

Attitudes towards alcohol-related sickness absence and presenteeism: Differences across subgroups of the population?

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Abstract

Background: More knowledge is needed to understand costly behaviours such as absence from work or reduced efficiency at work due to alcohol. The aim of this study was: (i) to map employees' attitudes towards alcohol-related sickness absence and presenteeism, and (ii) to examine how these attitudes vary across subgroups of the population.

Methods: Data stem from a web-survey among 18-69 year old Norwegians (N = 1407). The respondents evaluated six situations with alcohol-related sickness absence and presenteeism. The employees' own drinking habits, alcohol-related sickness absence and presenteeism were mapped.

Results: Attitudes towards alcohol-related absence were more restrictive than attitudes towards presenteeism. Both behaviours were condemned more strongly with frequent occurrence. Employees with a high intoxication frequency and/or own experience with these behaviours were more tolerant. Women were less tolerant of alcohol-related absence than men, and employees with a higher educational level were less tolerant of alcohol-related presenteeism than those with a low educational level. The other variables were not significant controlled for all other variables.

Conclusion: Alcohol-related sickness absence and presenteeism are generally not tolerated among Norwegian employees, unless it occurs very infrequently. Employees who were frequently intoxicated and who reported having had alcohol-related absence and presenteeism themselves were more tolerant.

Keywords: alcohol-related sickness absence, presenteeism, attitudes

Introduction

Alcohol use can cause sickness absence, both long-term (Upmark, 1999) and short-term (McFarlin & Fals-Stewart, 2002), (for review, see Schou & Moan, 2015). Other studies have found alcohol use to be among the risk factors that increase inefficiency at work (hereafter “presenteeism”) (Cooper & Dewe, 2008; Edvardsen et al., 2014; Edvardsen et al., 2015; Gjerde et al., 2010; Holden et al., 2011; Shi et al., 2013). Costs related to alcohol use for workplaces are consistently found to be high, and it has been estimated that sickness absence and presenteeism account for the largest fractions of the work-related costs (Gjelsvik, 2004; Laslett et al., 2010).

In order to curb the negative effect alcohol use has on workplaces, more knowledge is needed to understand the mechanisms behind norm deviating behaviour such as alcohol-related sickness absence and presenteeism. In behavioural research, attitudes towards the behaviour are regarded to be among the most important indicators of how people will act (e.g., Ajzen, 1991). Attitudes are defined as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly & Chaiken, 1993, page 1).

In Norway, showing up and doing your work is a rather strong norm. High participation in the labour force and not too much absence are often referred to as necessities in order to maintain the welfare state e.g. (NOU, 2004). Nevertheless, alcohol-related sickness absence is not uncommon.

The alcohol consumption of individual employees, including whether they drink on the job or show up with a hangover, have been found to be influenced by drinking norms in the work place (Ames et al., 2000). There is, however, to our knowledge, no previous research about employees’ attitudes towards alcohol-related sickness absence and presenteeism. Thus our study mapping such attitudes will provide new knowledge. Such information is useful for preventive efforts in this context.

Subgroup differences in attitudes

According to well-known attitude-behaviour models, e.g. the Theory of Planned Behaviour (Ajzen, 1991), attitudes towards a behaviour are assumed to be a result of among other things socio-demographic characteristics such as age, gender and educational level. Moreover, such theories propose that attitudes are formed through past experience with the behaviour. In addition to previous sickness absence and presenteeism due to alcohol, one can expect

drinking habits per se to be of relevance. The more people drink themselves, the more liberal attitudes they are expected to have toward both alcohol use and related problems (Caetano & Clark, 1999).

To our knowledge, no previous studies have examined group differences in *attitudes* towards alcohol-related sickness absence and presenteeism. However, previous studies have found alcohol-related sickness absence to be more prevalent among men (Schou et al., 2014; Edvardsen et al., 2015), younger age groups (Craig et al. 2012; Roche et al., 2008), those with a low level of education (Johansson, Bockerman, & Uutela, 2009) and income (Schou & Birkelund, 2015), and among those with a high consumption of alcohol (Schou et al., 2014). Alcohol-related presenteeism have been found to be more prevalent among men (Edvardsen et al., 2015; Norwegian Directorate of Health, 2006) and younger employees (Craig et al., 2012).

