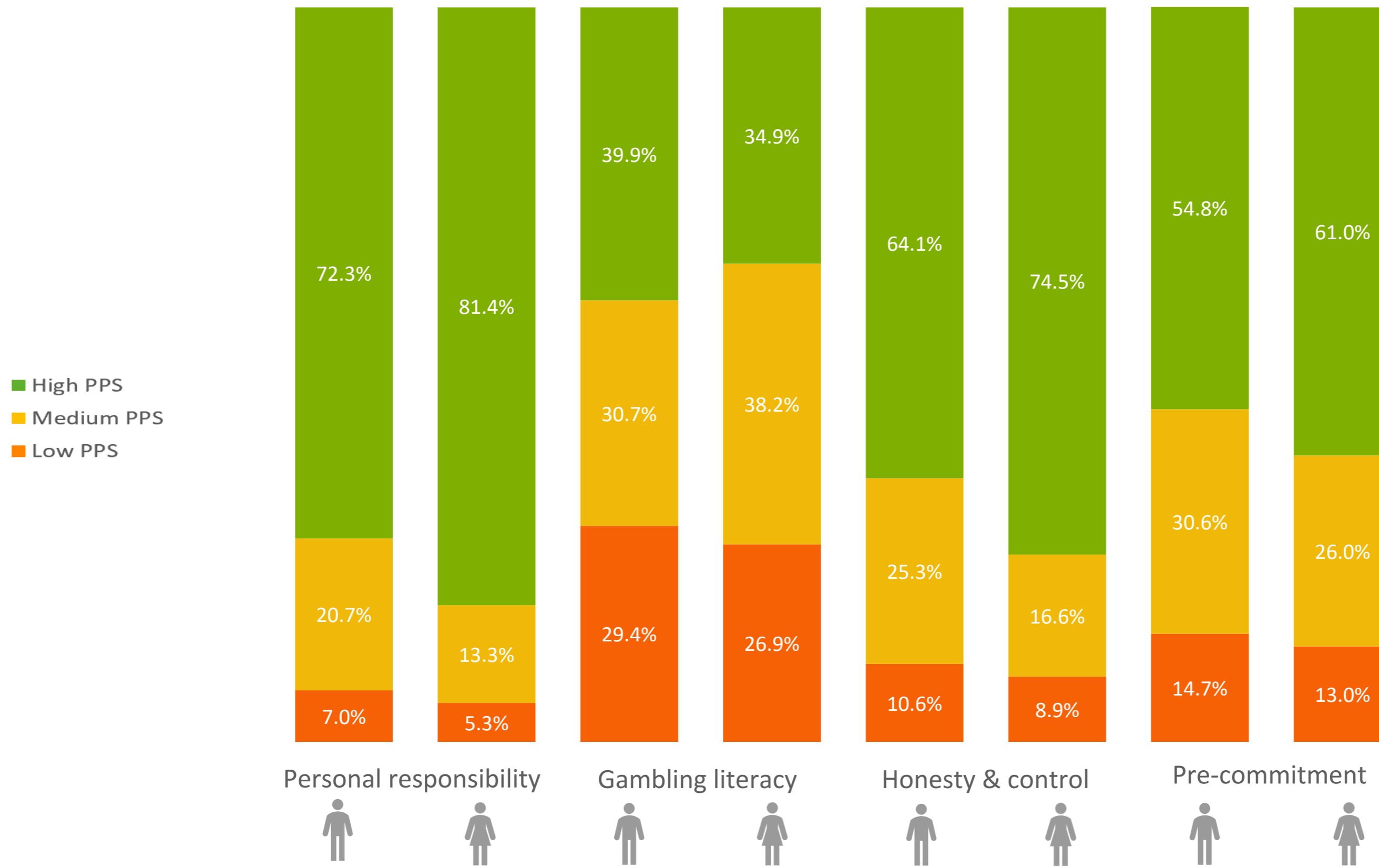
Positive play in Massachusetts closely approximated those observed in the four other US States we have previously examined. In common with those other US States, positive play (all 4 dimensions) in Massachusetts was lower than that observed in a national survey of Canadian players (a survey that assessed positive play in each Canadian province).

## Implications:

To increase *Gambling literacy* it may be necessary to focus attention on educating players about the nature of gambling. In particular, it may be helpful to address erroneous perceptions players may have about their chances of winning. Also, players should be encouraged to *pre-commit* by considering what they spend (time & money) before they begin gambling.

Canada is a world-leader in responsible gambling (RG). One reason is that gambling in each province is managed by a provincial gaming operator with an RG mandate. Best practice in RG is regularly shared between provincial operators. For example, via the Canadian Responsible Gaming Association. An examination of PPS scores in Canada and USA suggests there may be a link between investment in RG (and coordination of RG messages) and positive play.

## PPS scores: by gender



# Positive play by gender

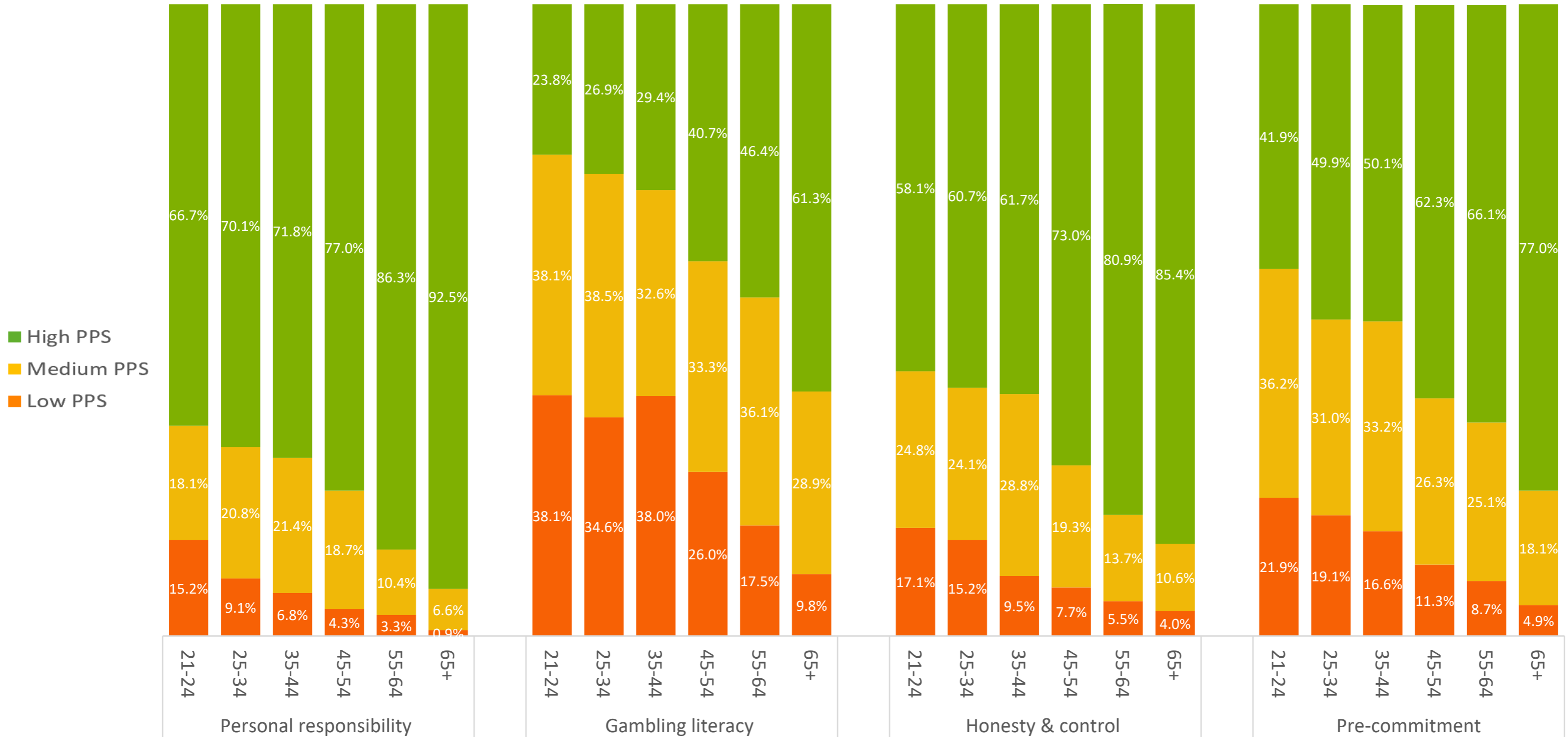
## Key findings:

Positive play belief and behavior scores were slightly lower for males compared to females in relation to the following sub-scales; *Personal responsibility, Honesty & control* and *Pre-commitment*. For *Gambling literacy*, males scored slightly higher than females. Nevertheless, the differences observed were small and not practically meaningful. The gender data show a similar pattern to those observed in previous PPS studies conducted across North America.

## Implications:

Based on the findings of the current research, we do not suggest investing in an RG strategy for Massachusetts that segments by gender, at least in reference to all players and the specific factors assessed by the Positive Play Scale.

# PPS scores: by age



PPS scores improved as age increased, on every PPS sub-scale



# Positive play: by age

## Key findings:

Positive play beliefs and behaviors increase systematically with age. Moreover, this trend was especially pronounced in relation to *gambling literacy* and *pre-commitment*.

