

Changes in gambling and gambling problems in Sweden from 2008 to 2015

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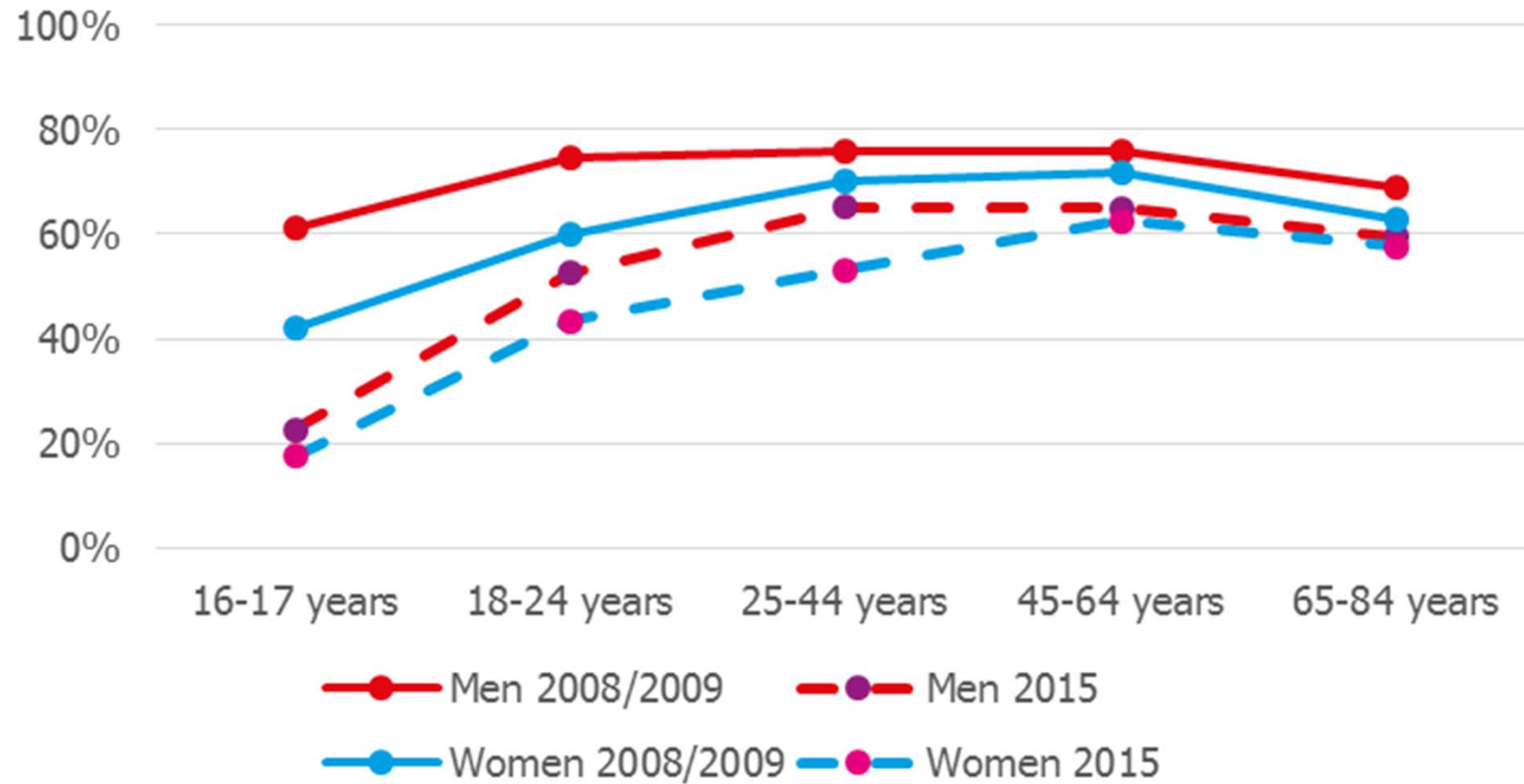
Acknowledgments