Aims

The aims of this study were: (i) To map employees' attitudes towards alcohol-related sickness-absence and presenteeism, and (ii) to examine how these attitudes vary across subgroups of the population, i.e. according to gender, age, educational level, income, full time versus part time job - and according to the respondents' own drinking habits as well as their experience with alcohol-related sickness absence and presenteeism.

Methods

Participants and procedure

The data stem from a web-survey conducted among respondents in Norway in 2013. The study was commissioned by The Norwegian Institute for Alcohol and Drug Research (SIRUS)¹ from TNS Gallup. A sample of 4 000 18-69 year olds was drawn from an online panel comprising more than 50 000 citizens. The sample was stratified according to figures from Statistics Norway on gender, age (4 groups), geographic region (4 groups), and education (2 groups). Of the original sample, 2182 (55%) participated. For a more detailed description of the web-survey see (Rise & Halkjelsvik, 2015). The net sample was weighted

¹ SIRUS merged with The Norwegian Institute of Public Health 1 January 2016.

to reflect the distribution of gender, age and education in the population. All reported findings were calculated in the weighted sample.

A few respondents who reported that they were older than 69 years of age were excluded from the analyses (N = 11). We were primarily interested in the attitudes of employees, thus only respondents who were employed (full or part time) were included in the analyses (N = 1 407). Of this sample, 47.2 % were women and the average age was 43.69 years (SD = 12.05). A higher educational level was reported by 38.1% of the respondents.

Measures

Attitudes towards alcohol-related sickness absence and presenteeism: The respondents were asked to evaluate four different situations describing alcohol-related absence and two situations describing presenteeism due to alcohol (see Table 1 for wording of the items). The response scales were: completely unproblematic (coded 4), quite unproblematic (3), quite problematic (2) and very problematic (1). Based on the responses, each respondent were given a mean score ranging from 1-4 on each index. The higher the score, the higher the tolerance for alcohol-related absence or presenteeism. Cronbach's Alpha = 0.75 for attitude towards alcohol-related absence, and the two items comprising the attitude towards presenteeism index were strongly correlated 0.65. Thus, the internal consistency of the attitude measures were satisfactory (cf., Nunnally, 1978). Because of missing responses of more than one question, 1 person did not get a score on one of the indices. Thus, the net sample for the present paper was 1 406.

Demographic variables: Gender, age (4 categories), education (higher/lower), income (4 categories), and working full time versus part time. See Table 2 for more details about the categories of each variable.

Own alcohol use the past 12 months: Drinking frequency was divided into 7 categories: Never (coded 0), one or a few times last year (1), once a month (2), 2 – 3 times a month (3), once a week (4), 2 – 3 days a week (5), 4 days a week or more (6). Intoxication frequency was divided into 5 categories: Never (coded 0), one or a few times last year (1), once a month (2), 2 – 3 times a month (3), one day a week or more (4).

Own sickness absence due to alcohol the past 12 months. Respondents were asked if they had been absent from work 1 - 3 hours (n = 24, 1.8 %) and if they had been absent one or more days (n = 16, 1.2 %). The categories were combined in one dichotomous variable: Any absence (coded 1) versus no absence (0).

Own presenteeism at work due to alcohol the past 12 months. Respondents were asked if they had been present at work, but felt unfocused and less efficient than usual (n = 246, 17, 4 %). 0 times (coded 0), 1 – 2 times (1), 3 or more times (2).

Statistical analyses

First, the mean scores of each item mapping attitudes towards alcohol-related absence and presenteeism were calculated (see Table 1). Second, the mean scores of the two indices for attitudes towards absence and presenteeism were calculated, for the whole sample and for various subgroups, (see Table 2). Third, we calculated Pearson's correlations between variables included in the regression analyses (see Table 3). Fourth, linear regression analyses, with attitudes towards alcohol-related absence and presenteeism as outcomes in separate models, were conducted (see Table 4).

