



Mental Health &
Addiction Research

**IFT Institut für
Therapieforschung**

Leopoldstrasse 175
80804 Munich

Tel. 089/360 804-38

Fax 089/360 804-19

olderbak@ift.de

www.ift.de

PD Dr. Eva Hoch
Institute Management

Justin Möckl

Christian Rauschert

Nicolas Wilms

Barbara Vetter

Prof. Dr. Ludwig Kraus

Dr. Sally Olderbak

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Brief Report: Epidemiological Survey on Addiction 2021

Volume:

Trends in Prevalence of (problematic)
Alcohol Use and Episodic Binge Drinking
by Gender and Age 1995-2021.

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Introduction

The data presented below are based on the surveys of the Epidemiological Survey on Addiction (ESA) from 1995 to 2021. A detailed description of the methodology of the penultimate survey can be found in Rauschert et al. (2022). Results on trends in the prevalence of alcohol use, episodic binge drinking, and alcohol abuse and dependence are presented and discussed for the complete sample in Rauschert et al. (2022).

Definitions and calculation bases

Prevalence of alcohol consumption: recorded using a beverage-specific quantity-frequency-index for the last 30 days. This includes beer, wine/sparkling wine, spirits, alcopops (2006 only), and alcoholic mixed drinks (from 2009); classification into consumption groups:

- Abstinent: did not consume alcohol in the last 30 days
- Low-risk consumption: men: >0-24 g per day, women: >0-12 g per day
- Risky consumption: men: >24-60 g per day, women: >12-40 g per day
- Hazardous consumption: men: >60-120 g per day, women: >40-80 g per day
- High consumption: men: >120 g per day, women: >80 g per day

Drinking quantity: Average quantity of individual beverages consumed in liters per week for the last 30 days. The following alcohol contents were used as a basis (according to Bühringer et al., 2000):

- Beer: 4.8 % by volume; equivalent to 38.1 g of pure alcohol per liter
- Wine/sparkling wine: 11.0% by volume; corresponds to 87.3 g of pure alcohol per liter
- Spirits: 33.0 % by volume; equivalent to 262.0 g of pure alcohol per liter
- Alcopops: 5.5 % by volume; corresponds to 43.7 g of pure alcohol per liter
- Mixed drinks containing alcohol: 0.04 liters of spirits at 33.0% by volume; assuming an average glass size of 0.4 liters, this corresponds to 26.2 g of pure alcohol per liter

Episodic binge drinking: consumption of five or more glasses of alcohol in one day.

Problematic alcohol consumption: evidence of problematic alcohol consumption in the last 12 months according to the criteria of the Alcohol Use Disorder Identification Test (AUDIT; Babor et al. 1989), collected with the German version of Rist et al. (2003). Problematic alcohol consumption is assumed from a threshold value of 8 points (Conigrave et al., 1995; Saunders et al., 1993).

Statistical analysis: The differences between the survey years were tested for statistical significance using logistic regression, taking into account the control variables age, gender and survey mode. The current survey year 2021 was used as the reference year.

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Table 1: Trends in alcohol use (abstinence and categories of average amounts of alcohol consumed in the past 30 days) among 18- to 59-year-olds, 1995-2021 (percent)

