Leaveism in English and Welsh police forces: baseline reference values

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**Abstract**

**Background:** Leaveism is a recently coined term for alternative attendance behaviours to sickness absence and sickness presence. Initial studies suggest that leaveism might mask the true extent of sickness in organisations and represent a response to perceived job insecurity, the belief that sickness absence could harm promotion prospects, and low job gratification.

**Aims:** To generate baseline reference values for leaveism in English and Welsh police forces to facilitate benchmarking and risk-reduction activities.

**Methods:** Officers represented by the Police Federation of England and Wales contributed survey data on the incidence of three leaveism dimensions in the year to February 2016. We applied descriptive statistics to characterise leaveism and Pearson’s $\chi^2$ tests to examine differences in incidence rates by socio- and occupational-demographic factors.

**Results:** Annual leave or rest days were used to take time off from work due to physical health complaints by 8,499/14,451 (59%) of respondents and psychological health complaints by 5,983/14,326 (42%) (dimension 1). Work was taken home that could not be completed in normal working hours by 7,515/14,959 (50%) of respondents (dimension 2), and 5,974/14,963 (40%) reported having worked while on annual leave in order to catch up with work (dimension 3). Incidence rates on dimensions 2 and 3 differed markedly by rank, with higher ranks reporting higher rates.
**Conclusions:** These sector-wide findings suggest that leaveism is a cause for concern. Further research is required to identify sector-specific causes of leaveism with a view to informing interventions to tackle the problem.

**Key words:** attendance, leaveism, police.
Introduction

Research on worker attendance behaviours associated with sickness has traditionally focused on sickness absence and more recently sickness presence (presenteeism). In 2014 Hesketh and Cooper [1] introduced a third form of attendance behaviour, leaveism, which was proposed as an additional manifestation of worker sickness. Leaveism describes hidden sickness absence and work undertaken during rest periods. Specifically, it is the practice of employees: (i) utilising allocated time off such as annual leave entitlements, flexi hours, banked re-rostered rest days, etc., to take time off when they are in fact unwell; (ii) taking work home that cannot be completed in normal hours; and (iii) working while on leave or holiday to catch up.[1]

Research on this emerging concept is important for a number of reasons. Firstly, and in relation to the first of the leaveism dimensions, organisations require accurate sickness data in order to meaningfully inform policies and procedures to protect and promote workers’ health. This is hindered if the true level of sickness absence is masked by alternative attendance behaviours that are little known and understood. Secondly, initial research indicates that the first dimension of leaveism is positively associated with fear of job loss and the expectation that attending for work while ill improves promotion chances, while negatively associated with job gratification (approval and remuneration for work done) and self-rated health, indicating that “this component of leaveism has to be interpreted as illness-related behaviour that is...a strategy induced by pressure and perceived insecurity”[2] and thereby highlighting the necessity for interventions targeted at these factors as a means to promote attendance and health. Thirdly, the positive association between opportunities for recovery from work and health and wellbeing [3] suggests that the second and third leaveism dimensions are likely to be most harmful.
Research to date has focused almost exclusively on the first of the three leaveism dimensions; using allocated time off in order to take time off when unwell. This might reflect the new nature of the construct as well as a desire to focus on the component of most obvious relevance to sickness-related behaviour. With one exception [2], these initial studies have been conducted in the English and Welsh police forces and focused on establishing the extent of the phenomenon. The earliest of these involved 155 officers (predominantly of constable rank) and police staff of an English police force surveyed in 2012 and 2013 [4]. Among full time respondents, 68% reported having taken rest days, flexi time, cumulative time off (CTO), or part of their annual leave entitlement to have time off when ill or injured. (Note the extension of the definition here to encompass injury alongside illness.) Leaveism appeared to be linked to rank with 64% of constables, 71% of sergeants, and 75% of inspectors reporting the phenomenon. Consistent with this pattern, a 2014 follow-up study of senior officers of the chief superintendent, superintendent, and chief inspector ranks \( n=33 \) reported a prevalence rate of 76% [5]. Because rank is typically positively correlated with years of service the possibility arises that differences in prevalence by rank found in these studies may reflect item wording that asked respondents to consider if they had ever demonstrated leaveism. Indeed, application of a 12-month timeframe in a study of police superintendents \( n=1033 \) who were asked to indicate whether they had taken leave or a rest day to avoid sickness resulted in a lower rate of 34% [6]. Accordingly, application of a six-month timeframe in a nationwide study of police custody officers \( n=747 \) resulted in a yet lower rate of 16% [7].