Results

Table 1 shows that people's attitudes were more restrictive towards alcohol-related absence (mean scores = 1.07-2.11) than towards presenteeism (mean scores = 2.16 and 3.02). Moreover, both attitudes became more restrictive with increased frequency of such behavior, e.g., being absent from work one day a year due to drinking alcohol the day before versus being absent twice a month.

Table 2 shows the mean score on the attitude indices in the sample as a whole and across subgroups of the population. In the sample as a whole, attitudes towards alcohol-related presenteeism were less restrictive than attitudes towards absence due to alcohol, mean scores were 2.59 and 1.50 respectively.

Bivariate analyses showed that *attitudes towards alcohol-related absence* were more positive with increasing intoxication frequency, more positive among men than women, and among those who reported having such absence themselves. *Attitudes towards presenteeism* were more positive with increasing frequencies of both drinking and intoxication, among men than women and among those who reported experiencing reduced efficiency several times themselves (see Table 2).

Table 1. Items measuring attitudes towards alcohol-related sickness absence and presenteeism. Proportion (%) that reported that the following behaviours were problematic/unproblematic (N = 1406).

Attitudes towards alcohol-related sickness absence	%				Mean (SD)
	Very problematic	Quite problematic	Quite unproblematic	Completely unproblematic	
An office employee is two hours late for work twice a year due to drinking alcohol the night before	29.7	36.6	26.8	7.0	2.11 (0.91)
An office employee is two hours late for work twice a month due to drinking alcohol the night before	64.7	30.8	4.1	0.4	1.40 (0.59)
An office employee is absent from work all day twice a year due to drinking alcohol the night before	66.8	26.1	6.2	1.0	1.41 (0.65)
An office employee is absent from work all day twice a month due to drinking alcohol the night before	93.5	5.7	0.5	0.2	1.07 (0.30)
Attitudes towards presenteeism	Very problematic	Quite problematic	Quite unproblematic	Completely unproblematic	Mean (SD)
An office employee is less efficient at work than usual twice a year due to drinking alcohol the night before	5.2	22.3	38.0	34.5	3.02 (0.88)
An office employee is less efficient at work than usual twice a month due to drinking alcohol the night before	20.7	48.2	25.2	5.9	2.16 (0.82)

^a Scale: 1-4, where 1 is very problematic and 4 is completely unproblematic.

Table 2. Mean score on attitudes towards alcohol-related sickness absence and presenteeism (scale 1-4) for various subgroups.

Dependent variable			Sickness absence		Presenteeism	
	N	%	M	SD	M	SD
Groups						
All	1406	100.0	1.50	0.49	2.59	0.77
Gender			F=14.71 ^{***}		F=5.46 [*]	
Male	743	52.8	1.55	0.51	2.64	0.79
Female	663	47.2	1.45	0.46	2.54	0.74
Age			F=0.56 ^{ns}		F=1.74 ^{ns}	
18-29 years	225	16.0	1.53	0.54	2.70	0.81
30-44 years	544	38.7	1.51	0.49	2.57	0.77
45-59 years	499	35.5	1.48	0.49	2.56	0.75
60 years or older	138	9.8	1.49	0.43	2.58	0.76
Level of education			F=0.00 ^{ns}		F=1.91 ^{ns}	
Junior/senior high school	870	61.9	1.50	0.50	2.61	0.79
University	536	38.1	1.50	0.48	2.55	0.74
Income (missing = 139)			F=1.19 ^{ns}		F=0.55 ^{ns}	
Less than 200 000 NOK	41	3.2	1.63	0.63	2.67	0.83
200 000 – 499 000 NOK	757	59.8	1.50	0.50	2.58	0.79
500 000-799 000 NOK	390	30.8	1.51	0.48	2.63	0.74
800 000 NOK or more	78	6.2	1.46	0.45	2.57	0.80
Employment			F=1.41 ^{ns}		F=2.38 ^{ns}	
Full time	1193	84.8	1.51	0.49	2.60	0.77
Part time	213	15.2	1.46	0.51	2.51	0.80
Drinking frequency			F=1.73 ^{ns}		F=9.00 ^{***}	
Not drinking	81	5.8	1.41	0.54	2.15	0.66
A few days	269	19.2	1.47	0.50	2.45	0.82
Once a month	178	12.7	1.47	0.44	2.57	0.76
2-3 times a month	301	21.4	1.50	0.49	2.61	0.78
About once a week	318	22.6	1.56	0.51	2.71	0.71
2-3 times a week	212	15.1	1.49	0.48	2.68	0.75
4 days a week or more	47	3.3	1.55	0.46	2.85	0.79
Intoxication frequency			F=5.08 ^{***}		F=12.78 ^{***}	
No episodes	379	27.0	1.43	0.46	2.39	0.78