- Swelogs Advisory Board
 - Rachel Volberg
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 - Per Binde
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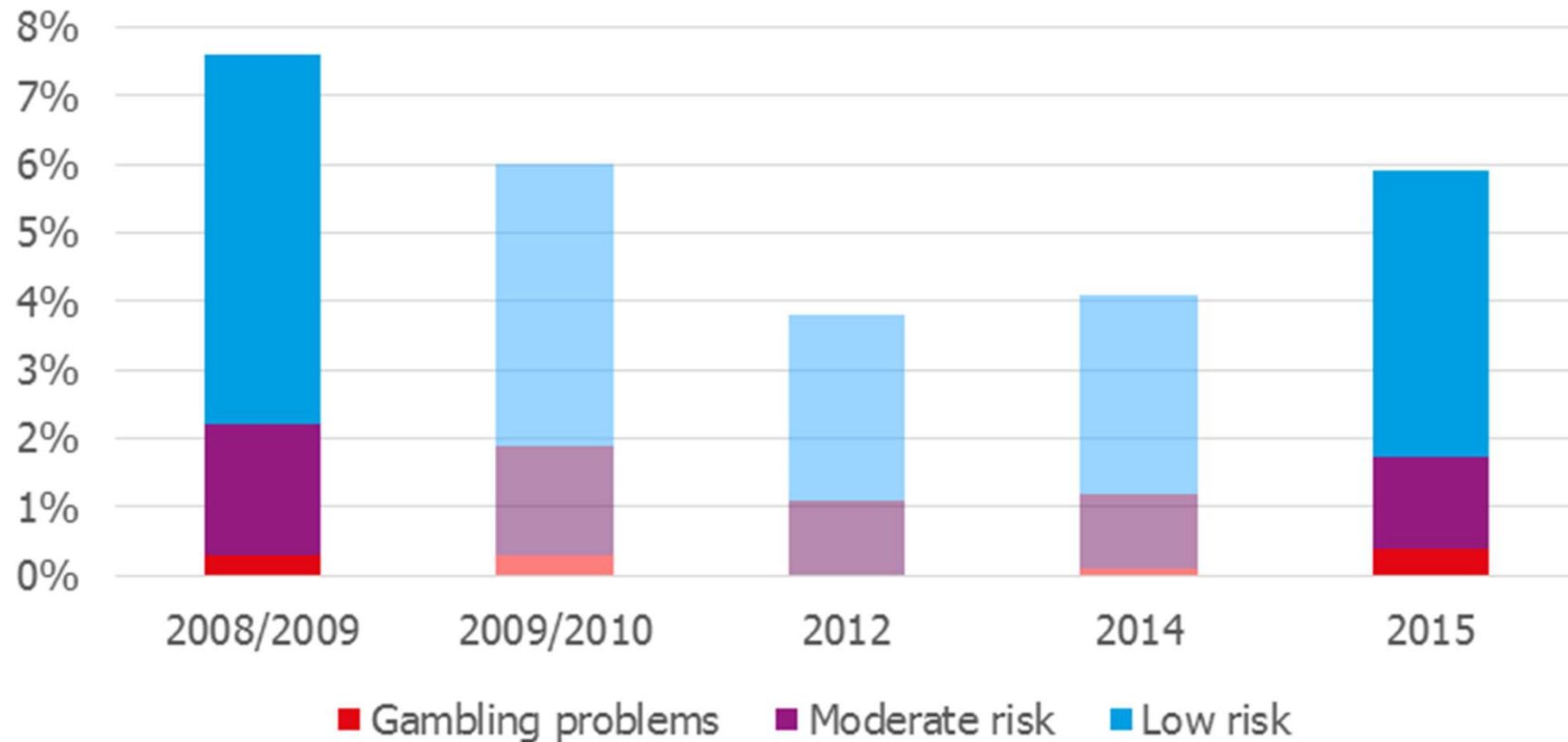
Gambled last 12 months