## Implications:

It is unknown why positive play increases systematically with age. One possibility is that there is a cumulative effect of exposure to RG messaging and other related initiatives. Older people have had more time to be exposed to RG initiatives and thus may be more influenced by them. Another possibility is that current RG initiatives are more tailored for older players. Regardless of the reason, the results of the current study suggest that improving RG amongst younger players could be a strategic focus. One strategy may be to make RG initiatives more attractive or palatable to younger players, particularly in relation to improving their *gambling literacy* and *pre-commitment*.

# 02

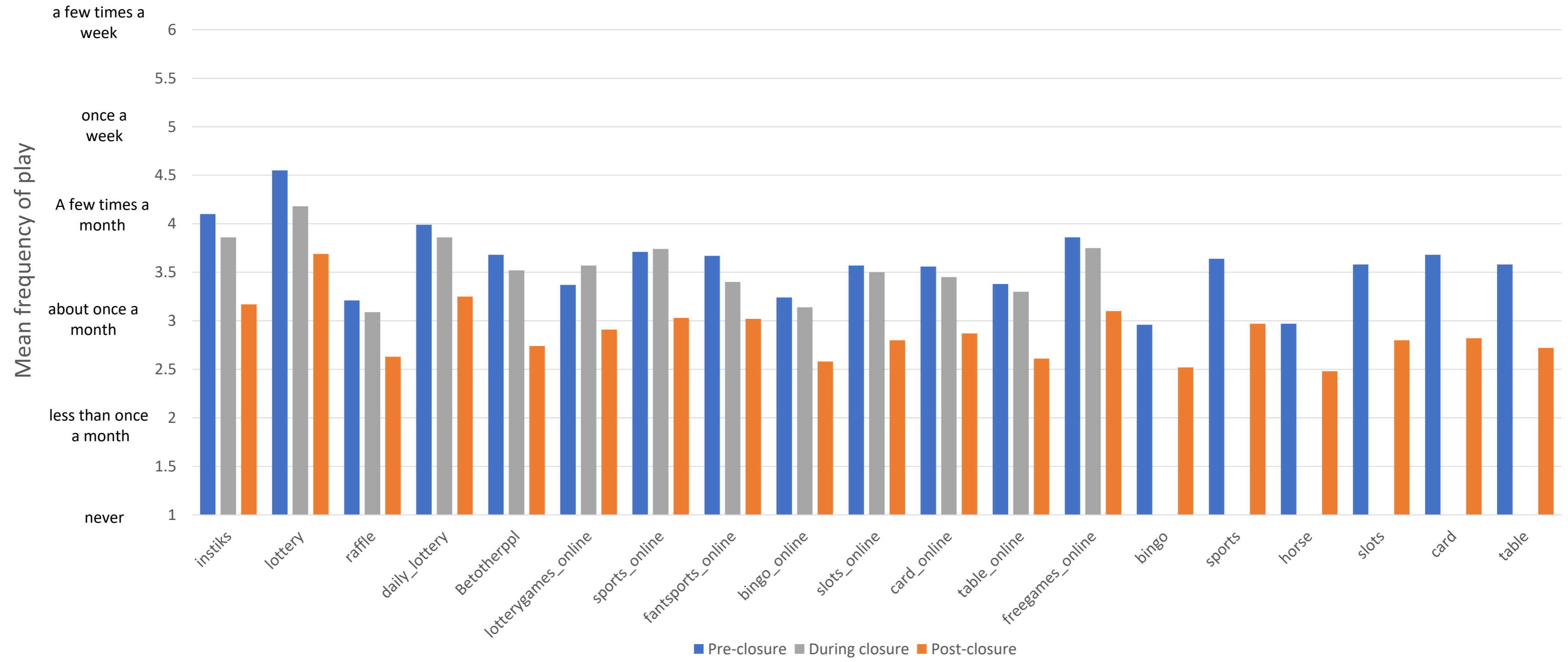
PPS scores by games played and frequency of play



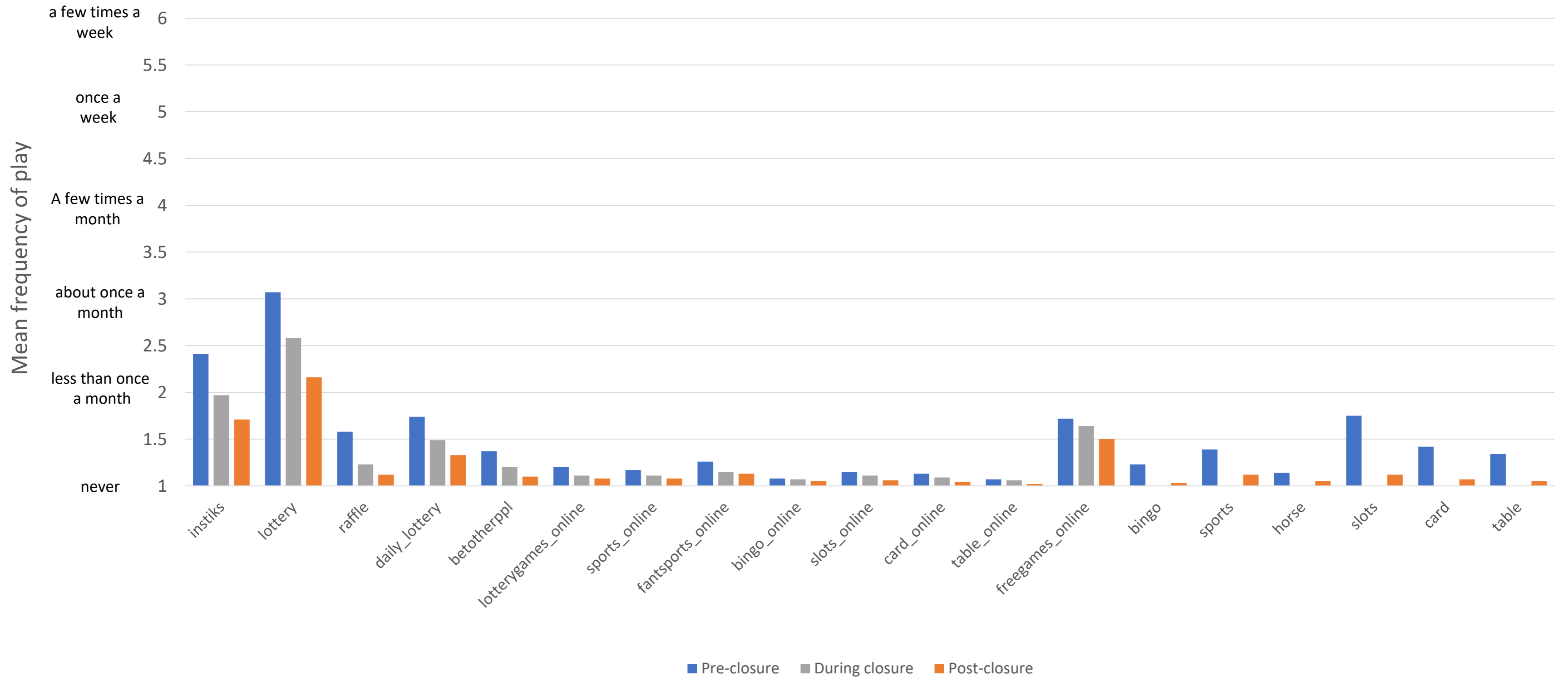
## Cluster analysis of players by game type and frequency of play

- Players will often play on more than one type of game in any given year. This means that analysing PPS scores by game type can be problematic. Also, frequency of play on games is a critical consideration as infrequent play is unlikely to be associated with overall gambling behavior or beliefs.
- Cluster analysis allows us to identify groups of players who cluster together according to the types of games that they play and how frequently they play those games.
- We identified two distinct groups of players.
  - *Higher frequency Multi-game Players* played on a wide variety of games and on average a few times a month.
  - *Lower frequency Lottery Game Players* played mostly lottery draw games and lottery instant tickets on average about once a month or less and other games less than once a month or never.
- We examined the PPS scores of both groups of players as well as PGSI scores and the general demographics that defined each group.
- We compared frequency of play on all games, before the casinos closed due to the COVID-19 pandemic, whilst the casinos were closed and after the casinos re-opened.