A few times	668	47.5	1.49	0.48	2.61	0.75
Once a month	174	12.3	1.55	0.55	2.68	0.74
2-3 times a month	121	8.6	1.60	0.51	2.86	0.73
Once a week or more often	65	4.6	1.64	0.53	2.83	0.78
Absent from work (missing = 9)			F=23.82***			
No episodes	1367	97.9	1.49	0.49	-	
At least once	30	2.1	1.93	0.60	-	
Presenteeism					F=44.28***	
No episodes	1161	82.5	-		2.50	0.77
1-2 times	186	13.2	-		2.95	0.67
3 times or more	60	4.2	-		3.12	0.58

*= p < 0.05 ***= p < 0.001 ns = not significant

Correlations

Table 3 shows that the correlation between attitudes toward alcohol-related sickness absence and attitudes toward presenteeism was 0.52, which is considered to be large in terms of effect size (Cohen, 1988). In the regression analyses, these two variables are outcomes in two different models. The variables that were significantly correlated with *attitude towards alcohol-related absence* were, by order of correlation strength: self-reported alcohol-related absence, intoxication frequency and gender. In terms of effect size, the correlations were generally small, i.e. around 0.1 (Cohen, 1988). The variables that were significantly correlated with *attitude towards presenteeism* were, by order of correlation strength: self-reported presenteeism due to alcohol, intoxication frequency and gender. Also here, the correlations were generally small in terms of effect size, the largest being 0.22.

Table 3: Bivariate associations^b between attitudes towards alcohol-related absence, presenteeism and correlates (N = 1406)

	Attitudes towards alcohol-related sickness absence	Attitudes towards presenteeism	Gender	Age	Education	Part time	Intoxication frequency	Self-reported alcohol-related absence	Self-reported presenteeism
Attitudes t. alcohol-related sickness absence	1	0.522**	-0.102**	-0.031 ^{ns}	0.001	-0.032	0.119**	0.130**	0.130**
Attitudes towards presenteeism		1	-0.062*	-0.043 ^{ns}	-0.037 ^{ns}	-0.041 ^{ns}	0.177**	0.130**	0.224**
Gender			1	0.039 ^{ns}	0.145**	0.226**	-0.225**	-0.031 ^{ns}	-0.094**
Age				1	-0.048 ^{ns}	0.031 ^{ns}	-0.225**	-0.093**	-0.145**
Education					1	-0.076**	0.024 ^{ns}	0.010 ^{ns}	0.057*
Part time						1	-0.057*	-0.018 ^{ns}	-0.047 ^{ns}
Intoxication frequency							1	0.217**	0.458**
Self-reported alcohol-related absence								1	0.375**
Self-reported presenteeism									1

*= p < 0.05 **= p < 0.01 ns = not significant b Pearson's r, two-tailed

Table 4 Linear regression analyses predicting attitudes towards alcohol-related sickness absence and presenteeism, N = 1397