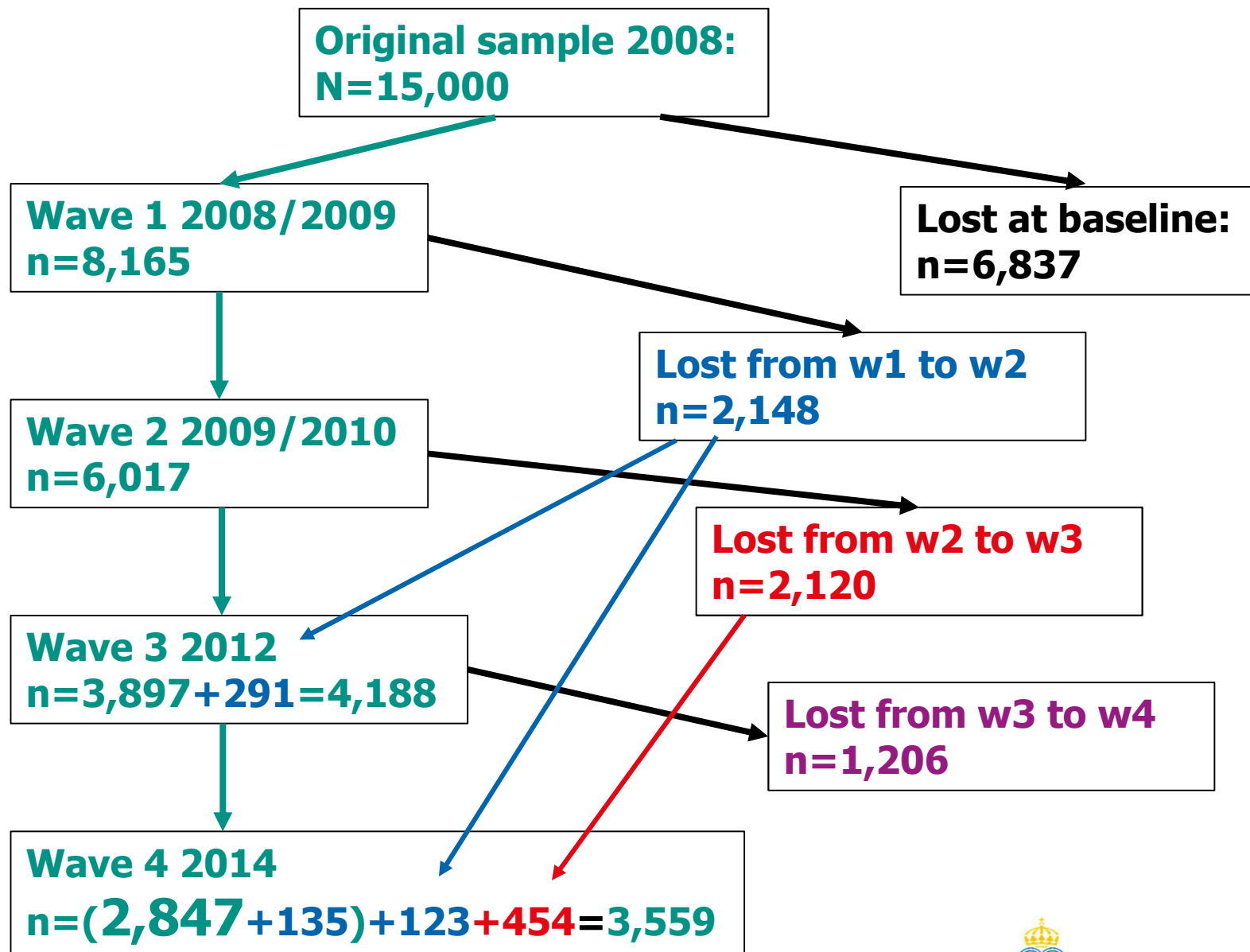


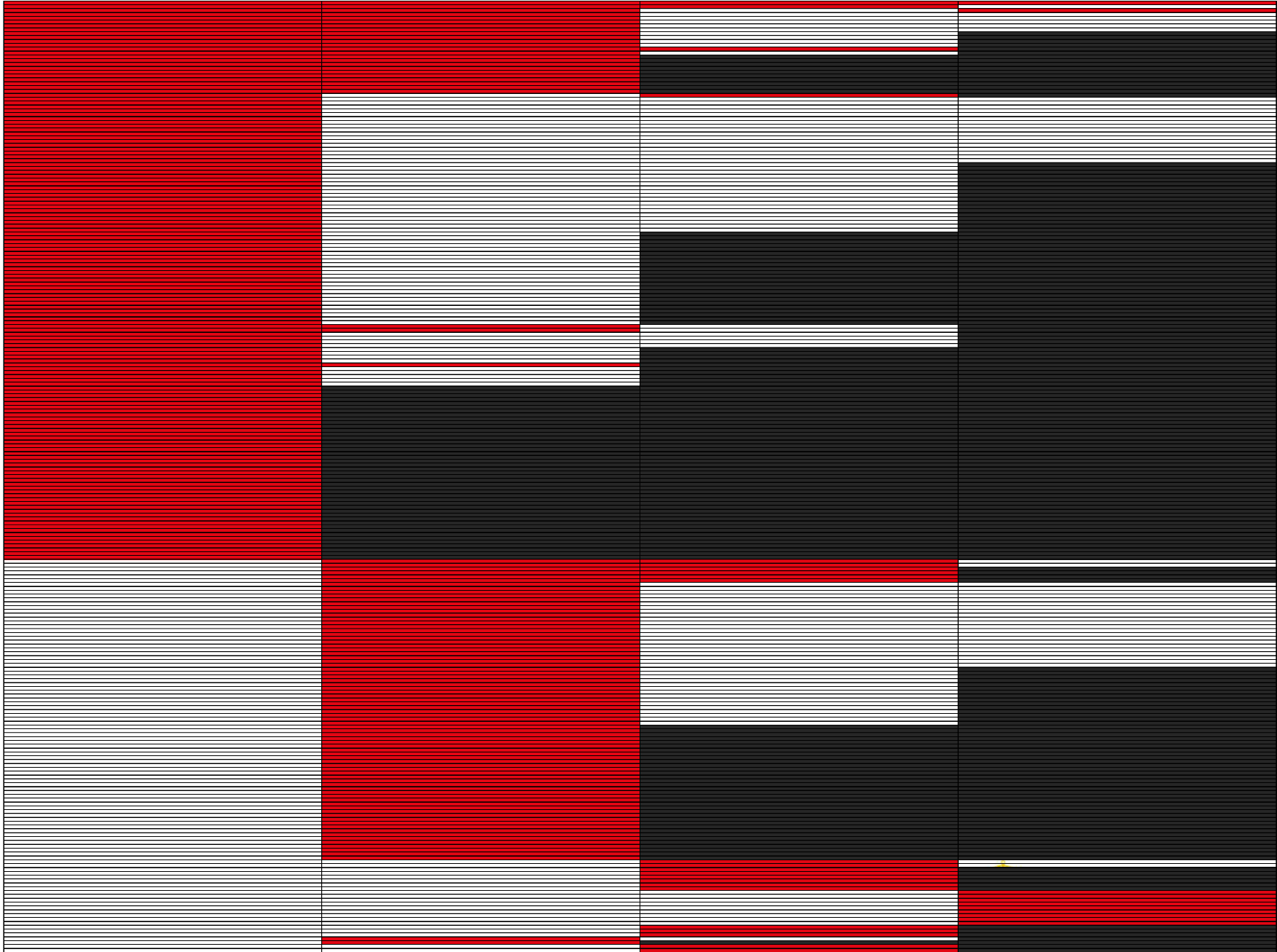
Gambled last 12 months



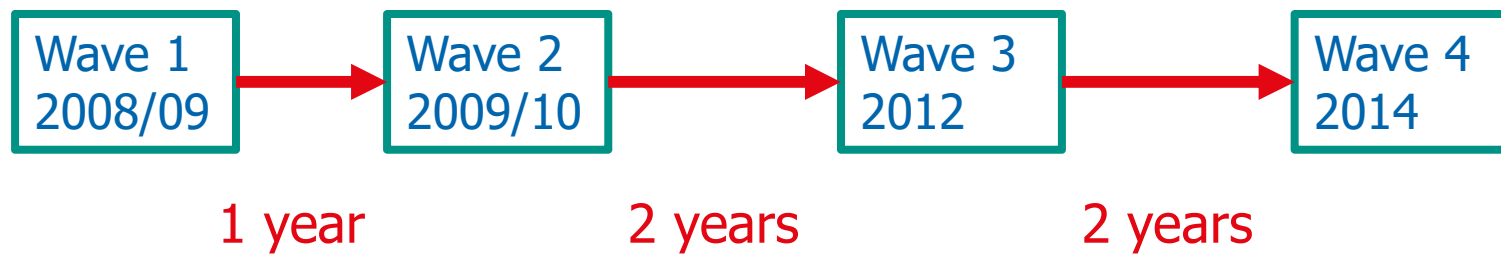
PGSI levels over time

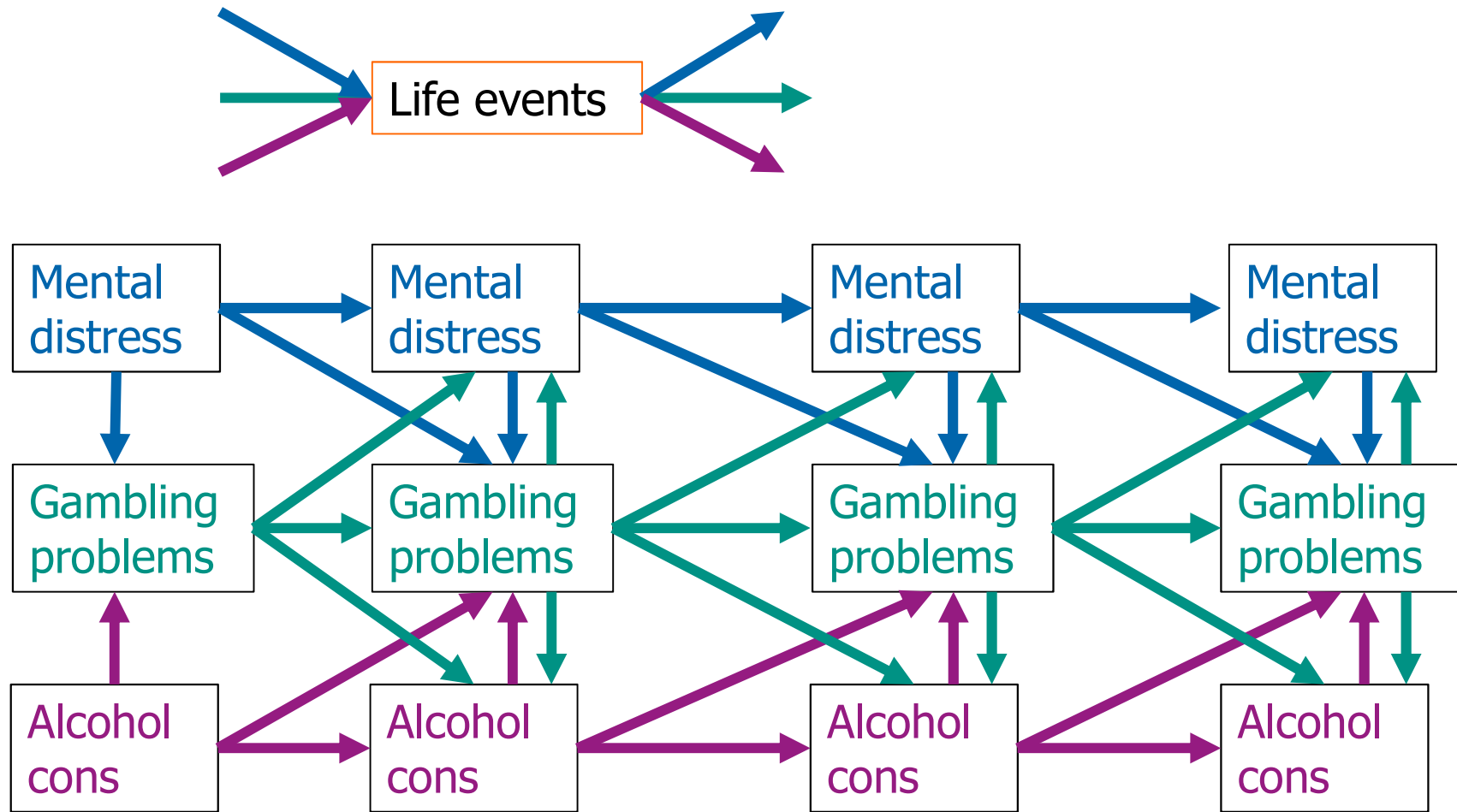






Swelogs data collection





Background variables: Age, gender, education – and gambling frequency for gambling problems

Not in the model		Increase risk (p<.05)			Reduce risk (p<.05)		Not significant	
		Gambling problems			Mental distress		Alcohol consumption	
Explanatory variables		Baseline	Wave 2	Wave 3 and 4	Wave 2	Wave 3 and 4	Wave 2	Wave 3 and 4
	Gambling problems (previous)		.297	.219	.092	.073		
