Supplementary Material

Turnover factors and retention strategies for chief executive officers in Australian hospitals

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1   Supplementary material file S1

2   Dear Chief Executive Officer,

3   Research Study Title: To investigate the factors behind increasing turnover of Chief Executive Officers

4   (CEO's) in Australian Health care setting and to devise a CEO retention model.

5   I am writing to let you know about this research project that you have the option to take part in. The
6   research is being conducted by a university in Australia. I am contacting you to see if you are
7   interested in taking part in this research.

8   We are conducting this research project to understand more about the factors behind increasing

9   turnover of CEO's in Australian Health care setting. The high rate of executive turnover in the

10   healthcare industry is a major issue for health service organisations and their staff both in Australia

11   and internationally. High turnover rates among senior executives have been found to be associated

12   with a number of negative consequences, including organisational instability, high financial costs, loss

13   of human capital and adverse effects on staff morale and patient care.

14   The reason we want to know more about the factors behind the turnover is to devise a retention

15   model for CEO's that health care organisations can use. Less is known about their turnover rates and

16   this research is being conducted to address this knowledge gap.

17   We are looking for people who want to take part in this research and who are or have been (in past):

18   ·   CEO's- Health care;

19   ·   In a CEO role in healthcare for a minimum of 12 months

20   ·   In a CEO level position at any level in any type of healthcare organisation in Australia.

21   Chief Executive Officer (CEO) is a professional who determines and formulates policies and provides

22   overall direction of companies or private and public sector organizations within guidelines set up by a

23   board of directors or similar governing body.

24   If you decide to take part in the research we would like you to complete an anonymous online survey

25   which will take approximately 3-5 minutes to complete.

26   Taking part in this research study is voluntary. You may choose not to take part. If you decide not to

27   take part in this research, your decision will not affect your relationship with the university. This

28   research has been reviewed and approved by the Human Research Ethics Committee. If you have any

29   complaints or concerns about the research study, please contact us.

30   Yours sincerely,

31

32   Do you agree to participate?

33   I agree to proceed

34

35   Supplementary material file S2

36   Participant Characteristics

37   1.   Sex: M/F

38   2.   Age: < 25; 25-34; 35-44; 45-54; 55-64;65+

39   3.   Total Experience as CEO in years: <1, 1-2, 3-5, 5-8, 8-10, >10

40   4.   Currently, working as health care CEO: Yes or No

41   4.   Working as Health care CEO in: Metro area/Regional area

42   5.   Which state in Australia do you work: New South Wales, Queensland, Northern Territory,

43   Western Australia, South Australia, Victoria, The Australian Capital Territory, Tasmania

44   6.   Number of organisations worked as CEO (free text)

45   6.   Managing total number of employees: <50, 51-100, 101-500, 501-1000, 1001-2000, 2001-

46   5000, 5001-10000, >10001

47   7.   Qualifications: Bachelors, Graduate Diploma, Masters, Doctorate, Other (Free text)