These initial findings from the English and Welsh policing forces on the first of the leaveism dimensions suggest that it may be a cause for concern in this occupational group. However, research to date has involved small samples or focused on specific
roles or ranks, limiting the generalisbility of findings. This produces uncertainty about whether leaveism is a widespread phenomenon in policing. If so, researchers and practitioners might try to identify its causes and develop interventions to erode cause-consequence linkages. In response to these knowledge limitations in the evidence base the first aim of this study is to extend previous research by establishing the extent of the first of the leaveism dimensions in a large-scale representative sample of police officers drawn from all 43 territorial police forces in England and Wales.

The second and third components of leaveism have to date been considered largely in conceptual terms, with a single empirical study involving 148 police officers and staff of a UK force having examined the proportion of respondents that worked while on annual leave [8]. Hence, a second aim of this study is to establish the extent of these leaveism components in policing in England and Wales. Given the health promoting benefits of opportunities for recovery from work [3], knowledge on the extent of these leaveism components may help support and inform workload management policies.

This study measures all three dimensions of leaveism in order to provide a comprehensive baseline assessment against which trends can be monitored in police forces in England and Wales. Reference data may allow stakeholders to take decisions on the targeting of resources to tackle leaveism through implementation of health-supporting working conditions, organisational culture, and attendance policies and consequently to monitor progress on its amelioration.

**Methods**

The analyses reported are drawn from the Police Federation of England and Wales 2016 Officer Demand, Capacity, and Welfare Survey, which was conducted by
the authors. The self-reported measurement instrument collected information on a range of issues relating to police officers’ psychosocial working conditions, safety, health, and wellbeing, of which leaveism formed one part. We piloted the questionnaire with a panel of Police Federation representatives to check for errors and ambiguity and to establish its face validity, with minor adjustments made in light of feedback. The Faculty of Medicine and Health Sciences Research Ethics Committee at the University of Nottingham granted ethical approval for the study (ref: LT08122015 SoM PAP). Police officers of the federated ranks (constable, sergeant, inspector, chief inspector) in the 43 territorial forces across England and Wales were eligible to complete the online survey using Survey Monkey. Officers were made aware of the survey through Police Federation national and local social media activity, magazine/newsletter communications, and its website. The survey was available for a four-week period in February 2016.

We measured leaveism using four items. Dimension 1 was assessed using two items adapted from Donaldson-Fielder and colleagues’ study of personal resilience in police superintendents [6] and Hesketh and colleagues’ studies of leaveism in the federated and senior policing ranks [4,5]: “In the last 12 months have you used annual leave or rest days to take time off due to your state of physical health?” and “In the last 12 months have you used annual leave or rest days to take time off when you really should have taken sick leave due to stress, low mood, anxiety, or other problems with your mental health and wellbeing?” Participants provided responses on a 4-point scale of (i) ‘no, never’, (ii) ‘yes, once’, (iii) ‘yes, 2-5 times’, and (iv) ‘yes, more than 5 times’. Due to the absence of empirical literature on the second of the leaveism dimensions at the time of designing the study, we developed an item to measure this: “In the last 12 months how often have you taken work home that cannot be completed in normal
We measured dimension 3 using an item adapted from Hesketh and colleagues’ study of discretionary effort in policing [8]: “In the last 12 months how often have you worked while on annual leave in order to catch up with work?” Responses to these items were given on a 5-point scale of (i) ‘never’, (ii) ‘seldom’, (iii) ‘sometimes’, (iv) ‘often’, and (v) ‘always’. We also collected data on a range of background socio- and occupational-demographic characteristics.

We performed analyses with IBM SPSS Statistics V.23. We generated descriptive statistics for each study variable and applied Pearson’s $\chi^2$ tests to characterise socio- and occupational-demographic factors associated with leaveism. We applied Cramer’s V to establish effect size, with a coefficient of >.10 representing a small effect, >.30 a medium effect, and >.50 a large effect [9]. In order to ensure that statistically significant effects were practically relevant we defined significance as $p<0.001$ throughout owing to the large sample size.