Correlates	Attitudes towards alcohol-related sickness absence			Attitudes towards presenteeism		
	B	St. E	t	B	St. E	t
Gender	- 0,080 ^{**}	0,028	- 2,885	- 0,018 ^{ns}	0,043	- 0,340
Age	0,000 ^{ns}	0,015	0,010	- 0,005 ^{ns}	0,024	- 0,222
Education	0,007 ^{ns}	0,027	0,263	- 0,085 [*]	0,042	- 2,018
Part time work	- 0,010 ^{ns}	0,038	- 0,264	- 0,060 ^{ns}	0,057	- 1,045
Intoxication frequency	0,036 ^{**}	0,013	2,707	0,060 ^{**}	0,022	2,704
Own absence	0,377 ^{***}	0,093	4,072			
Own presenteeism				0,259 ^{***}	0,038	6,770

*= p < 0,05 **= p < 0,01 ***= p < 0,001 ns = not significant

Regression analyses

Drinking frequency and intoxication frequency were strongly correlated (0.51). We therefore chose to include only intoxication frequency in the regression analyses. Due to a high rate of missing values, income was also excluded from the regression analyses.

Regression analyses in which the effect of each correlate was controlled for the effect of all other correlates, are shown in Table 4. Women were significantly more restrictive towards *alcohol-related absence* than men. The attitude towards such absence was more positive with a higher intoxication frequency and among those who reported having experienced alcohol-related absence themselves. The other correlates were not significant. The *attitude towards presenteeism* was more restrictive among those with a higher education and more positive among those who had experienced presenteeism themselves and among those with a higher intoxication frequency. The other correlates were not significant.

Discussion

This study showed that employees' attitudes towards alcohol-related absence and presenteeism generally were restrictive, but that alcohol-related presenteeism was tolerated more than absence, and both behaviours were accepted by many employees if occurring only very seldom. Demographic differences were found; men were more tolerant of alcohol-related absence than women, and employees with a low educational level were more tolerant of alcohol-related presenteeism than those with a high educational level. Employees who reported having a high intoxication frequency and/or experience of their own with alcohol-related absence and presenteeism, were more tolerant of these behaviours.

Possible explanations for attitudes found in the general sample

The findings which suggest that alcohol-related presenteeism is tolerated more than absence may be in line with the social norm requiring people to show up and do their work (NOU, 2004). In cases of alcohol-related presenteeism, people have shown up at work even if having hangover symptoms, and may be seen as making an effort to behave as required and not having lost control completely. Being present – in spite of feeling ill, may be seen as a milder breach of the norm. In some work places, there may even be tolerance of some presenteeism

due to alcohol among colleagues. The fact that more people reported having had alcohol-related presenteeism the past 12 months (17.4 % reported 1 or more times) than alcohol-related absence in the same period (2.1 % reported absence part of the day or longer) partly support this notion.

The almost full agreement on condemning these behaviours if occurring frequently, can reflect that people may be allowed to make a mistake once or twice – drinking to intoxication on certain occasions is part of the traditional Norwegian drinking pattern (Horverak & Bye, 2007) – but frequent absence or presenteeism due to alcohol is seen as a serious problem. In those cases, people may be seen as having lost control of their alcohol use and causing trouble both for themselves and others.

Subgroup differences in attitudes

The most important demographic factor influencing attitudes towards alcohol-related sickness absence was gender. Women were generally more restrictive than men, even when other factors, including own drinking pattern and experience with this phenomenon, were controlled for. This is in line with previous research showing gender role differences in relation to alcohol. Cultural expectations and traditions require women to control their own alcohol consumption and also to influence men to control theirs (de Visser & McDonnell, 2012; Neve et al., 1997). Men drink more alcohol than women, both in terms of total consumption and frequency of heavy drinking, in all societies surveyed (Craig et al., 2012; Wilsnack et al., 2000). Although great changes have taken place in the last decades, and women's alcohol consumption has increased steadily, it is not surprising that women condemn alcohol-related harm more strongly. This reasoning is also consistent with the findings that alcohol-related sickness absence and presenteeism are more common among men than women (Edvardsen et al., 2015; Schou et al., 2014).