48

49   In your opinion, reasons for CEO's turnover include: (Please tick all that applies)

50   CEO's may leave due to stress/pressure from the job

51   CEO's may leave due to the criticism they face within and outside the organisation

52   CEO's leave due to managing an under-resourced health care organisation

53   CEOs resign seeking a quieter life by stepping down or retirement

54   CEO's leave due to the desire for a career change

55   CEO's may resign due to lack of support from the board

56   CEO's might get removed by the board due to poor performance

57   CEOs are more often forced out of office than they replaced

58   CEO's leave because of lapses in ethical conduct than for the typical complaint of poor financial

59   performance

60   CEO's may leave due to family commitments

61   CEO's may leave due market decline or lesser demand of services

62   Other

63

64   Do you have any suggestions on how to improve Health care CEO Retention?

65   It is important for CEO to have clinical background to be successful in their role

66   1.   Strongly disagree

67   2.   Disagree

68   3.   Neutral

69   4.   Agree

70   5.   Strongly agree

71   It is important for CEOs to have their values aligned with organisational values to succeeded in their

72   role

73   1.   Strongly disagree

74   2.   Disagree

75   3.   Neutral

76   4.   Agree

77   5.   Strongly agree

78

79   Organisational culture plays a huge role in CEOs departure or retention

80   1. Strongly disagree

81   2. Disagree

82   3. Neutral

83   4. Agree

84   5. Strongly agree

85

86   Acknowledging a CEO for their work achievements by providing financial and non-financial rewards

87   will help CEO retention

88   1. Strongly disagree

89   2. Disagree

90   3. Neutral

91   4. Agree

92   5. Strongly agree

93

94   It is helpful for a CEO to have a mentor or coach to perform their role well.

95   1. Strongly disagree

96   2. Disagree

97   3. Neutral

98   4. Agree

99   5. Strongly agree

100

101   CEO's retention tracking is important as it helps to plan organisational responses and identify

102   turnover risks

103   1. Strongly disagree

104   2. Disagree

105   3. Neutral

106   4. Agree

107   5.   Strongly agree

108

109   Recruitment of CEO should be conducted in a broader platform so to find the most suitable

110   candidate for the role

111   1.   Strongly disagree

112   2.   Disagree

113   3.   Neutral

114   4.   Agree

115   5.   Strongly agree

116

117   Job description of CEO should be clearly defined when the role is advertised

118   1. Strongly disagree

119   2. Disagree

120   3. Neutral

121   4. Agree

122   5. Strongly agree

123

124   Organisation should fulfill a CEOs training and development needs to him/her to grow professionally

125   1.   Strongly disagree

126   2.   Disagree

127   3. Neutral

128   4. Agree

129   5. Strongly agree

130

131   Exit interviews should be conducted before a CEOs departure

132   1. Strongly disagree

133   2. Disagree

134   3. Neutral

135   4. Agree

136   5. Strongly agree

137

138   Job responsibilities of CEO, board chair and board members should be clearly defined and followed

139   1. Strongly disagree

140   2. Disagree

141   3. Neutral

142   4. Agree

143   5. Strongly agree

144   It is important that the Board/government health departments don't stray into operations, and they

145   keep their distance

146   1. Strongly disagree

147   2.   Disagree

148   3.   Neutral

149   4.   Agree

150   5.   Strongly agree

151   Board Chair and CEO to have regular performance (For e.g., monthly) catch up's

152   1.   Strongly disagree

153   2.   Disagree

154   3.   Neutral

155   4.   Agree

156   5.   Strongly agree

157   Having skill-based board creates a system of safety and plays a critical part in supporting CEO's

158   1.   Strongly disagree

159   2.   Disagree

160   3.   Neutral

161   4.   Agree

162   5.   Strongly agree

163   For a CEO to be successful in their role, it is imperative for CEO and Board chair to have mutual

164   respect and trust for each other

165   1.   Strongly disagree

166   2.   Disagree

167   3.   Neutral

168   4.   Agree

169   5.   Strongly agree

170   CEOs should get the autonomy to prioritise organisational demands

171   1. Strongly disagree

172   2.   Disagree

173   3.   Neutral

174   4.   Agree

175   5.   Strongly agree

176   CEOs should be given time so that they can invest on staff's wellbeing and resilience within their

177   organisation.

178   1. Strongly disagree

179   2.   Disagree

180   3.   Neutral

181   4.   Agree

182   5.   Strongly agree

183   Rural health CEO should get same pay as Metro health CEO as managing rural health is complex

184   1. Strongly disagree

185   2.   Disagree

186   3.   Neutral

187   4.   Agree

188   5.   Strongly agree

189   CEOs should get the opportunity to participate in government decisions that has significant impact

190   upon their organisation and its functioning

191   1. Strongly disagree

192   2.   Disagree

193   3.   Neutral

194   4.   Agree

195   5.   Strongly agree

196   Succession planning is very important and Board should take it very seriously as frequent CEO

197   turnover can affect an organization's safety

198   1. Strongly disagree

199   2.   Disagree

200   3.   Neutral

201   4.   Agree

202   5.   Strongly agree

203

204

205

206

207   Supplementary material Table S1

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	6.001	1.970		3.046	0.004		
Sex (male vs female)	-0.471	0.832	-0.104	-0.567	0.574	0.668	1.497
Age (>55 vs <55)	0.324	0.912	0.070	0.355	0.724	0.583	1.716
CEO_Years (>8 vs <8)	-0.262	1.019	-0.058	-0.257	0.799	0.451	2.219
CEO_Current (Yes vs No)	0.167	1.015	0.028	0.165	0.870	0.757	1.321
CEO_Metro vs Rural	0.530	0.773	0.118	0.685	0.497	0.761	1.315
CEO_State (Victoria vs Other states)	-0.473	0.739	-0.105	-0.640	0.526	0.839	1.192
No_organisations (>1 vs <1)	-0.785	0.857	-0.176	-0.916	0.365	0.617	1.620
No_employees (>10000 vs <50)	-0.700	0.853	-0.150	-0.821	0.417	0.682	1.466
Qualifications (Bachelors vs Other qualification)	-0.012	0.774	-0.003	-0.015	0.988	0.828	1.207