	<i>Gambling problems (simultaneous)</i>				-.147	-.147	.078	.078
	Mental distress (previous)		-.022		.339	.339		
	<i>Mental distress (simultaneous)</i>	.080	.080	.080				
	Alcohol consumption (previous)						.611	.619
	<i>Alcohol consumption (simultaneous)</i>							
Demographics	<i>Female</i>	-.093	-.093	-.093	.277	.277	-.480	-.480
at baseline	Age	-.012	-.006		-.023	-.013	-.012	-.016
	<i>Education (level 2)</i>	-.118	-.118	-.118			-.348	-.348
	<i>Education (level 3)</i>	-.148	-.148	-.148			-.327	-.327
Gambling freq	Low	.595	.228	.228				
	Moderate	1.29	.638	.638				
	High	2.37	1.20	1.20				
Life events	<i>Death, someone close</i>							
	<i>Separation or divorce</i>				.402	.402	.217	.217
	<i>Legal problems</i>				.433	.433		
	<i>Serious illness or injury</i>				.493	.493		
	<i>Marriage or new relation</i>				.131	.131	.149	.149
	<i>Problem at work</i>		.075	.075	.685	.685	.232	.232
	<i>Retired</i>				-.423	-.423		
	<i>Pregnancy or new child</i>						-.451	-.451
	<i>Worse economy</i>		.171	.171	.365	.365		
	<i>Better economy</i>		.103	.103				
	<i>Large loan or investment</i>							
	<i>Worse housing</i>				.546	.546		
	<i>Improved housing</i>		-.071	-.071				
	<i>Worse work situation</i>		-.107	-.107	.525	.525		
	<i>Better work situation</i>				.212	.212	.103	.103