Results

A total of 17,343 questionnaires containing responses were submitted. Removal of ineligible cases reduced the overall sample to 16,841 usable responses, representing a 14% response rate based on Home Office figures reporting a total of 117,473 officers within the federated ranks available for duty (excluding long-term absentees such as those on career breaks, and maternity or paternity leave) as of 31 March 2016 [10]. For the purpose of this study, we restricted analyses to respondents who provided data on leaveism. Respondents who failed to provide responses to items on leaveism did not differ significantly from those who provided such information on key socio- and occupational-demographic variables.

Chi-square analyses indicated that the socio-demographic profile of the full
sample and population [10] were broadly comparable, with no significant difference for gender (p > 0.05). There were significant though small differences for age (p < 0.001) and ethnicity (p < 0.001). In terms of occupational characteristics, there was a significant difference between the sample and the population for rank (p < 0.001), with a slightly higher proportion of the population than the sample reporting constable rank (79% vs. 74%), and a slightly higher proportion of the sample than the population reporting sergeant rank (19% vs. 15%).

The overall incidence of leaveism is shown in Table 1. Fifty-nine percent of respondents reported having used annual leave or rest days to take time off owing to the state of their physical health on at least one occasion in the last 12 months, while 42% reported having done so owing to stress, low mood, or other problems with mental health and wellbeing (dimension 1). Half (50%) of respondents reported having taken work home that could not be completed during normal work hours (dimension 2), while 40% reported having worked while on annual leave in order to catch up with work (dimension 3).

[Insert Table 1 here]

The incidence of leaveism by socio- and occupational-demographic characteristics is shown in Tables 2 and 3. There were significant differences for the incidence of the first leaveism dimension across all characteristics (with the exception of gender), though the effect size was negligible in every case. There were significant differences in the incidence rate on the second dimension across all characteristics (with the exception of gender and ethnicity). Effect sizes were notable for three occupational characteristics, with a small effect for rank, role, and years of service. On the third dimension, significant differences in the incidence rate were observed across one characteristic (age) and all assessed occupational characteristics. Small effect sizes were
observed for rank and role. On both the second and third leaveism dimensions the incidence rate ranged markedly by rank, with 44% and 34% of constables reporting these forms of leaveism, rising to 92% and 85% of chief inspectors.

*Insert tables 2 and 3 here*

**Discussion**

This study is the first to profile the extent of leaveism in police officers of the federated ranks in England and Wales. Fifty-nine percent of respondents reported having used annual leave or rest days to take time off owing to the state of their physical health in the previous 12 months, while 42% reported having done so owing to stress, low mood, or other problems with mental health and wellbeing (dimension 1). Work was taken home that could not be completed in normal working hours by 50% of respondents (dimension 2), and 40% reported having worked while on annual leave in order to catch up with work (dimension 3). Incidence rates on dimensions 2 and 3 differed markedly by rank, with higher ranks reporting higher rates. The high incidence rate on dimension 1, which was consistent across ranks, supports the view that a restricted focus on sickness absence and presenteeism is likely to under-estimate the true extent of worker sickness. Therefore, “the concept of leaveism provides additional value since...it covers a third behavioural option applicable in times of sickness...which adds additional health-related information above and beyond the information embedded in the measures of absenteeism and presenteeism”.[2]

The strengths of this study lie in the comprehensive examination of all three leaveism dimensions, a response rate comparable to that obtained in recent research concerning working conditions in policing[11-14], and the large-scale nationally representative sample that permits generalisation of the findings to policing across
England and Wales. Nevertheless, there are some limitations. Officers on sick leave and those who had resigned or retired were not included; it is possible that these officers may have responded to sickness and work pressure differently to respondents, raising the possibility of an under- or over-estimation of leaveism. Given that this strand of research is new, the reliability of self-reports of leaveism is unclear and further research is required to better understand workers’ perceptions of sickness and attendance behaviour decision-making and develop associated standardised measurement instruments.