208

Supplementary material Table S2

Variables	Stress		Criticism		Under-resourced		Quieter life		Career change		Lack of Board support	
	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)
Sex	0.762 (95% CI [0.193, 3.005], p=0.697).	0.876 (95% CI [0.175, 4.395], p=0.872)	.212 (95% CI [0.062, 0.724], p=0.011)	.138 (95% CI .025, .757], p=0.023)	.594 (95% CI [0.182, 1.941], p=0.386)	.471 (95% CI .101, 2.209], p=.340)	1.457 (95% CI [0.486, 4.367], p=0.501)	1.906 (95% CI .456, 7.968], p=.377)	.963 (95% CI [0.308, 3.005], p=0.948)	2.881 (95% CI .467, 17.763], p=.254)	.357 (95% CI [0.105, 1.213], p=0.093)	.037 (95% CI [.003, .480], p=0.012)
Age	1.354 (95% CI [0.354, 5.173], p=0.657).	2.101 (95% CI [0.323, 13.651], p=0.437)	1.329 (95% CI [0.438, 4.030, p=0.615)	1.709 (95% CI [.269, 10.856], p=.570)	1.354 (95% CI [0.426, 4.298, p=0.607)	.813 (95% CI [.165, 3.993], p=.798)	1.714 (95% CI [0.564, 5.208, p=0.340)	3.412 (95% CI [.698, 16.671], p=.129)	1.711 (95% CI [0.525, 5.571, p=0.371)	5.767 (95% CI [.761 4 3.727], p=.090)	1.650 (95% CI [0.526, 5.173, p=0.389)	.100 (95% CI [.008, 1.208], p=0.070)
CEO years	0.816 (95% CI [0.214, 3.108], p=0.765).	0.540 (95% CI [0.071, 4.120], p=0.552)	0.632 (95% CI [.209, 1.907], p=.414)	.577 (95% CI [.086, 3.854], p=.570)	1.179 (95% CI [.369, 3.760], p=.781)	1.582 (95% CI [.269, 9.304], p=.612)	1.280 (95% CI [.428, 3.829], p=.659)	.433 (95% CI [.080, 2.357], p=.333)	.519 (95% CI [.160, 1.688], p=.273)	.169 (95% CI [.022, 1.290], p=0.086)	1.926 (95% CI [.593, 6.259], p=.273)	6.725 (95% CI [.655, 69.093], p=0.109)
Current CEO	1.111(95% CI [0.196, 6.291], p=0.905).	1.809 (95% CI [0.227, 14.405], p=0.575)	3.176 (95% CI [0.700, 14.421], p=0.122)	5.985 (95% CI [.830, 43.184], p=0.076)	0.967 (95% CI [0.211, 4.418], p=0.965)	.627 (95% CI [.108, 3.629], p=.603)	2.400 (95% CI [0.531, 10.838], p=0.246)	4.010 (95% CI [.676, 23.774], p=.126)	.647 (95% CI [0.151, 2.770], p=0.555)	.667 (95% CI [.102, 4.336], p=.671)	.454 (95% CI [0.084, 2.446], p=0.349)	.248 (95% CI [.029, 2.114], p=.202)