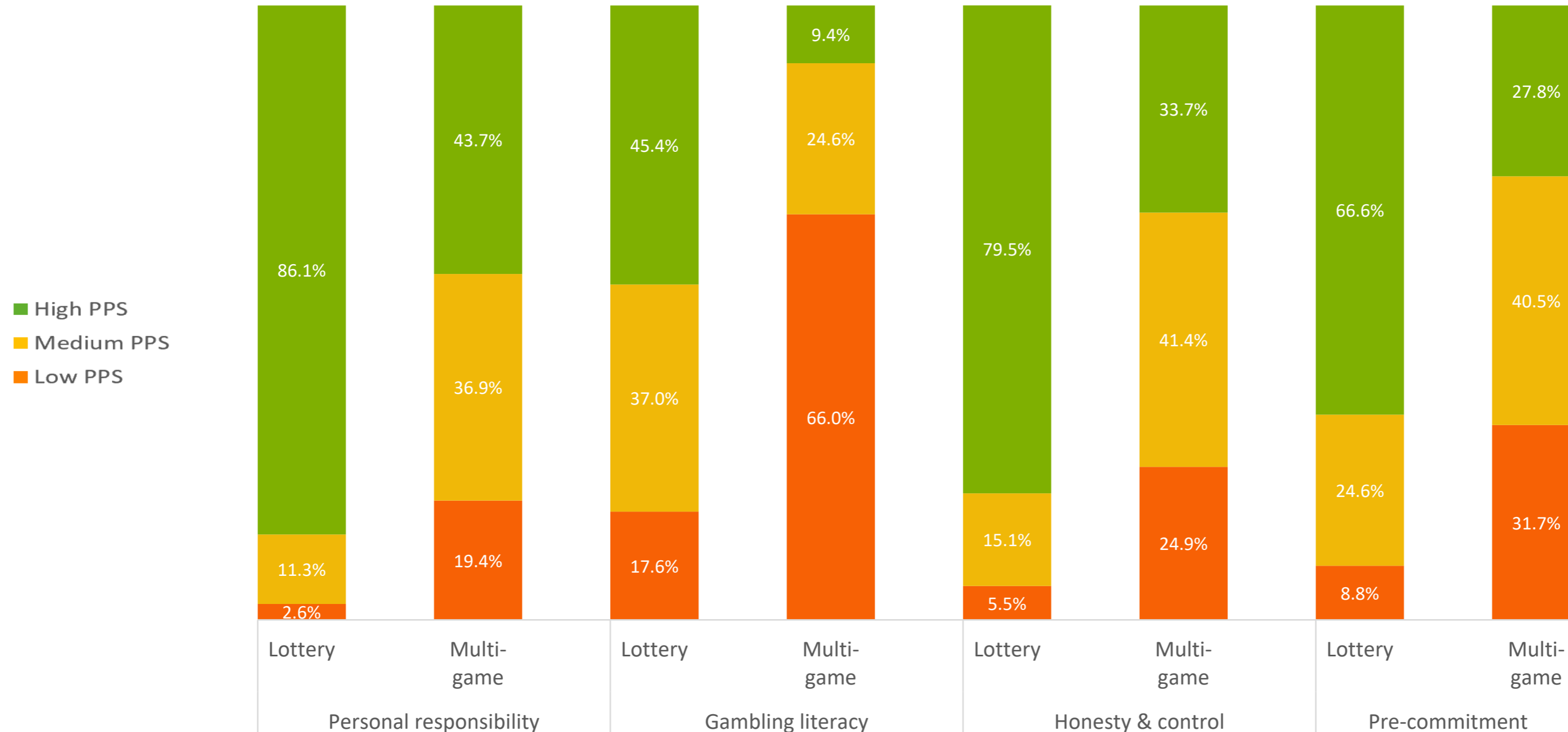
# Higher Frequency Multi-game Players N=309



# Lower Frequency Lottery Game Players (N=1,173)

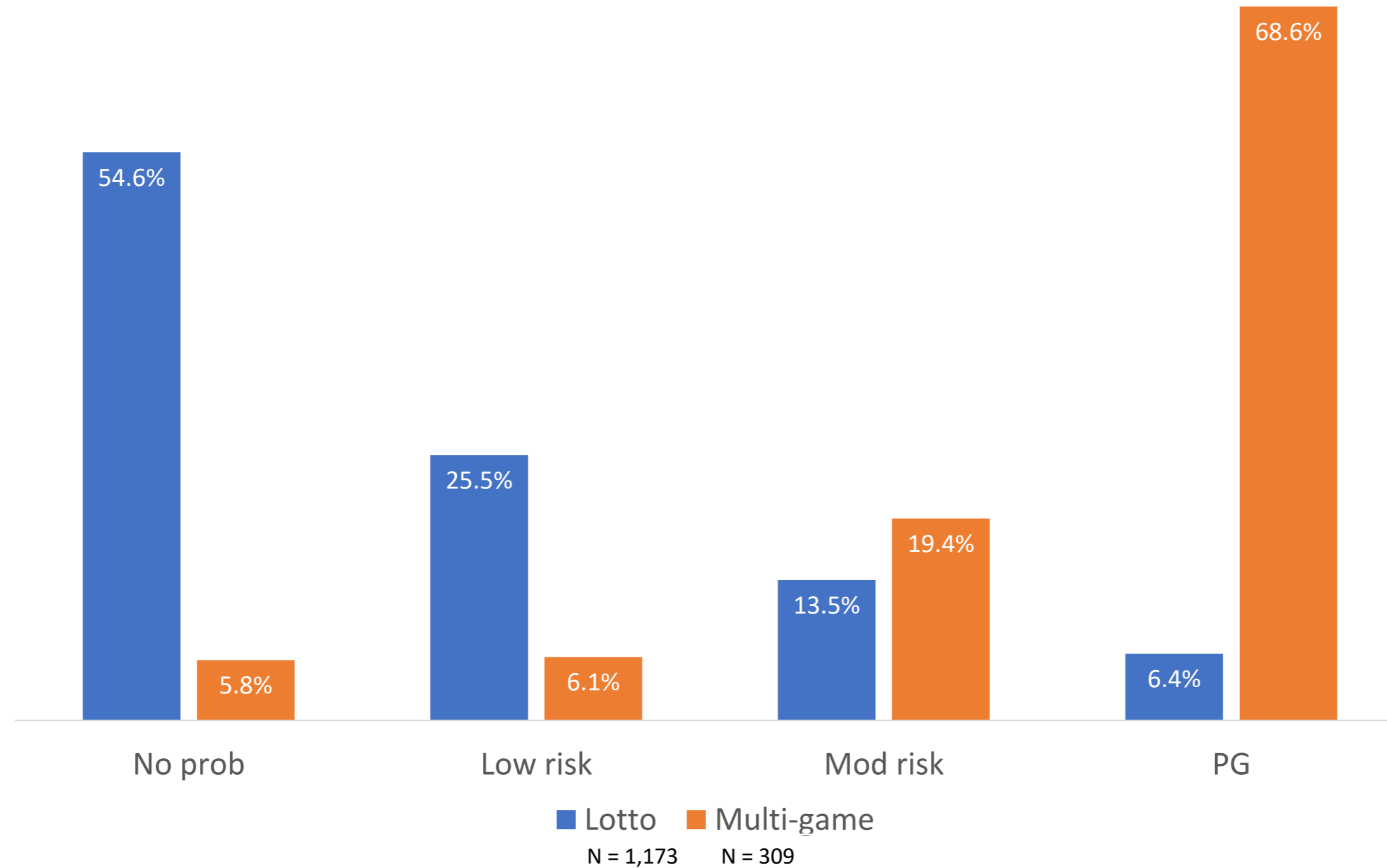


## PPS scores by game cluster (*Lottery vs. Multi-game* players)



Those who primarily played lottery games at a lower frequency (**Lottery** group) had higher PPS scores (i.e., were more responsible players) on every sub-scale compared to those who played lotto games *and* a range of other games more frequently (**Multi-game** group).

## PGSI scores by game cluster (*Lottery vs. Multi-game players*)



Those who played lottery games *and* a range of other games at a higher frequency (***Multi-game players***) had higher PGSI scores compared to those who primarily played lottery games at a lower frequency (***Lottery players***).

**Observed differences between *Lottery players* (N = 1087\*) and *Multi-game players* (N = 293\*) on psychological and demographic characteristics**

Cluster	Psychological characteristics					Demographic characteristics			
	Personal Responsibility mean score out of 7	Gambling Literacy mean score out of 7	Honesty & Control mean score out of 7	Pre-commitment mean score out of 7	Problem Gambling Severity Index (PGSI) mean score out of 27 3-7 moderate risk ≥8 high risk	Household mean income	Age (years) mean	Gender M/F %	Ethnicity White/Non-White %
<i>Lottery players</i>	6.71	5.78	6.45	6.32	1.83	\$60,000 to \$79,999	47	46.6%/53.4%	85.9%/14.1%
<i>Multi-game players</i>	5.74	4.15	5.33	5.22	12.33	\$60,000 to \$79,999	38	61.8%/38.2%	71.7%/28.3%

\* The Ns presented here are slightly lower than for the previous cluster analysis slides as some participants who chose not to answer Qs on income or gender were excluded from the current analysis

**Psychological characteristics:**

Regression analysis indicated large differences between *Lottery players* and *Multi-game players* in terms of the PPS subscales with *Lottery players* endorsing greater personal responsibility, gambling literacy, honesty and control, and pre-commitment compared to *Multi-game players*. As well, there were large differences between *Lottery players* and *Multi-game players* in terms of the PGSI with more *Multi-game players* reporting gambling problems.

**Demographic characteristics:**

There was no difference in household income between *Lottery players* and *Multi-game players*. However, there was a difference between *Lottery players* and *Multi-game players* in terms of age with *Multi-game players* being younger than *Lottery players*. There were also small differences between *Lottery players* and *Multi-game players* in terms of gender and ethnicity. Specifically, more male players were *Multi-game players* as opposed to *Lottery players*. Likewise, non-white players tended to be *Multi-game players* as opposed to *Lottery players*, however the small sample size for non-white players mean that this finding should be interpreted cautiously, and suggest further investigation with a larger sample of non-white players.



# PPS and game cluster

## (*Lottery vs. Multi-game* players)

### Key findings:

Across all the PPS dimensions, those who played only (or predominantly) lottery games at a lower frequency had the highest overall PPS scores.