Rates on the first leaveism dimension observed in our study differ from those found in earlier police force research. This is likely to reflect contrasting reporting timeframes. The incidence rate in our study, which involved a 12-month reporting window, is higher than that found in studies applying a six-month reporting window, and lower than the rate produced by those that operated an ‘ever in career’ reporting window. This highlights the issue of inconsistency between initial studies on leaveism that included differences in reporting windows and also the type of leave encompassed and the definition of ill health. In order for leaveism research to develop in a structured and cohesive manner it is important that researchers take steps to acquire consensus on the definition and measurement of the phenomenon. Consistency in these regards is important for research to provide an empirical foundation capable of informing developments in organisational policy and practice. Lessons may be learned from the evolution of research on presenteeism.

In our study the incidence of the second and third leaveism dimensions was strongly linked to rank, with rates in the constable rank being half that observed in the inspector and chief inspector ranks. These findings require further evaluation, d,
suggest that work-life balance and its attendant negative health and wellbeing correlates may differ between ranks.

As one of the first studies on leaveism we set out to establish the scale of the problem in police forces in England and Wales. Accordingly, there is considerable scope for further research in this area. Specifically, in addition to the development of consensus between researchers on the definition and measurement of leaveism, studies are needed to develop an empirical knowledge base concerning generic and sector-specific aetiological factors in addition to consequences for workers and their organisations. For instance, data from the Police Federation’s 2016 Officer Demand, Capacity, and Welfare Survey on mental health disclosure indicate that 23% of police officers who opted not to disclose mental health difficulties to their employer, did so because of concerns about implications for career progression [15]. Similarly, Gerich [2] found that leaveism was associated with the expectation that attending for work while ill improves promotion chances. Such findings suggest that organisational culture surrounding ill health might be linked to leaveism rates. Knowledge on potentially modifiable work factors associated with leaveism could usefully inform the development of interventions to address the problem.

**Key Points**

- Leaveism is an attendance behaviour alternative to sickness absence and sickness presence, and is a recently coined term describing a phenomenon that provides additional health-related information to data on absenteeism and presenteeism.
- In a nationally representative sample of more than 14,000 police officers of the federated ranks in England and Wales, two thirds of respondents reported using
annual leave or rest days in the preceding year to take time off work due to psychological health problems, and three fifths for physical health problems.

- These findings provide baseline reference data against which police forces may measure progress towards the amelioration of this hitherto little explored challenge to occupational health.

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## Table 1

**Leaveism overall incidence (last 12 months)**

| | Used annual leave or rest days to take time off due to physical health | Used annual leave or rest days to take time off due to stress, low mood, anxiety, or other problems with mental health and wellbeing | n (%) |
|---|---|---|---|
| No, never, | 5,952 (41) | 8,343 (58) | |
| Yes, once | 3,684 (26) | 2,321 (16) | |
| Yes, 2-5 times | 3,810 (26) | 2,633 (19) | |
| Yes, more than 5 times | 1,005 (7) | 1,029 (7) | |
| Total | 14,326 (100) | 14,451 (100) | |

| | Taken work home that cannot be completed in normal working hours | Worked while on annual leave in order to catch up with work | n (%) |
|---|---|---|---|
| Never | 7,444 (50) | 8,989 (60) | |
| Seldom | 2,691 (18) | 2,533 (17) | |
| Sometimes | 2,891 (19) | 2,355 (16) | |
| Often | 1,453 (10) | 842 (6) | |
| Always | 480 (3) | 244 (1) | |
| Total | 14,959 (100) | 14,963 (100) | |
Table 2

Association between socio-demographic characteristics and leaveism (≥ once in last 12 months)