CEO metro/rural	1.091(95% CI [0.288, 4.135], p=0.898).	0.952 (95% CI [0.186, 4.859], p=0.953)	0.955 (95% CI [.322, 2.834], p=0.933)	1.323 (95% CI [.294, 5.953], p=0.715)	0.600 (95% CI [0.191, 1.877], p=0.380)	.450 (95% CI [.149, 2.327], p=0.589)	1.469 (95% CI [.497, 4.342], p=0.487)	2.060 (95% CI [.521, 8.143], p=.303)	1.407 (95% CI [.456, 4.342], p=0.552)	2.368 (95% CI [.549, 10.213], p=0.248)	.988 (95% CI [.321, 3.041], p=0.983)	1.333 (95% CI [.254, 6.989], p=.734)
CEO State	0.991(95% CI [0.261, 3.761], p=0.990).	1.043 (95% CI [0.223, 4.883], p=0.957)	1.138 (95% CI [.381, 3.393], p=0.817)	1.058 (95% CI [.258, 4.342], p=0.938)	0.750 (95% CI [.240, 2.347], p=0.621)	.502 (95% CI .133, 1.898], p=0.310)	.504 (95% CI [.168, 1.511], p=0.219)	.541 (95% CI [.148, 1.973], p=0.352)	.583 (95% CI [.185, 1.841], p=0.356)	.370 (95% CI [.087, 1.573], p=.178)	3.547 (95% CI [1.042, 12.075], p=0.038)	3.768 (95% CI [.810, 17.539], p=0.091)
CEO no: of organisations	0.833 (95% CI [0.220, 3.157], p=0.788).	0.697 (95% CI [0.120, 4.052], p=0.688)	0.673 (95% CI [.226, 2.007], p=0.477)	0.281 (95% CI [.051, 1.537], p=.143)	1.059 (95% CI [.340, 3.301], p=0.922)	0.950 (95% CI .218, 4.137], p=.946)	.587 (95% CI [.198, 1.740], p=0.335)	.719 (95% CI [.172, 2.999], p=.651)	2.171 (95% CI [.686, 6.872], p=0.184)	2.690 (95% CI [.541, 13.365], p=0.226)	.323 (95% CI [.099, 1.056], p=0.057)	.100 (95% CI [.014, 0.715], p=0.022)
No: of employees	1.667 (95% CI [0.432, 6.423], p=0.456).	2.476 (95% CI [0.430, 14.265], p=0.310)	1.286 (95% CI [.415, 3.981], p=0.663)	2.709 (95% CI [.497, 14.750], p=0.249)	0.577 (95% CI [.168, 1.980], p=0.380)	.625 (95% CI [.138, 2.839], p=0.543)	.900 (95% CI [.293, 2.769], p=0.854)	.756 (95% CI [.173, 3.298], p=0.709)	.658 (95% CI [.206, 2.098], p=0.478)	.314 (95% CI [.059, 1.683], p=0.176)	.510 (95% CI [.149, 1.743], p=0.279)	.245 (95% CI [.032, 1.900], p=0.178)
CEO Qualifications	1.143 (95% CI [0.286, 4.570], p=0.850).	1.481 (95% CI [0.299, 7.331], p=0.630)	1.067 (95% CI [.339, 3.354], p=0.912)	1.534 (95% CI [.336, 7.011], p=0.581)	1.388 (95% CI [.424, 4.547], p=0.587)	1.683 (95% CI [.428, 6.623], p=0.456)	.756 (95% CI [.241, 2.367], p=0.630)	.680 (95% CI [.177, 2.610], p=0.574)	.820 (95% CI [.253, 2.660], p=0.741)	.629 (95% CI [.140, 2.820], p=0.545)	1.220 (95% CI [.376, 3.957], p=0.741)	.560 (95% CI [.101, 3.092], p=0.506)