	Survey Year									
	1995	1997	2000	2003	2006	2009	2012	2015	2018	2021
Total (n)	6534	7210	8076	7553	6738	7118	7743	7987	8130	7664
Abstinent	20,3*	21,2*	12,4*	16,8*	25,2*	23,3*	25,1*	25,2*	25,6*	27,4
Low-risk consumption ¹⁾	58,7*	58,4	63,3*	64,7*	58,1	60,5*	59,9	59,4	61,4*	57,3
Risky consumption ²⁾	16,4*	16,9*	20,3*	15,7*	14,1	14,1*	12,9	13,6	11,6	13,0
Dangerous consumption ³⁾	3,8*	2,7	3,4*	2,5	2,3	1,8	1,8	1,5	1,2*	2,0
High consumption ⁴⁾	0,8*	0,7*	0,6	0,3	0,3	0,3	0,3	0,3	0,2	0,3
Men (n)	2629	2933	3382	3039	2463	2691	2762	2914	2996	2675
Abstinent	14,1*	15,2*	9,0*	13,0*	20,2	17,1*	19,6*	20,8	21,2	22,8
Low-risk consumption ¹⁾	59,1	58,2*	62,7	65,3*	60,6	64,8	64,3	62,7	66,2*	62,1
Risky Consumption ²⁾	20,0*	21,1*	22,6*	17,6*	15,3*	15,3*	13,0	14,4*	11,1	12,5
Dangerous consumption ³⁾	5,7*	4,4*	4,9*	3,7*	3,3*	2,3	2,5	1,7	1,3*	2,3
High consumption ⁴⁾	1,1*	1,2*	0,7	0,4	0,6	0,5	0,5	0,4	0,2	0,3
Women (n)	2947	3246	3822	3406	2767	2928	3248	3256	3292	3145
Abstinent	26,4*	27,1*	15,9*	20,9*	30,3*	29,8*	30,7	29,6*	30,2	32,3
Low-risk consumption ¹⁾	58,4*	58,7*	64,0*	64,0*	55,4*	56,1	55,3	56,0*	56,4*	52,2
Risky Consumption ²⁾	12,9	12,8	17,9*	13,7	12,9	12,8	12,7	12,9	12,2	13,5
Dangerous consumption ³⁾	1,9	1,0*	1,8	1,2	1,2	1,2	1,1	1,2	1,1	1,7
High consumption ⁴⁾	0,5	0,3	0,5	0,1	0,1	0,1	0,1	0,3	0,1	0,3

¹⁾ Last 30 days, males: >0-24 g. Women: >0-12 g.

²⁾ last 30 days, men: >24-60 g. Women: >12-40 g.

³⁾ last 30 days, Men: >60-120 g. Women: >40-80 g.

⁴⁾ last 30 days, males: >120 g. Women: >80 g

* Statistically significant difference ($p < 0.05$) compared to 2021.

Logistic regression to predict prevalences with year (reference 2021), age, (gender), survey mode.

n for complete sample.

Table 2: Trends in 30-day prevalence of consumption of various beverages (total population) and average amount drunken (consumers) among 18- to 59-year-olds, 1995-2021.

		Survey Year									
		1995	1997	2000	2003	2006	2009	2012	2015	2018	2021
Total (n)		7780	7983	8088	7894	6958	7193	7879	8132	8200	7976
Beer	% ¹⁾	63,5*	61,1*	67,2*	59,3*	54,5	57,4*	54,5	54,9	55,0	55,2
	Liter ²⁾	2,8*	2,6*	2,5*	2,1*	2,1*	1,9*	1,9	1,7	1,5*	1,7
Wine/sparkling wine	%	63,0*	57,9*	67,8*	60,6*	51,4	52,4*	49,9	52,3	49,6	50,8
	Liter	0,5	0,5	0,6*	0,5	0,5	0,5	0,5	0,5	0,4*	0,5
Spirits	%	42,1*	37,0*	38,8*	33,4	31,3	30,2	29,9	32,8	33,0	32,8
	Liter	0,07*	0,07*	0,06*	0,05	0,07*	0,06	0,06*	0,05	0,05	0,05
Men (n)		3541	3709	3670	3560	3086	3202	3395	3669	3690	3459
Beer	%	82,8*	79,8*	84,2*	78,7*	71,8	75,3*	72,8	72,0	71,1	70,7
	Liter	3,5*	3,4*	3,2*	2,7*	2,7*	2,4	2,3	2,2	1,9*	2,1
Wine/sparkling wine	%	58,7*	51,9*	62,0*	53,0*	43,2	46,2*	42,2	44,3	41,0	43,8
	Liter	0,5*	0,6*	0,6*	0,5*	0,5*	0,5*	0,5	0,4	0,4	0,4
Spirits	%	51,5*	46,5*	46,2*	41,6	37,7	37,7	37,2	40,3	39,9	39,5
	Liter	0,08*	0,08*	0,07*	0,06	0,08*	0,07*	0,07*	0,06	0,06	0,06
Women (n)		4239	4274	4418	4334	3872	3991	4484	4463	4510	4505
Beer	%	44,1*	42,1*	49,5*	38,8	36,8	38,7	35,3	37,1	38,3	39,1
	Liter	1,2*	0,9	1,0*	0,9	0,9	0,8	0,8	0,8	0,8	0,8
Wine/sparkling wine	%	67,3*	64,0*	73,8*	68,6*	59,8	58,9	57,9	60,5*	58,5	58,2
	Liter	0,5*	0,5	0,6	0,5*	0,5	0,5	0,5*	0,5	0,4*	0,5
Spirits	%	32,6*	27,4	31,1*	24,7	24,6	22,4	22,2*	25,1	25,8	25,7
	Liter	0,04	0,04	0,04	0,04	0,04	0,04	0,04	0,03	0,04	0,04

¹⁾ Proportion of male and female consumers of the beverage (at least one glass in the past 30 days), based on the complete sample.