|                                | Used annual leave or rest days to take time off due to state of physical health | Used annual leave or rest days to take time off due to state of mental health | Taken work home that cannot be completed in normal working hours | Worked while on annual leave in order to catch up with work |
|--------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|
|                                | n (%)                                                                            | n (%)                                                                            | n (%)                                                           | n (%)                                                           |
| All                            | 8,499/14,451 (59)                                                               | 5,983/14,326 (42)                                                               | 7,515/14,959 (50)                                               | 5,974/14,963 (40)                                               |
| Age                            |                                                                                  |                                                                                  |                                                                 |                                                                 |
| ≤25                            | 163/352 (46)                                                                    | 107/348 (31)                                                                    | 163/362 (45)                                                    | 134/362 (37)                                                    |
| 26-40                          | 3,740/6,347 (59)                                                                | 2,585/6,293 (41)                                                                | 3,111/6,554 (48)                                               | 2,469/6,552 (38)                                               |
| 41-55                          | 4,385/7,398 (59)                                                                | 3,144/7,337 (43)                                                                | 4,070/7,679 (53)                                               | 3,230/7,686 (42)                                               |
| >55                            | 82/149 (55)                                                                     | 58/146 (40)                                                                     | 71/149 (48)                                                    | 61/149 (41)                                                    |
| $X^2$, df, p value             | 24.25, 3, p<0.001                                                               | 22.40, 3, p<0.001                                                               | 47.90, 3, p<0.001                                             | 29.18, 3, p<0.001                                             |
| Effect size                    | .04                                                                              | .04                                                                              | .06                                                            | .04                                                            |
| Gender                         |                                                                                  |                                                                                  |                                                                 |                                                                 |
| Female                         | 2,420/3,980 (61)                                                                | 1,725/3,956 (44)                                                                | 2,104/4,118 (51)                                              | 1,640/4,121 (40)                                              |
| Male                           | 6,051/10,416 (58)                                                              | 4,238/10,316 (41)                                                               | 5,391/10,785 (50)                                             | 4,315/10,786 (40)                                             |
| $X^2$, df, p value             | 8.74, 1, p<0.01                                                                 | 7.48, 1, p<0.01                                                                 | 1.46, 1, NS                                                   | .05, 1, NS                                                     |
| Effect size                    | .03                                                                              | .02                                                                              | .01                                                           | .00                                                            |
| Ethnicity                      |                                                                                  |                                                                                  |                                                                 |                                                                 |
| White                          | 7,980/13,678 (58)                                                               | 5,597/13,557 (41)                                                               | 7,113/14,154 (50)                                             | 5,638/14,158 (40)                                             |
| Mixed                          | 171/261 (66)                                                                    | 119/260 (46)                                                                    | 129/272 (48)                                                  | 112/272 (41)                                                   |
| Asian/Asian British            | 103/146 (71)                                                                    | 84/147 (58)                                                                      | 76/157 (48)                                                   | 66/156 (43)                                                    |
| Black/African/Caribbean/Black British | 51/75 (68)                                                                  | 43/4 (58)                                                                       | 35/73 (48)                                                   | 34/75 (45)                                                    |
| Other                          | 137/184 (75)                                                                    | 106/185 (57)                                                                    | 113/193 (59)                                                  | 90/192 (47)                                                    |
| $X^2$, df, p value             | 35.60, 4, p<0.01                                                                | 43.73, 4, p<0.01                                                                | 6.55, 4, NS                                                   | 5.36, 4, NS                                                    |
| Marital status                                           | Effect size | p<0.001 | p<0.001 | p<0.001 | p<0.001 |
|---------------------------------------------------------|-------------|---------|---------|---------|---------|
| Single (never married or formed a civil partnership)     | .05         |         |         |         |         |
| In a long term relationship but not married or in a civil partnership | .06         |         |         |         |         |
| Married / Civil Partnership                             | .02         |         |         |         |         |
| Separated but still legally married or in a civil partnership | .02         |         |         |         |         |
| Divorced / Formerly in a civil partnership that is now legally dissolved | .03         |         |         |         |         |
| Widowed / Surviving partner from civil partnership       | .04         |         |         |         |         |
| $\chi^2$, df, p value                                   | 22.04, 5,   | 93.87, 5, | 22.47, 5, | 9.91, 5, | NS      |
| Effect size                                             | .04         | .08     | .04     | .03     |         |

NS, non-significant
## Table 3

Association between occupational-demographic characteristics and leaveism (≥ once in last 12 months)