Supplementary material Table S2

Variables	Poor performance		Forced out		Lapse in ethical conduct		Family commitments		Lesser demand of services		Other reasons	
	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)
Sex	1.125 (95% CI [.376, 3.365], p=0.833)	1.137 (95% CI [.268, 4.820], p=.861)	1.841 (95% CI [0.486, 6.997], p=0.366)	1.243 (95% CI [.223, 6.926], p=.804)	3.111 (95% CI [0.323, 29.942], p=0.305)	7.062 (95% CI [.151, 329.666], p=.319)	1.105 (95% CI [0.357, 3.421], p=0.862)	1.073 (95% CI [.245, 4.706], p=.925)	0.804 (95% CI [0.041, 11.830], p=0.700)	207.94 (95% CI [0.000, -], p=.999)	0.513 (95% CI [0.134, 1.959], p=0.324)	1.114 (95% CI [.132, 9.396], p=.921)
Age	2.571 (95% CI [0.818, 8.080, p=0.102)	2.821 (95% CI [.602, 13.219], p=.188)	1.663 (95% CI [0.438, 6.315, p=0.453)	1.423 (95% CI [.222, 9.132], p=.710)	.400 (95% CI [0.061, 2.627, p=0.328)	0.00 (95% CI [.000, -], p=.994)	1.944 (95% CI [0.600, 6.306, p=0.265)	1.784 (95% CI [.358, 8.882], p=.480)	0.645 (95% CI [0.038, 10.913, p=0.760)	158.61 (95% CI [0.000, -], p=.999)	2.000 (95% CI [0.464, 8.619, p=0.347)	1.855 (95% CI [.156, 22.077], p=.625)
CEO years	1.662 (95% CI [.552, 4.999], p=.365)	.572 (95% CI [.107, 3.046], p=.513)	2.971 (95% CI [.816, 10.882], p=0.092)	1.310 (95% CI [.202, 8.480], p=.777)	2.289 (95% CI [0.349, 15.010], p=.378)	4.504 (95% CI [.108, 187.84], p=.429)	1.259 (95% CI [.409, 3.874, p=.688)	0.606 (95% CI [.109, 3.358], p=.567)	0.935 (95% CI [.853, 1.026, p=.225)	0.000 (95% CI [.0.000, -], p=.998)	0.762 (95% CI [.193, 3.005], p=.697)	0.632 (95% CI [.043, 9.383], p=.739)
Current CEO	1.141 (95% CI [0.270, 4.825], p=0.857)	1.547 (95% CI [.281, 8.505], p=.616)	1.167 (95% CI [0.210, 6.471], p=0.860)	1.364 (95% CI [.165, 11.272], p=.773)	0.800 (95% CI [0.079, 8.133], p=0.850)	0.00 (95% CI [.000, -], p=.995)	0.414 (95% CI [0.097, 1.773], p=0.226)	0.503 (95% CI [.091, 2.778], p=.431)	1.048 (95% CI [0.982, 1.117], p=0.514)	3.648 (95% CI [.0.000, -], p=1.000)	0.444 (95% CI [0.091, 2.247], p=0.307)	0.249 (95% CI [.022, 2.772], p=.258)
CEO metro/rural	1.444 (95% CI [.488, 4.272], p=0.506)	1.674 (95% CI [.442, 6.341], p=.448)	2.165 (95% CI [.601, 7.795], p=0.232)	2.965 (95% CI [.271, 14.572], p=.181)	1.773 (95% CI [.394, 11.584], p=0.546)	0.00 (95% CI [.000, -], p=.995)	1.200 (95% CI [.394, 3.651], p=0.748)	0.775 (95% CI [.205, 2.935], p=.707)	1.125 (95% CI [.067, 18.984], p=0.935)	2.707 (95% CI [.0.000, -], p=1.000)	0.571 (95% CI [.145, 7.795], p=0.420)	0.950 (95% CI [.117, 7.692], p=.962)
CEO State	0.667 (95% CI [.224, 1.984], p=0.465)	.555 (95% CI [.150, 2.054], p=0.378)	.271 (95% CI [.065, 1.136], p=0.064)	.290 (95% CI [.055, 1.528], p=0.144)	.828 (95% CI [.701, 0.977], p=0.033)	0.00 (95% CI [.000, -], p=.995)	.982 (95% CI [.322, 2.997], p=0.974)	.886 (95% CI [.247, 3.181], p=0.853)	.931 (95% CI [.843, 1.028], p=0.190)	0.023 (95% CI [.0.000, -], p=1.000)	8.100 (95% CI [1.545, 42.476], p=0.006)	8.874 (95% CI [1.097, 71.802], p=0.041)
CEO no: of organisations	.431 (95% CI [.143, 1.299], p=0.132)	.482 (95% CI [.117, 1.979], p=.311)	.329 (95% CI [.087, 1.247], p=0.094)	.501 (95% CI [.090, 2.783], p=.429)	.212 (95% CI [.022, 2.035], p=0.146)	0.00 (95% CI [.000, -], p=.995)	.491 (95% CI [.159, 1.521], p=0.215)	.445 (95% CI [.102, 1.938], p=.281)	.923 (95% CI [.826, 1.031], p=0.142)	.000 (95% CI [.0.000, -], p=.997)	1.200 (95% CI [.317, 4.547], p=0.788)	0.596 (95% CI [.064, 5.560], p=.650)
No: of employees	.711 (95% CI [.230, 2.192], p=0.552)	.616 (95% CI [.141, 2.689], p=0.520)	.862 (95% CI [.237, 3.138], p=0.821)	.363 (95% CI [.058, 2.258], p=0.277)	2.400 (95% CI [.248, 23.181], p=0.437)	13.483 (95% CI [.028, 64.851], p=0.409)	1.517 (95% CI [.464, 4.956], p=0.489)	1.717 (95% CI [.388, 7.591], p=0.476)	1.063 (95% CI [.977, 1.156], p=0.281)	159.00 (95% CI [.0.000, -], p=0.999)	.229 (95% CI [.056, .926], p=0.031)	0.134 (95% CI [.016, 1.116], p=0.063)
CEO Qualifications	1.181 (95% CI [.377, 3.698], p=0.776)	1.107 (95% CI [.293, 4.189], p=0.881)	.500 (95% CI [.139, 1.804], p=0.285)	.396 (95% CI [.075, 2.098], p=0.276)	.750 (95% CI [.114, 4.950], p=0.765)	22.000 (95% CI [.000, -], p=0.994)	1.333 (95% CI [.405, 4.386], p=0.635)	1.679 (95% CI [.422, 6.686], p=0.462)	0.889 (95% CI [.775, 1.047], p=0.044)	0.000 (95% CI [.0.000, -], p=0.996)	.875 (95% CI [.219, 3.499], p=0.850)	0.209 (95% CI [.022, 2.020], p=0.176)