It is perhaps a bit surprising that there was no difference in tolerance between age groups, neither when own experience was controlled for or in the univariate analyses. This is not in line with previous research which found higher rates of alcohol-related absence among young people (Roche et al., 2008). This connection may be weaker in young people, they do not seem to be more tolerant of alcohol-related presenteeism and absence, even if they experience it slightly more often. This may be connected to ideas of binge drinking among young people as a temporary phase, and episodes of alcohol-related presenteeism and absence among young people as exceptions and not something they will continue to do.

There was no significant difference in attitudes towards alcohol-related absence according to education. Alcohol-related presenteeism, however, was more strongly condemned among those with a higher education. Reduced efficiency caused by a hangover may be more evident while doing work which require concentration and abstract thinking. People with a higher education may also more often see their work as personally fulfilling and a source of personal development, and may therefore take offence if colleagues appear not to value their work by showing up with a hangover.

People who frequently drink to intoxication and/or have experienced alcohol-related absence or presenteeism themselves, are found to be more tolerant. This shows the importance of past behaviour and experiences. This is in line with attitude-behaviour models which assume past experience with a type of behaviour to be important for attitudes towards that behaviour (e.g., Ajzen, 1991). However, this association between attitudes and actions may be explained in two ways; either people act as they do because their attitudes allow them to – or they adjust their attitudes in order to avoid cognitive dissonance (Festinger, 1957), when failing to act the way they think they are supposed to. In this instance, people could have alcohol-related sickness absence or presenteeism because they have tolerant attitudes towards this behaviour, or because they changed their restrictive attitudes after failing to keep their drinking from interfering with work. With cross-sectional data, we cannot tell which came first, the attitudes or the actions. Either way, attitudes may be an important indicator of future behaviour.

Methodological considerations and suggestions for future research

To our knowledge, this is the first study to explore employees' *attitudes* towards alcohol-related absence and presenteeism. Attitudes towards these two different types of alcohol-related harm are mapped, as well as their correlations with several other variables, including the employees' own experiences with these phenomena. The results from this study can contribute knowledge relevant for preventive efforts targeted at these types of alcohol-related harm.

The sample was stratified to reflect the population figures on gender, age, geographic region and education. However, the response rate was 55 %. A high intoxication frequency and/or experience with alcohol-related absence and presenteeism is likely to be more prevalent among non-responders (Johnson, 2014), and this may also affect estimates of attitudes, so that tolerance of alcohol-related absence and presenteeism among Norwegian

employees may be somewhat greater than measured in this study. However, this is less likely to affect the correlations between attitudes and other variables (Aaberge & Laake, 1984).

There may also be other important correlates of attitudes towards alcohol-related absence and presenteeism, than those included in this study. Other possible correlates are norms in the work place and the attitudes of colleagues, which are likely to influence both individual attitudes and the actions of individual employees directly. This could be examined with multi-level analysis, in which companies or work places could form level 2 and individual employees level 1. The effect of informal norms and formal policies on the company level versus individual experiences and socio-demographic characteristics could thus be examined.

Since this study uses cross-sectional data, it is not possible to assess whether attitudes predict actions or if actions influence attitudes over time. Future research on longitudinal data could examine the association between attitudes towards alcohol-related absence and presenteeism and one's own actions more carefully.

Conclusions

Frequently occurring alcohol-related sickness absence and presenteeism are generally not tolerated among Norwegian employees. However, many tolerate such behaviour, especially presenteeism, if infrequent. Women were more restrictive towards alcohol-related absence than men, and respondents with a high educational level were more restrictive towards alcohol-related presenteeism than employees with a low level of education. However, the most important indicator of attitudes seem to be past behaviour, both in terms of people's own drinking behaviour and their experience with alcohol-related absence and presenteeism.

Declaration of Interest

The authors report no conflicts of interest.

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