Playing a wider range of games was more frequently linked to much lower PPS scores, particularly in relation to *gambling literacy*.

Multi-game high frequency players were more likely to have higher PGSI scores

Frequency of gambling declined for both groups during the casino closures and declined again after the casinos opened. The exception being online lottery games and online sports betting, which increased slightly for the higher frequency multi-game players, but only during the period where casinos were closed.

### Implications:

Exposure to a range of games and higher frequency of play is linked to lower positive play. However, it is difficult to determine whether exposure leads to decrements in positive play or whether those who do not hold positive play beliefs or engage in positive play behaviors are more apt to play multiple games at higher frequency.

Focusing RG resources on higher frequency multi-game players would be beneficial. Gamesense advisors should be made of the increased likelihood that such players may have gambling related issues.

# 03

Focusing on lower PPS  
scoring players in  
Massachusetts

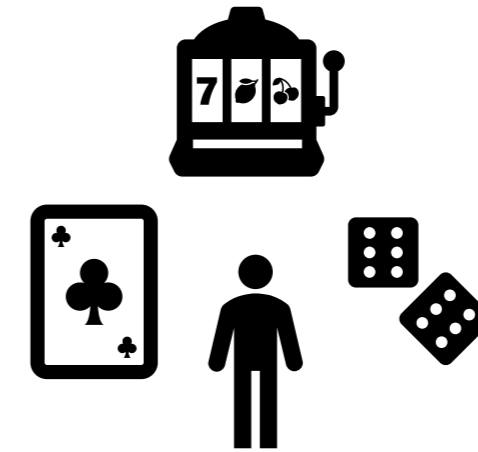


# Player segments who might be targeted for an increased RG focus



Younger players

Younger players scored progressively lower than older players on every PPS sub-scale. In particular, *gambling literacy* and *pre-commitment* scored lower than the other sub-scales. This was most prominent in players aged between 21 and 44 years-of-age. Future RG efforts may want to engage younger players using media and content that resonate with these age groups (see pages 53-60 for ideas on how to increase positive play).



Higher frequency multi-game players

Those who played several game types, other than lottery draw games or scratch tickets, and who played at least once a month, scored lower on the PPS. Although there were no meaningful gender differences in PPS scores amongst all players as a group, males were more likely to be high-frequency multi-game players.

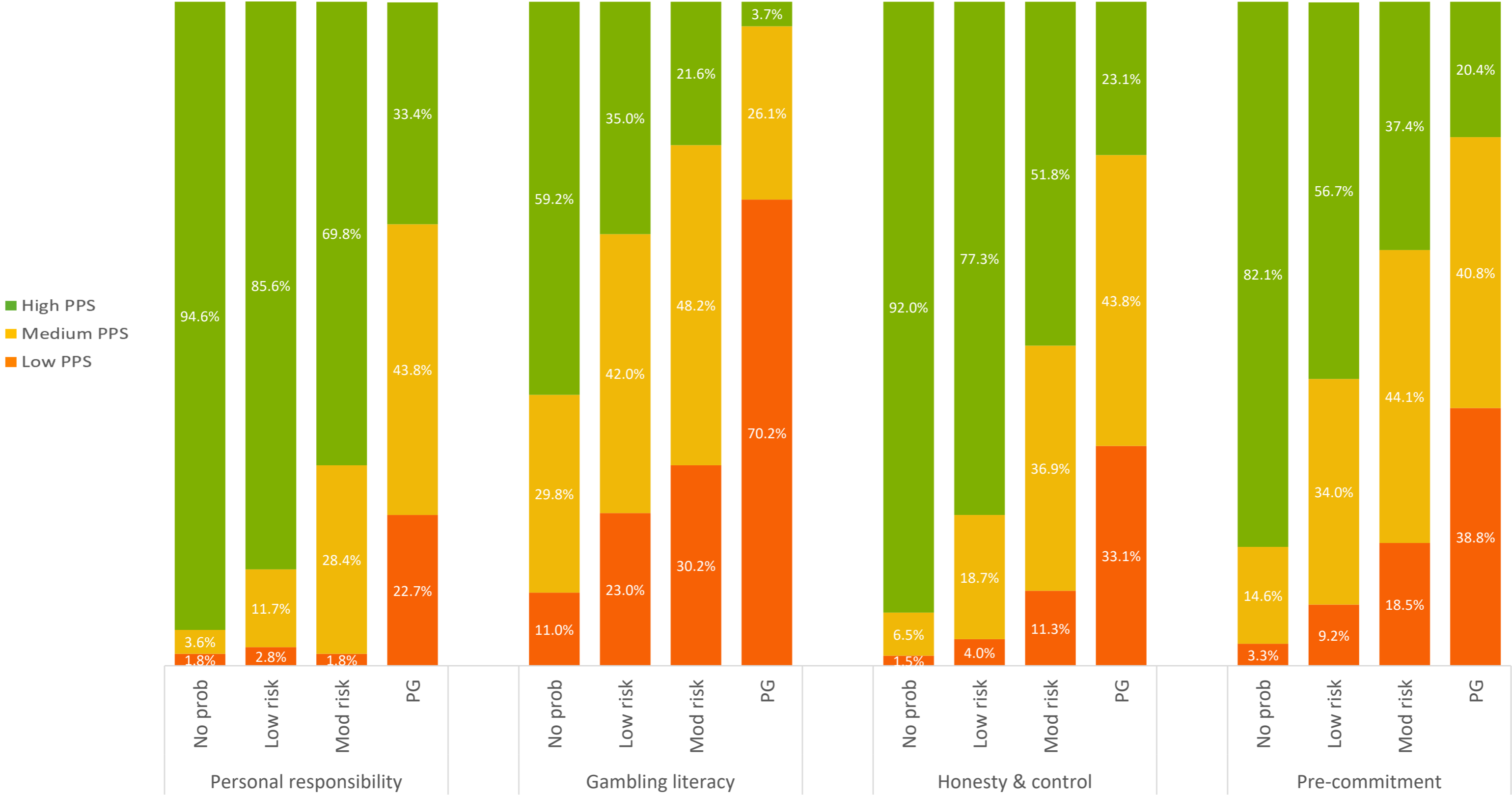
Future RG efforts may wish to focus on higher frequency multi-game players to try to increase their *gambling literacy* and to encourage *pre-commitment* (see pages 53-60 for ideas on how to increase positive play).

A large green triangle pointing downwards, containing the white text '04'.

04

Positive play and problem  
gambling

# PGSI categories by PPS categories



# PGSI categories by PPS categories

## Key findings:

Across all the PPS dimensions, those who scored lowest on the PGSI had the highest overall PPS scores.

PPS scores are partially correlated to PGSI scores

Pearson's R  $-.504$ ,  $P = 0.001$ .

## Implications:

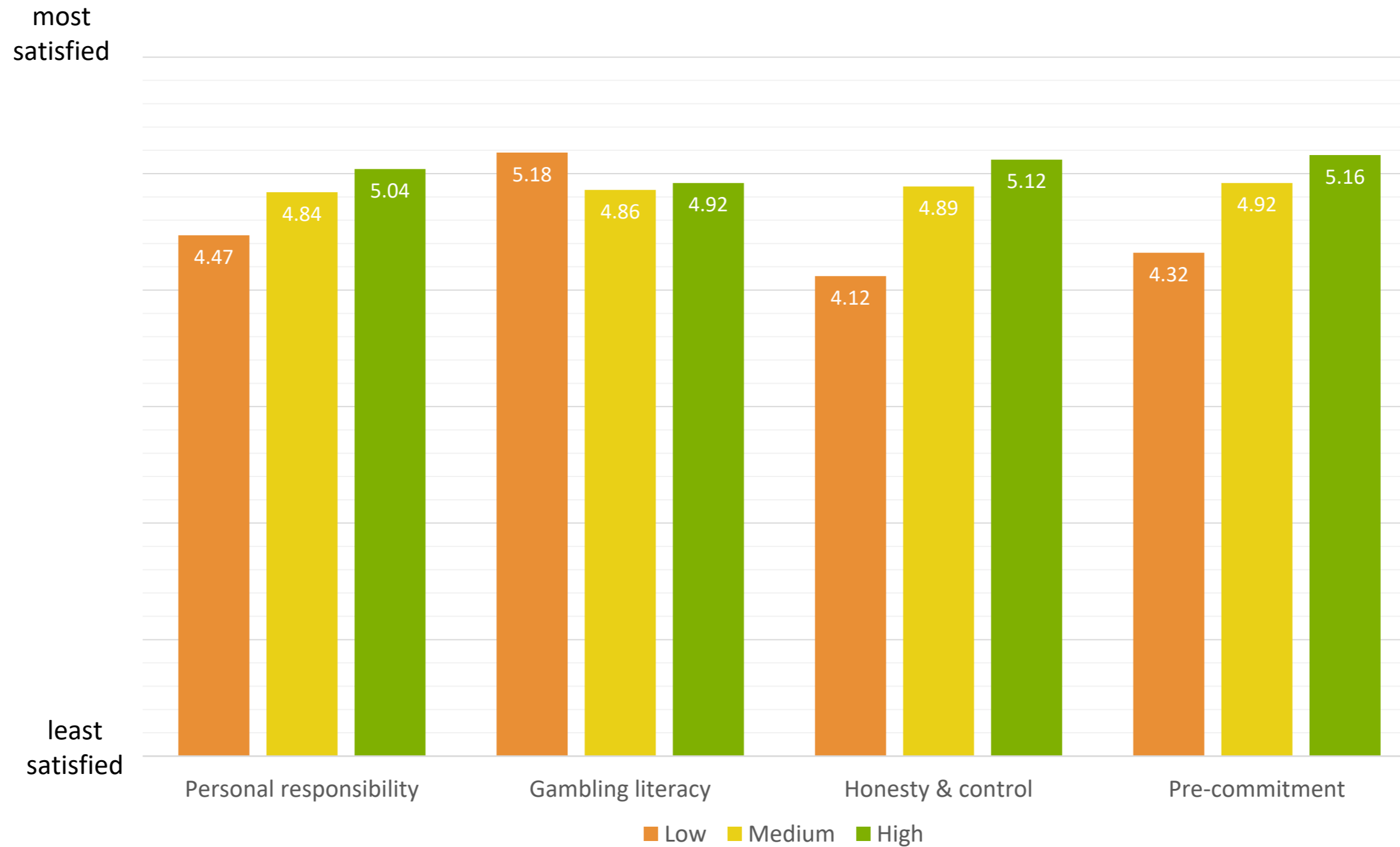
As PPS scores increase, PGSI scores decrease, indicating that positive play is incompatible with problem gambling. However, whilst a high PGSI score reliably indicates a low PPS score, the opposite is not always true. That is, a low PPS score does not necessarily indicate problem gambling. This is likely because some PPS low scoring players do not play frequently enough to show symptoms or the consequences of PG. Consequently, we might speculate that for low PPS scoring players, as frequency of play increases, so does the likelihood that those players will develop a gambling problem.