Supplementary material Table S2

Variables	Skill based board		Clinical		Culture		Rewards		Mentor		Tracking		Recruitment		Training		Exit interview	
	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)
Sex	1.350 (95% CI [0.175, 10.419], p=0.773)	1.067 (95% CI [0.051, 22.539], p=0.967)	0.457 (95% CI [0.142, 1.472], p=0.186)	0.368 (95% CI [0.083, 1.626], p=0.187)	0.457 (95% CI [0.142, 1.472], p=0.186)	0.368 (95% CI [0.083, 1.626], p=0.187)	2.132 (95% CI [0.324, 14.011], p=0.423)	3.064 (95% CI [0.261, 36.030], p=0.373)	0.625 (95% CI [0.104, 3.767], p=0.606)	0.859 (95% CI [0.082, 9.028], p=0.899)	1.261 (95% CI [1.047, 1.518], p=0.023)	0.000 (95% CI [0.000-.], p=0.997)	0.351 (95% CI [0.082, 1.495], p=0.147)	0.248 (95% CI [.031, 1.982], p=0.189)	NA	1.258 (95% CI [.020, 77.390], p=0.913)	1.208 (95% CI [1.023, 1.427], p=0.040)	0.000 (95% CI [.000, -], p=0.995)
Age	1.765 (95% CI [0.228, 13.685], p=0.583)	1.840 (95% CI [0.051, 66.502], p=0.739)	0.898 (95% CI [0.275, 2.933], p=0.859)	0.670 (95% CI [0.133, 3.366], p=0.626)	0.898 (95% CI [0.275, 2.933], p=0.859)	0.670 (95% CI [0.133, 3.366], p=0.626)	1.137 (95% CI [0.172, 7.503], p=0.894)	1.045 (95% CI [0.099, 11.078], p=0.971)	0.300 (95% CI [.032, 2.785], p=0.267)	0.428 (95% CI [0.023, 8.013], p=0.570)	1.813 (95% CI [0.327, 10.049], p=0.492)	0.368 (95% CI [.000, 649.621], p=0.793)	3.150 (95% CI [0.830, 11.958], p=0.084)	1.905 (95% CI [.179, 20.240], p=0.593)	NA	0.350 (95% CI [.003, 36.282], p=0.657)	8.267 (95% CI [0.849, 80.527], p=0.037)	0.000 (95% CI [.000, -], p=0.999)
CEO years	2.222 (95% CI [0.215, 22.974], p=0.493)	0.385 (95% CI [0.004, 38.552], p=0.685)	0.600 (95% CI [0.181, 1.984], p=0.401)	0.805 (95% CI [0.132, 4.916], p=0.814)	0.600 (95% CI [0.181, 1.984], p=0.401)	0.805 (95% CI [0.132, 4.916], p=0.814)	1.056 (95% CI [0.161, 6.938], p=0.955)	0.427 (95% CI [0.027, 6.788], p=0.546)	0.304 (95% CI [0.050, 1.839], p=0.177)	0.333 (95% CI [0.021, 5.357], p=0.438)	0.667 (95% CI [0.121, 3.678], p=0.640)	4.063 (95% CI [0.003, 5003.594], p=0.699)	2.571 (95% CI [.603, 10.967], p=.193)	7.013 (95% CI [.548, 89.702], p=0.134)	NA	302.876 (95% CI [.000, -], p=0.997)	3.077 (95% CI [.319, 29.709], p=.311)	123.230 (95% CI [.000, -], p=0.998)
Current CEO	1.625 (95% CI [0.149, 17.692], p=0.688)	0.844 (95% CI [0.033, 21.789], p=0.919)	0.625 (95% CI [0.145, 2.699], p=0.527)	0.365 (95% CI [0.059, 2.268], p=0.280)	0.625 (95% CI [0.145, 2.699], p=0.527)	0.365 (95% CI [0.059, 2.268], p=0.280)	1.135 (95% CI [1.016, 1.269], p=0.276)	0.000 (95% CI [0.000, -], p=0.999)	0.925 (95% CI [.095, 9.034], p=0.947)	0.665 (95% CI [.044, 10.080], p=0.768)	6.500 (95% CI [1.057, 39.977], p=0.027)	17.987 (95% CI [0.870, 371.917], p=0.062)	0.352 (95% CI [.039, 3.147], p=0.333)	0.284 (95% CI [.021, 3.864], p=0.344)	NA	0.000 (95% CI [.000, -], p=0.997)	1.135 (95% CI [1.016, 1.269], p=0.276)	0.000 (95% CI [.000, -], p=0.999)