²⁾ Mean value in liters per week, based on consumers of the respective beverage.

* Statistically significant difference ($p < 0.05$) compared to 2021.

-) was not collected.

Logistic regression to predict prevalence or generalized linear gamma regression models with log linkage to predict drinking quantity with year (reference 2021), age, (gender), survey mode.

n for complete sample.

Table 3: Trends in 30-day prevalence of episodic binge drinking by gender and age, 1995-2021 (percent).

	Age	Survey Year									
		1995	1997	2000	2003	2006	2009	2012	2015	2018	2021
Total (n)		7779	7612	8010	7873	6895	7265	7924	8209	8248	8013
	18-59	33,7*	32,3*	27,2	26,3	25,9	26,9	26,9	26,5	26,5	25,3
	18-24	33,0	36,8	37,0	38,8	45,4*	43,7*	42,3*	43,2*	41,3	38,3
	25-39	35,2*	31,4	28,6	26,2	26,8	29,2	31,9*	30,4	29,1	27,2
	40-59	32,7*	31,2*	23,0	23,2	20,8	21,0	20,1	20,1	20,9	20,5
	60-64	-	-	-	-	15,9	17,4	16,0	16,7	17,1	15,4
Men (n)		3539	3565	3638	3535	3054	3215	3402	3683	3713	3462
	18-59	47,5*	47,1*	40,7*	39,1*	37,1	39,6*	37,9*	36,7	35,3	33,6
	18-24	41,9	49,7	47,6	51,1*	57,5*	56,7*	51,7*	52,0*	48,4	44,9
	25-39	50,5*	47,3	*43,3	39,1	39,2	42,1	46,2*	42,6*	38,0	36,3
	40-59	46,7*	46,0*	36,3*	36,1*	31,0	33,7*	29,5	29,3	29,9	28,7
	60-64	-	-	-	-	23,5	27,5	23,4	28,1	25,1	22,4
Women (n)		4240	4047	4372	4338	3841	4050	4522	4526	4535	4539
	18-59	19,8*	17,1	13,0*	12,9*	14,4*	13,6*	15,4	16,1	17,3	16,7
	18-24	23,0*	23,1*	26,1	26,0*	32,1	30,2	32,5	33,9	33,4	31,2
	25-39	19,8	15,4	12,9*	12,5*	14,7	16,0	16,9	17,7	19,6	17,8
	40-59	19,0*	16,3	9,3*	9,8*	10,2*	7,8*	10,3	10,7	11,8	12,2
	60-64	-	-	-	-	7,0	7,4	8,7	5,8	9,4	8,6

¹⁾ Episodic binge drinking: consumption of five or more glasses of alcohol within at least one day.

* Statistically significant difference ($p < 0.05$) compared with 2021.

-) was not collected.

Logistic regression to predict prevalence with year (reference 2021), age, (gender), survey mode.
n for complete sample.

Table 4: Trends in problematic alcohol use by AUDIT in the past 12 months among 18- to 59-year-olds, 1997-2021 (total population and consumers) (percent).

	Survey Year				
	1997	2003	2009	2015	2021
Total (n)	7818	7168	7232	8163	8044
Total population	19,7*	20,9	19,7	19,8*	19,0
Consumers ²⁾	23,9*	22,7*	24,7	25,1	24,9
Men (n)	3661	3330	3205	3664	3464
Total population	32,5	32,2	30,6*	28,9*	26,6
Consumers ²⁾	36,9	34,6	35,7*	34,9	33,1
Women (n)	4157	3838	4027	4499	4568
Total population	6,7*	8,3*	8,4*	10,5	11,3
Consumers ²⁾	8,7*	9,1*	11,4*	13,8	15,4

¹⁾ AUDIT: Alcohol Use Disorder Identification Test; threshold score ≥ 8 .

²⁾ Alcohol users and consumers in the past 30 days.

* Statistically significant difference ($p < 0.05$) compared with 2021.

Logistic regression to predict prevalence with year (reference 2021), age, (gender), survey mode.
n for complete sample.