05

PPS and player  
satisfaction



## Gambling satisfaction mean scores (out of 7) by PPS category scores



Player satisfaction (past year) increased alongside positive play beliefs and behaviors, except in relation to *gambling literacy* where those with low PPS scores had slightly higher satisfaction ratings.



# Positive play and satisfaction with gambling

## Key findings:

Players were more satisfied with their gambling experience when they accepted personal responsibility for their gambling, were honest and in control about their gambling and when they considered limits for the amount of money and time they should spend gambling (i.e., *pre-commitment*).

Interestingly, player satisfaction was not associated with *gambling literacy* scores.

## Implications:

Playing responsibly and holding responsible beliefs about gambling does not appear to decrease satisfaction with gambling, suggesting that RG promotion to date is not a deterrent to responsible play and may even provide added value. That *pre-commitment* and satisfaction are linked makes intuitive sense. Players who pre-determine how much they can afford to lose and then adhere to that limit are unlikely to experience high levels of anxiety due to their gambling losses. Higher scores on *personal responsibility & honesty and control* may be indicative of an overall high level of psychological well being, which may translate into less worry and concern about losing control over gambling than those players who have lower PPS scores.

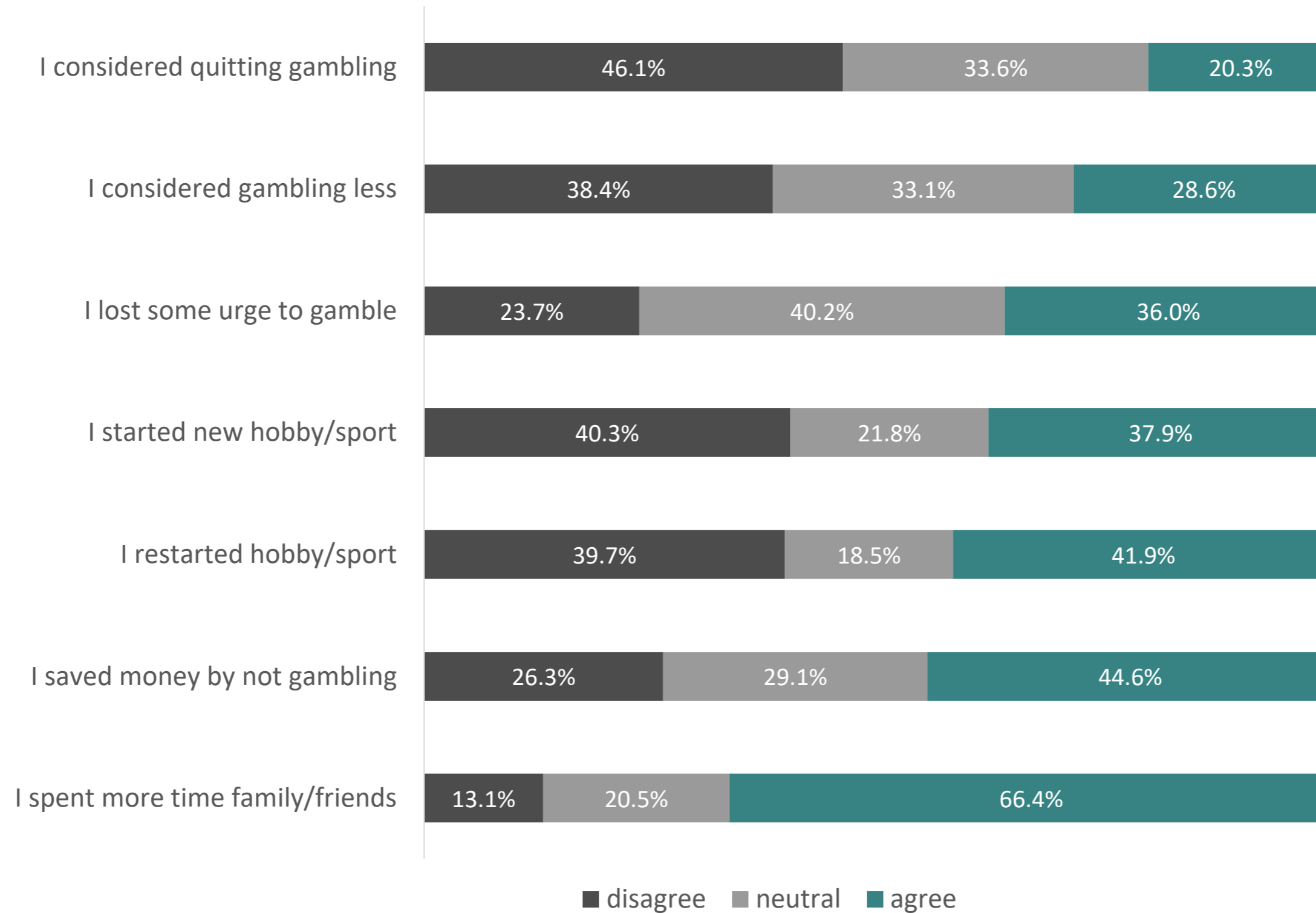
That *gambling literacy* was unassociated with satisfaction was unexpected and deserving of additional empirical attention. Perhaps being well informed about the realistic chances of winning does not increase the fun of gambling, but neither does it appear to diminish the fun either.

# 06

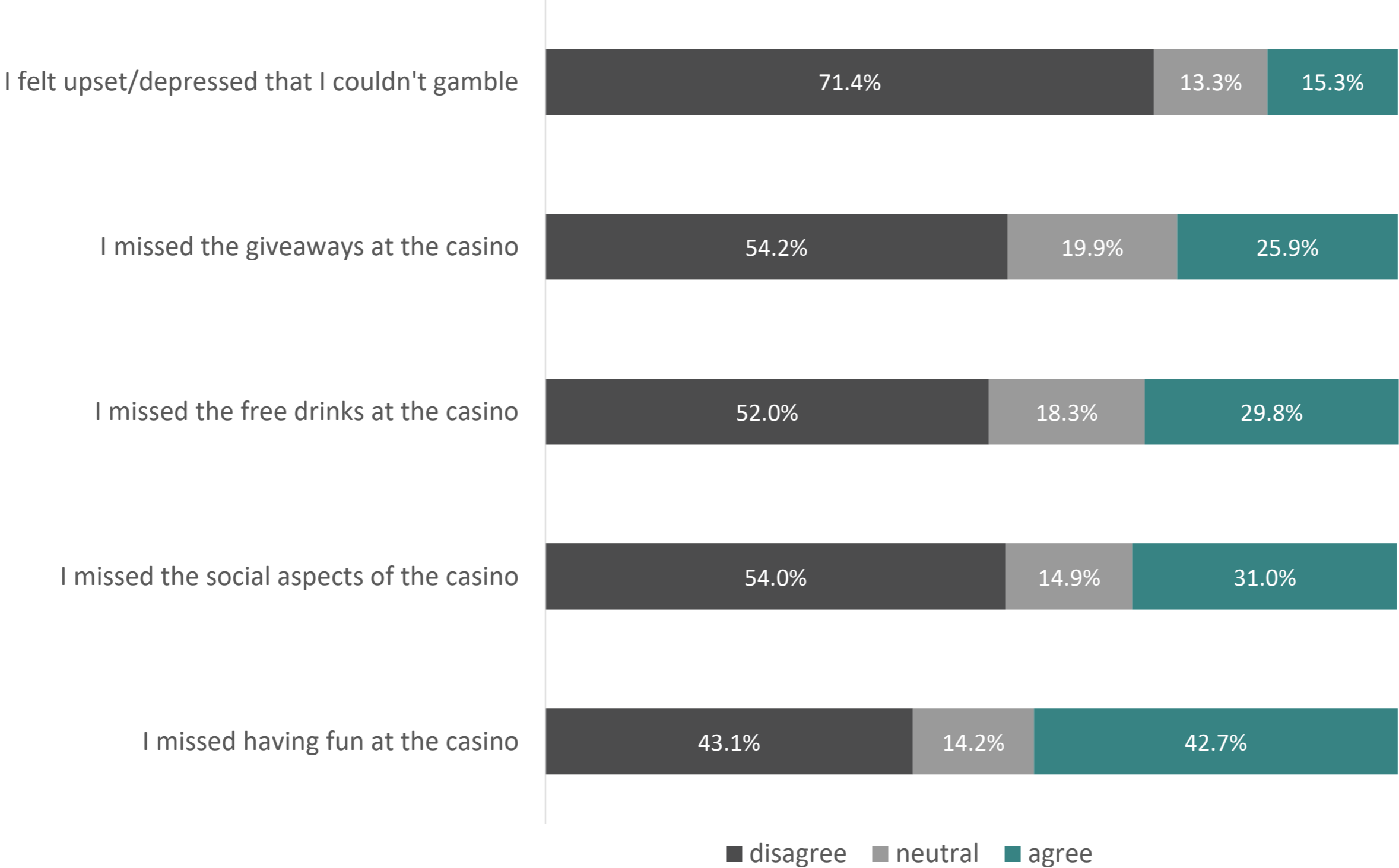
Gambling during and  
after COVID-19  
lockdown