CEO metro/rural	0.880 (95% CI [0.114, 6.781], p=0.902)	0.452 (95% CI [0.014, 14.494], p=0.654)	0.850 (95% CI [0.268, 2.694], p=0.782)	0.743 (95% CI [0.185, 2.980], p=0.675)	0.850 (95% CI [0.268, 2.694], p=0.782)	0.743 (95% CI [0.185, 2.980], p=0.675)	4.000 (95% CI [0.415, 38.572], p=0.202)	0.743 (95% CI [0.185, 2.980], p=0.207)	1.913 (95% CI [0.318, 11.518], p=0.473)	2.963 (95% CI [.328, 26.797], p=0.334)	0.400 (95% CI [.066, 2.411], p=0.306)	0.314 (95% CI [0.013, 7.703], p=0.478)	0.552 (95% CI [.149, 2.047], p=0.371)	0.725 (95% CI [.106, 4.972], p=0.744)	NA	0.000 (95% CI [.000, -], p=0.997)	1.375 (95% CI [.210, 9.015], p=0.739)	433.702 (95% CI [.000, -], p=0.996)
CEO State	0.247 (95% CI [0.024, 2.553], p=0.211)	0.126 (95% CI [0.006, 2.568], p=0.178)	0.676 (95% CI [0.210, 2.174], p=0.510)	0.407 (95% CI [0.102, 1.616], p=0.201)	0.676 (95% CI [0.210, 2.174], p=0.510)	0.407 (95% CI [0.102, 1.616], p=0.201)	3.667 (95% CI [0.380, 35.363], p=0.235)	0.407 (95% CI [0.102, 1.616], p=0.387)	1.750 (95% CI [0.291, 10.540], p=0.538)	1.518 (95% CI [.202, 11.378], p=0.685)	1.750 (95% CI [0.291, 10.540], p=0.538)	0.444 (95% CI [0.034 5.800], p=0.536)	0.773 (95% CI [.211, 2.826], p=0.696)	0.692 (95% CI [.136, 3.513], p=0.657)	NA	0.459 (95% CI [.022, 9.531], p=0.615)	1.260 (95% CI [.192, 8.265], p=0.809)	0.000 (95% CI [.000, -], p=0.996)
CEO no: of organisations	0.293 (95% CI [0.028, 3.029], p=0.279)	0.103 (95% CI [0.002, 6.591], p=0.284)	1.500 (95% CI [0.473, 4.761], p=0.490)	0.888 (95% CI [0.186, 4.240], p=0.882)	1.500 (95% CI [0.473, 4.761], p=0.490)	0.888 (95% CI [0.186, 4.240], p=0.882)	0.611 (95% CI [0.093, 4.007], p=0.605)	0.888 (95% CI [0.186, 4.240], p=0.593)	2.091 (95% CI [0.347, 12.589], p=0.413)	1.067 (95% CI [.112, 10.161], p=0.955)	0.957 (95% CI [0.174, 5.255], p=0.959)	0.170 (95% CI [0.006, 4.874], p=0.301)	1.474 (95% CI [.398, 5.452], p=0.560)	4.036 (95% CI [.454, 35.871], p=0.211)	NA	3.716 (95% CI [.45, 305.172], p=0.559)	0.611 (95% CI [.093, 4.007], p=0.605)	1.000 (95% CI [.024, 41.241], p=1.000)
No: of employees	0.588 (95% CI [0.057, 6.107], p=0.654)	0.309 (95% CI [0.014, 6.700], p=0.454)	1.143 (95% CI [0.341, 3.831], p=0.829)	1.034 (95% CI [0.218, 4.895], p=0.966)	1.143 (95% CI [0.341, 3.831], p=0.829)	1.034 (95% CI [0.218, 4.895], p=0.966)	0.426 (95% CI [0.044, 4.135], p=0.451)	1.034 (95% CI [0.218, 4.895], p=0.464)	0.906 (95% CI [0.149, 5.503], p=0.915)	0.360 (95% CI [.030, 4.374], p=0.423)	0.329 (95% CI [0.035, 3.063], p=0.309)	1.975 (95% CI [0.073, 53.125], p=0.685)	0.533 (95% CI [.124, 2.290], p=0.393)	0.492 (95% CI [.072, 3.340], p=0.468)	NA	909.256 (95% CI [.000, -], p=0.997)	0.426 (95% CI [.044, 4.135], p=0.451)	0.000 (95% CI [.000, -], p=0.996)
CEO Qualifications	0.588 (95% CI [0.057, 6.107], p=0.654)	0.619 (95% CI [0.038, 10.132], p=0.737)	1.690 (95% CI [0.486, 5.872], p=0.407)	2.340 (95% CI [0.579, 9.447], p=0.233)	1.690 (95% CI [0.486, 5.872], p=0.407)	2.340 (95% CI [0.579, 9.447], p=0.233)	3.100 (95% CI [0.467, 20.570], p=0.224)	2.340 (95% CI [0.579, 9.447], p=0.398)	0.906 (95% CI [0.149, 5.503], p=0.915)	0.469 (95% CI [.042, 5.202], p=0.537)	2.000 (95% CI [0.360, 11.126], p=0.422)	6.844 (95% CI [0.334, 140.362], p=0.212)	0.288 (95% CI [.055, 1.492], p=0.123)	0.185 (95% CI [.025, 1.376], p=0.099)	NA	0.000 (95% CI [.000, -], p=0.998)	9.143 (95% CI [.936, 89.345], p=0.028)	220.440 (95% CI [.000, -], p=0.996)