|                              | Used annual leave or rest days to take time off due to state of physical health | Used annual leave or rest days to take time off due to state of mental health | Taken work home that cannot be completed in normal working hours | Worked while on annual leave in order to catch up with work |
|------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------|
|                              | n (%).                                                                          | n (%).                                                                          | n (%).                                                           | n (%).                                                   |
| All                          | 8,499/14,451 (59)                                                              | 5,983/14,326 (42)                                                              | 7,515/14,959 (50)                                               | 5,974/14,963 (40)                                       |
| Rank                         |                                                                                 |                                                                                 |                                                                  |                                                          |
| Constable                    | 6,355/10,579 (60)                                                              | 4,506/10,481 (43)                                                              | 4,765/10,956 (44)                                              | 3,773/10,957 (34)                                       |
| Sergeant                     | 1,591/2,852 (56)                                                               | 1,112/2,834 (39)                                                              | 1,840/2,930 (63)                                               | 1,426/2,933 (49)                                        |
| Inspector                    | 450/839 (54)                                                                   | 296/832 (36)                                                                   | 744/875 (85)                                                   | 623/875 (71)                                            |
| Chief Inspector              | 82/145 (57)                                                                    | 55/143 (39)                                                                    | 146/158 (92)                                                   | 135/158 (85)                                            |
| $X^2$, df, p value           | p<0.001                                                                        | p<0.001                                                                        | p<0.001                                                        | p<0.001                                                 |
| Effect size                  | .04                                                                             | .04                                                                             | .25                                                             | .22                                                     |
| Role                         |                                                                                 |                                                                                 |                                                                  |                                                          |
| Other                        | 334/594 (56)                                                                   | 232/583 (40)                                                                   | 335/615 (55)                                                   | 251/615 (41)                                            |
| Neighbourhood                | 1,154/1,895 (61)                                                               | 834/1,889 (44)                                                                 | 1,025/1,960 (52)                                              | 798/1,965 (41)                                          |
| Response                     | 2,608/4,577 (57)                                                               | 1,849/4,544 (41)                                                              | 1,948/4,700 (41)                                              | 1,563/4,695 (33)                                        |
| Central                      | 102/211 (48)                                                                   | 82/208 (39)                                                                    | 73/218 (34)                                                    | 57/217 (26)                                             |
| Communications               |                                                                                 |                                                                                 |                                                                  |                                                          |
| Custody                      | 192/393 (49)                                                                   | 148/393 (38)                                                                   | 142/405 (35)                                                   | 115/407 (28)                                            |
| Criminal justice             | 202/336 (60)                                                                   | 152/327 (47)                                                                   | 210/353 (60)                                                   | 164/354 (46)                                            |
| Road policing                | 396/686 (58)                                                                   | 273/687 (40)                                                                   | 360/718 (50)                                                   | 277/718 (39)                                            |
| Operational support          | 694/1,137 (61)                                                                 | 410/1,124 (37)                                                                 | 619/1,193 (52)                                                | 468/1,194 (39)                                          |
| Intelligence                 | 414/650 (64)                                                                   | 279/641 (44)                                                                   | 364/670 (54)                                                   | 280/673 (42)                                            |
| Investigations               | 2,048/3,339 (61)                                                               | 1,459/3,301 (44)                                                               | 1,972/3,461 (57)                                              | 1,639/3,460 (47)                                        |
| National policing            | 74/129 (57)                                                                    | 51/128 (40)                                                                     | 84/141 (60)                                                   | 72/140 (51)                                             |
| Training                     | 143/254 (56)                                                                   | 112/250 (45)                                                                   | 213/266 (80)                                                  | 147/266 (55)                                            |
| Administrative support       | 82/128 (64)                                                                    | 56/128 (44)                                                                    | 81/134 (60)                                                   | 61/134 (46)                                             |
| PFEW rep.                    | 19/50 (38)                                                                     | 13/49 (27)                                                                      | 49/50 (98)                                                     | 48/50 (96)                                              |
| Mixed role                   | 24/48 (50)                                                                     | 21/49 (43)                                                                      | 23/49 (47)                                                     | 18/49 (37)                                              |
| Years service | Effect size | $\chi^2$, df, p value | Effect size | $\chi^2$, df, p value | Effect size | $\chi^2$, df, p value |
|---------------|-------------|-----------------------|-------------|-----------------------|-------------|-----------------------|
| 0-9           | .07         | 67.79, 14, p<0.001    | .06         | 42.68, 14, p<0.001    | .17         | 446.63, 14, p<0.001   |
| 10-19         | .05         | 315, 14, p<0.001      | .07         | 57.11, 2, p<0.001     | .10         | 39.21, 2, p<0.001     |
| ≥20           | .06         | 1,829/3,336 (55)      | .05         | 1,488/3,447 (43)      | .07         | 1,769/4,403 (40)      |

*Note: Effect sizes are given as a proportion of the total sample size.*