## When the casinos were closed due to COVID-19

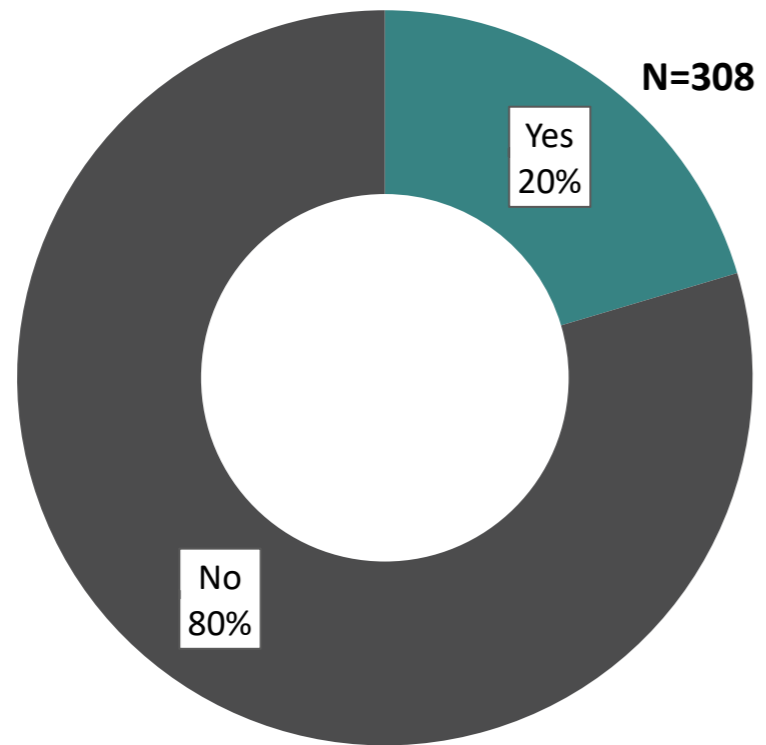


# When the casinos were closed due to COVID-19

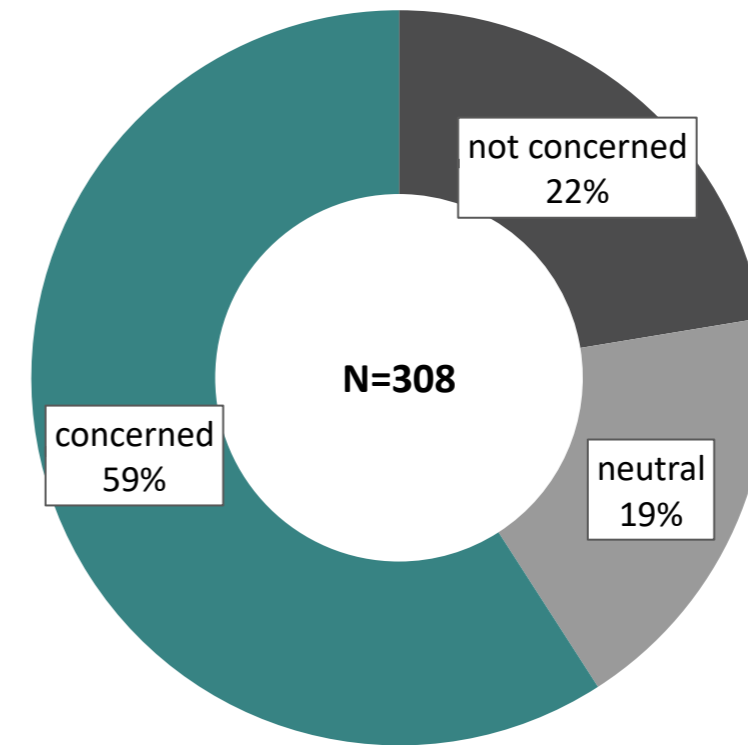


# Casino gambling after the COVID-19 lockdown

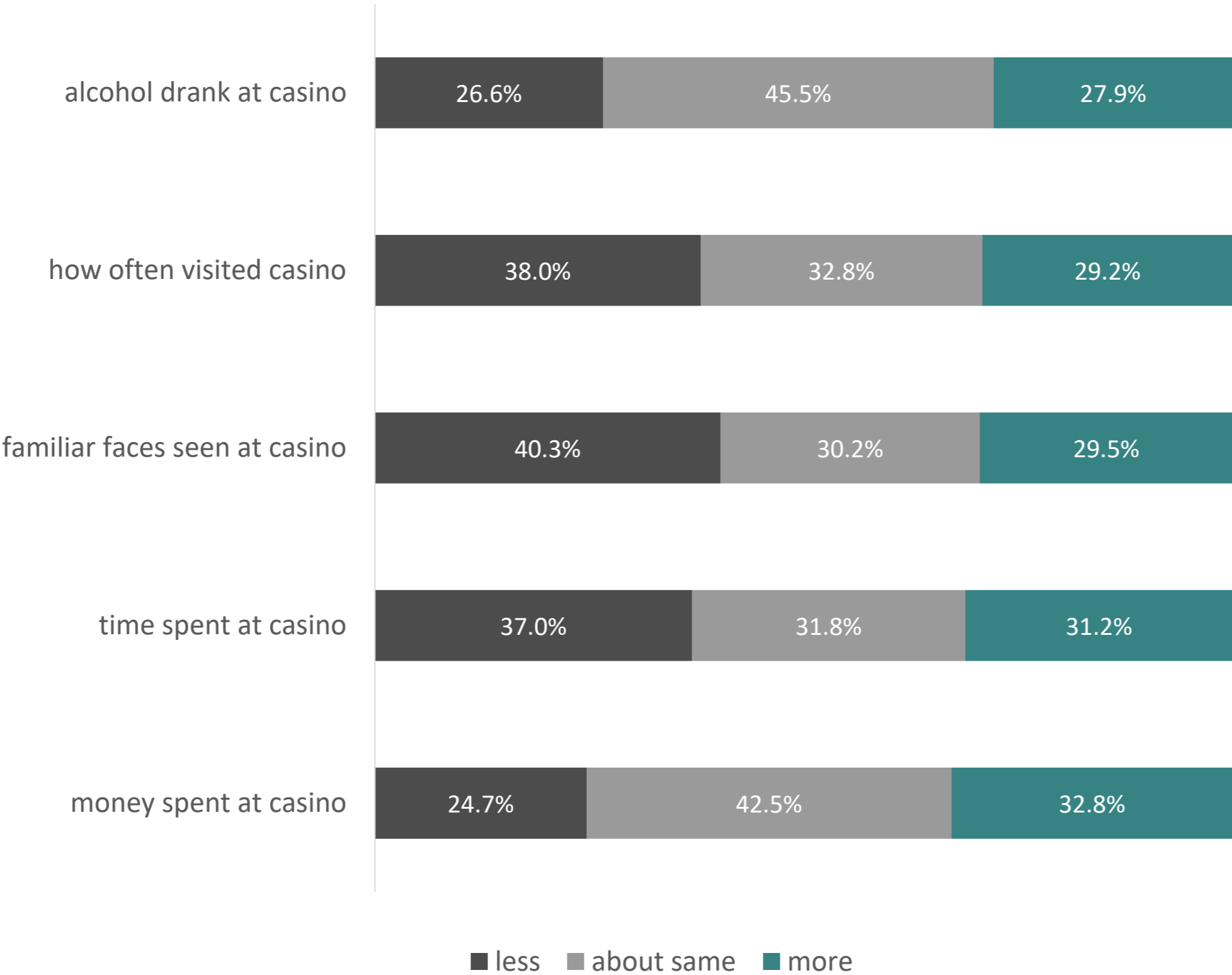
Have you visited a casino since they reopened in July 2020?



How concerned were you about COVID-19 when returning to the casino?