Gambling problems

- Previous gambling problems increase the risk
- Previous mental distress may decrease the risk, but only on 1 years perspective, while simultaneous mental distress increase the risk
- We see no obvious influence from alcohol consumption
- Being female, having more than primary education and getting older decrease the risk
- Live events past 12 months, such as problem at work, severe change of the household economy into the worse, but also into the better increase the risk
- Improved housing conditions and worse work situation decrease the risk

Mental distress

- Previous gambling problems increase the risk, while simultaneous gambling problems decrease the risk (reduce anxiety?)
- Previous mental distress increase the risk
- Being female increase the risk, while the risk is reduced by age
- Several life events increase the risk: separation or divorce, legal problems, serious illness or injury, marriage or new relation, problem at work, worse economy, worse housing, worse work situation but also better work situation
- To retire decrease the risk

Alcohol consumption

- Simultaneous gambling problems increase the consumption, but not previous gambling problems
- Previous alcohol consumption increase the present consumption
- Being female, and educated more than primary level, decrease the consumption, and it's reduced by age
- Separation or divorce, marriage or new relation, problems at work and a better work situation may increase the alcohol consumption
- Pregnancy or a new child reduce the alcohol consumption

How gambling problems, mental distress and alcohol consumption effect life events

Dependent	Gambling problems		Mental distress		Alcohol consumption	
	1 year	2 years	1 year	2 years	1 year	2 years
Death, someone close						
Separation or divorce	Increase	n.s	Increase	Increase	Increase	n.s
Legal problems	Increase	n.s	Increase	Increase	Increase	n.s
Serious illness or injury						
Marriage or new relation	Increase	n.s	n.s	n.s	Increase	Increase
Problem at work	n.s	Increase	Increase	Increase	Increase	n.s
Retired						
Pregnancy or new child						
Worse economy	n.s	n.s	Increase	Increase	n.s	n.s
Better economy	Increase	n.s	n.s	n.s	Increase	Increase
Large loan or investment	n.s	n.s	n.s	n.s	Increase	Increase
Worse housing	n.s	n.s	Increase	Increase	n.s	n.s
Improved housing	n.s	n.s	n.s	n.s	Increase	Increase
Worse work situation	n.s	Increase	Increase	Increase	n.s	n.s
Better work situation	n.s	n.s	Increase	Increase	Increase	Increase





Folkhälsomyndigheten
PUBLIC HEALTH AGENCY OF SWEDEN

Thank you!



Gambled monthly last 12 months



The Swedish Longitudinal Gambling Study (Swelogs) is one of the world's largest national studies on gambling and health based on a random sample of 15,000 drawn from the register on the total population in Sweden. The epidemiological track comprised 4 waves of data collection between 2008 and 2014 where telephone interviews were used as primary measurement method. Around 8,000 individuals responded at baseline and they were all contacted in each of the following waves. Around 3,000 persons participated in all waves of data collection. The changes over time are also compared to the results from a new sample drawn in 2015 when around 9,000 persons participated. Calibration weights based on register data at Statistics Sweden were used and updated for each wave. All prevalence and incidence measures are calculated with these weights.

The general trend in Sweden, as in many western countries is a reduced participation in gambling, measured as any past year gambling, while the amounts of money played for and the prevalence of gambling problems remains about the same. We use our data to describe the general changes but also to study individual changes over time where we have used multi-level analysis and structural equation modelling in our analysis of the longitudinal data set. Our results confirm mutual connections between gambling problems on one hand and impaired mental health and risky alcohol-consumption, respectively, on the other hand over time within and between the measurement time points. We have also found significant correlations between major life events and problem gambling over time, where the life events may precede or follow from problem gambling.