# Behavior since the casinos reopened in July 2020, in comparison to before the pandemic

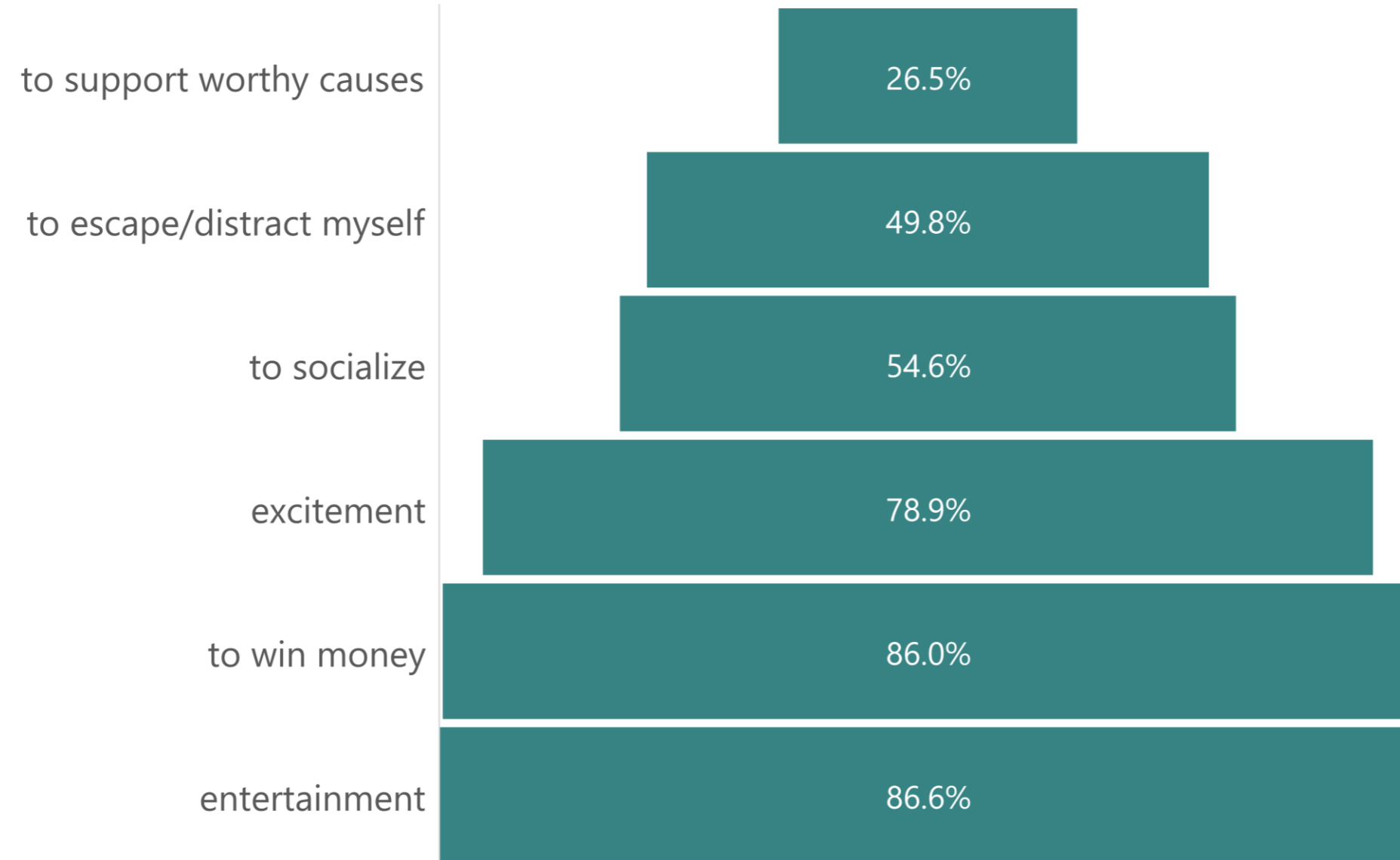


# 07

Gambling motivations and views about gambling and responsible gambling features

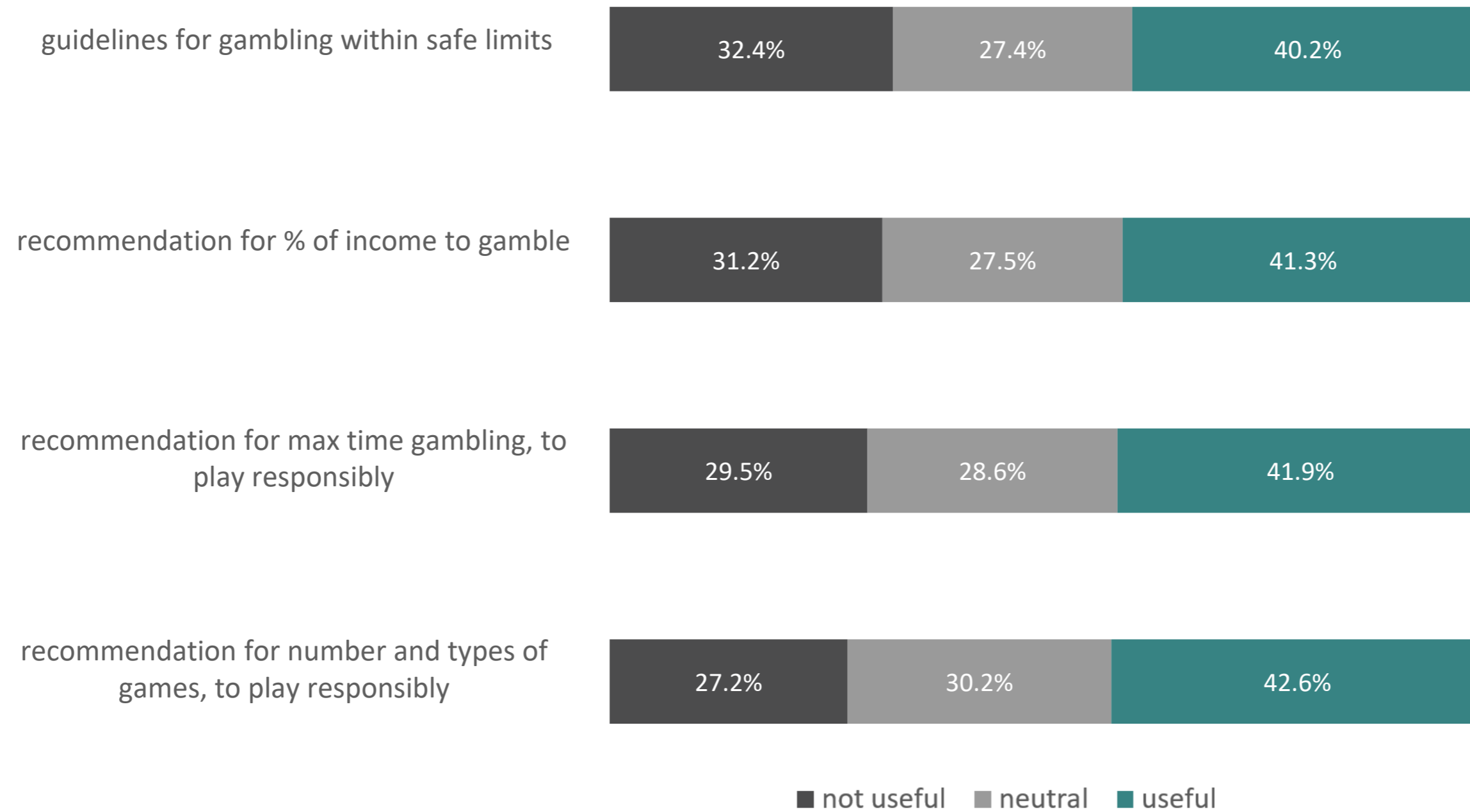


## Reasons for gambling: all players, all games

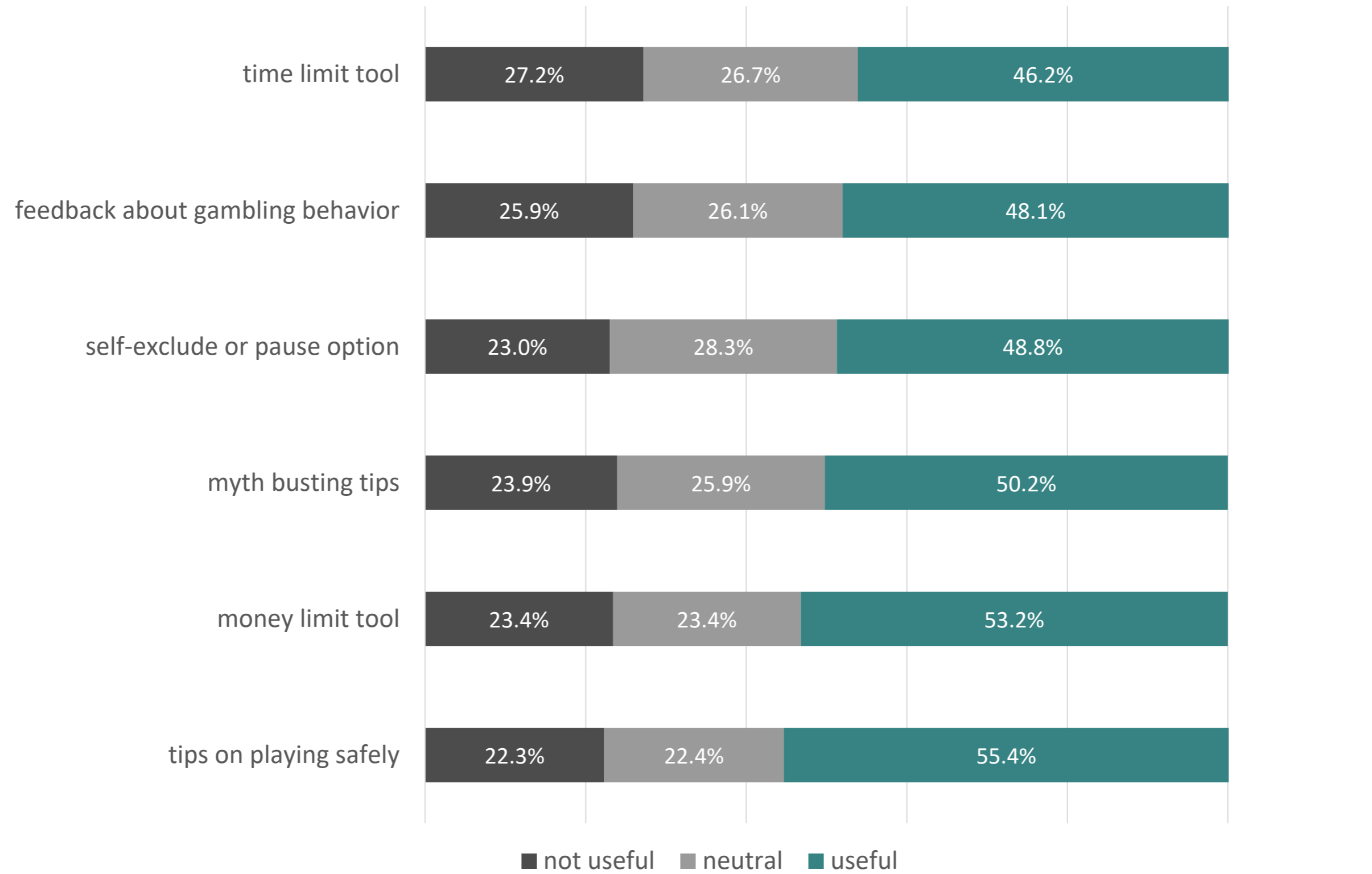




## Views on the usefulness of responsible gambling recommendations/guidelines

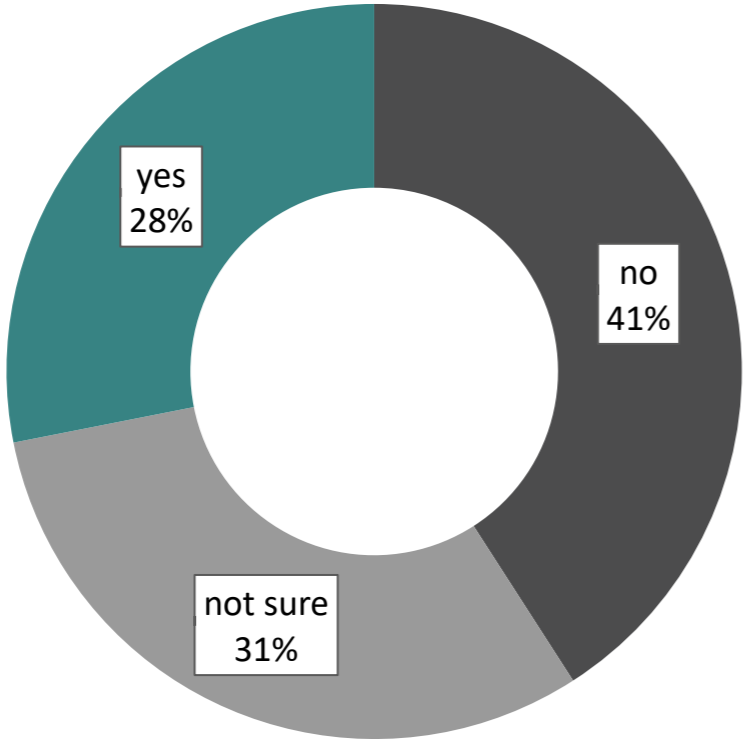


## If online gambling is legalized in Massachusetts, which of the following would you find useful?

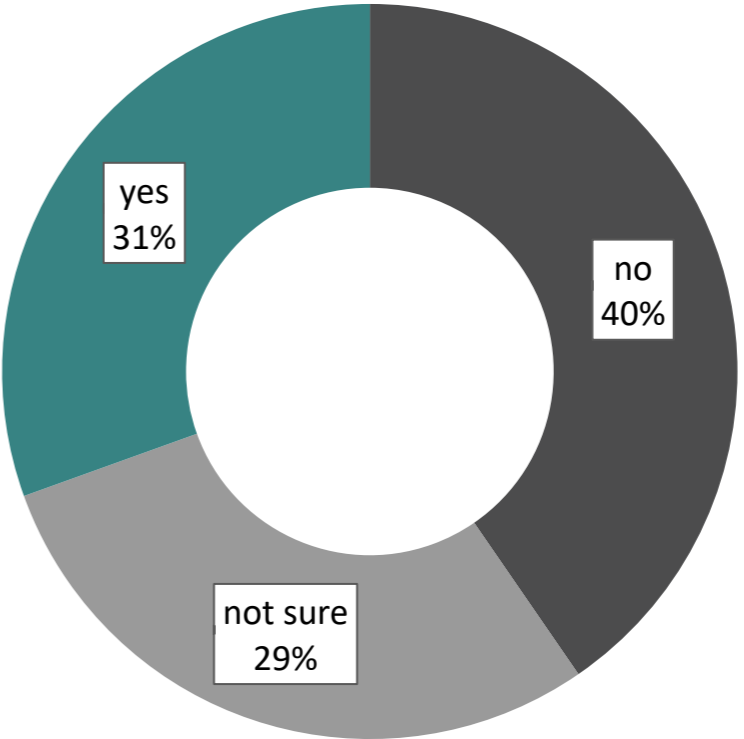


# Views about free online games and video games

Do you consider it gambling to pay money to boost or extend your play in free to play online games/apps (e.g., candy crush or social casinos)?



Do you consider it gambling to pay money to purchase loot boxes (i.e., purchase mystery game items or enhance play) in video games?



# Summary of key findings



08

Ideas for  
increasing  
Positive  
Play



# Increasing Gambling literacy and Pre-commitment scores amongst players in Massachusetts

- A segmented approach is critical
- Identify a range of possible interventions
- **Easy Attractive Social Timely**
- Work with stakeholder group to narrow down ideas
- Test ideas with player groups
- Define measurement goals and strategy
- Re-test PPS scores with same participants

# Ideas for increasing Pre-commitment scores amongst Massachusetts players

- **Social proof** the idea that people are influenced by what others do

## *Did you know that.....*

“86% of players in Massachusetts report that they consider how much money they are willing to lose before they play.”

“94% of players in Massachusetts agree that they should only gamble when they have enough money to cover their bills first.”

“86% of players in Massachusetts agree that they only gamble with money that they can afford to lose.”

- **Anchoring** communicate the average amount that Lotto or scratch ticket jackpot winners bet.

# Ideas for increasing Pre-commitment scores amongst players in Massachusetts

- People like to be **consistent**, making a **commitment** encourages them to follow through
  - Ask players how they will decide on a limit before they gamble
  - Give them some options and ask them to tick which strategies they will use
- **Reduce friction**
  - If possible, make setting a limit the default action before playing
- Develop **Positive Language** for all player facing interactions and features (e.g., avoid “limit setting” maybe “My money” or My bankroll”). Specific language needs to be developed and tested with players. Consider dropping the term “*Responsible Gambling*” from all player facing communications as the term is associated with problem gambling.



# Ideas for increasing Gambling literacy scores amongst players in Massachusetts

## ➤ Social Proof

“most players in Massachusetts agree that.....”

“Gambling is not a good way to try to make money” (82% of players in Massachusetts agree)

“Your chances of winning don’t improve after you lose” (62% of players in Massachusetts agree)

“Playing more frequently doesn’t improve your chances of winning more than you will lose” (66% of players in Massachusetts agree)

➤ Videos (Social media, in-venue screens, TV)

➤ What every player needs to know

<https://www.youtube.com/watch?v=ZxMKhUMF-EE>

**An example of applying findings from the PPS in Nova Scotia for Responsible Gambling Awareness week**

Kai the surfer

<https://www.youtube.com/watch?v=VLB8nVq824g>

Norah the coffee connoisseur

<https://www.youtube.com/watch?v=Su16V6AqAhE>

# Ideas for increasing Gambling literacy scores amongst Massachusetts players

- **Reward &/or reciprocity** players need to see merit in attending to an RG message
- **PPS self-test** develop a PPS based fun quiz for players to learn about their playing style

# Ideas for increasing overall player engagement with RG

- **Rebrand RG** develop a more positive way to communicate with players to avoid negative connotations (RG experts and marketing collaboration)
  - Develop a more positive overall term to replace RG in all player facing communications
  - Develop more positive terms for all RG related player tools (limit tools, budget tools, self-exclusion,



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PUTTING RESEARCH INTO PLAY