Supplementary material Table S2

Variables	Distance		Catch ups		Trust		Autonomy		Time		Rural Equality		Government decisions		Succession planning	
	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)	OR (95% CI)	AOR (95% CI)
Sex	1.333 (95% CI [0.079, 22.571], p=0.842)	15.847 (95% CI [.000, -], p=1.000)	1.036 (95% CI [0.967, 1.109], p=0.379)	0.000 (95% CI [.000, -], p=.977)	NA	NA	0.643 (95% CI [0.055, 7.579], p=0.742)	.000 (95% CI [.000, -], p=.991)	1.036 (95% CI [0.967, 1.109], p=0.379)	.000 (95% CI [.000, -], p=.999)	.238 (95% CI [0.065, 3.637], p=.26)	.220 (95% CI .036, 1.329], p=0.099)	.413 (95% CI [0.040, 4.263], p=0.445)	.891 (95% CI [.027, 29.683], p=.948)	.643 (95% CI [0.055, 7.579], p=0.724)	NA
Age	1.722 (95% CI [0.101, 29.242], p=0.704)	353.50 (95% CI [.000, -], p=0.998)	.947 (95% CI [0.852, 1.053], p=0.190)	0.000 (95% CI [.000, -], p=1.000)	NA	NA	0.833 (95% CI [0.070, 9.858], p=0.885)	6.084 (95% CI [.000, -], p=0.990)	0.947 (95% CI [0.852, 1.053], p=0.190)	.747 (95% CI [.000, -], p=1.000)	1.114 (95% CI [0.341, 1.053], p=0.859)	1.102 (95% CI [.141, 8.616], p=.926)	1.765 (95% CI [0.228, 13.685], p=0.583)	133.340 (95% CI [.000, -], p=.993)	.833 (95% CI [0.070, 9.858], p=0.885)	NA
CEO years	0.690 (95% CI [.041, 11.684], p=.796)	.000 (95% CI [.000, -], p=0.991)	0.967 (95% CI [.905, 1.033], p=.398)	128.299 (95% CI [.000, -], p=1.000)	NA	NA	1.167 (95% CI [.980, 1.389], p=0.033)	.000 (95% CI [.000, -], p=0.987)	.967 (95% CI [.905, 1.033], p=.398)	.427 (95% CI [.000, -], p=1.000)	.571 (95% CI [.178, 1.832], p=.344)	.491 (95% CI [.049, 4.957], p=.547)	.679 (95% CI [.088, 5.243], p=.709)	1.903 (95% CI [.039, 91.750], p=.745)	1.429 (95% CI [.121, 16.857], p=.776)	NA
Current CEO	1.050 (95% CI [0.981, 1.123], p=0.504)	0.125 (95% CI [.000, -], p=1.000)	1.024 (95% CI [0.977, 1.074], p=0.640)	0.000 (95% CI [.000, -], p=1.000)	NA	NA	1.077 (95% CI [0.990, 1.171], p=0.409)	0.000 (95% CI [.450, -], p=.992)	1.024 (95% CI [0.997, 1.074], p=0.640)	0.213 (95% CI [.450, -], p=1.000)	1.600 (95% CI [0.370, 6.910], p=0.527)	0.696 (95% CI [.090 ,5.373], p=.728)	1.625 (95% CI [0.149, 17.692], p=0.688)	400.643 (95% CI [.000, -], p=.995)	2.500 (95% CI [0.202, 30.998], p=0.463)	NA
CEO metro/rural	0.885 (95% CI [.052, 14.961], p=0.932)	.000 (95% CI [.000, -], p=0.995)	0.963 (95% CI [.894, 1.037], p=0.341)	120.369 (95% CI [.000, -], p=1.000)	NA	NA	0.423 (95% CI [.036, 4.985], p=0.483)	.000 (95% CI [.000, -], p=1.000)	1.043 (95% CI [.960, 1.134], p=0.284)	.000 (95% CI [.000, -], p=.997)	.286 (95% CI [.085, .958], p=0.038)	.363 (95% CI [.071, 1.866], p=.225)	2.875 (95% CI [.279, 29.677], p=0.357)	171.400 (95% CI [.000, -], p=.993)	1.143 (95% CI [.982, 1.329], p=0.058)	NA
CEO State	0.929 (95% CI [.838, 1.029], p=0.191)	312.93 (95% CI [.000, -], p=0.998)	1.045 (95% CI [.958, 1.141], p=0.265)	0.000 (95% CI [.000, -], p=1.000)	NA	NA	1.692 (95% CI [.144, 19.941], p=0.673)	730.00 (95% CI [.000, -], p=0.989)	.964 (95% CI [.898, 1.036], p=0.360)	.000 (95% CI [.000, -], p=0.999)	.364 (95% CI [.111, 1.188], p=0.090)	.257 (95% CI [.056, 1.179], p=0.081)	.857 (95% CI [.737, .997], p=0.059)	119.000 (95% CI [.000, -], p=0.994)	.893 (95% CI [.785, 1.015], p=0.106)	NA
CEO no: of organisations	1.087 (95% CI [.968, 1.220], p=0.141)	.000 (95% CI [.000, -], p=.994)	1.042 (95% CI [.962, 1.128], p=0.303)	.168 (95% CI [.000, -], p=1.000)	NA	NA	2.000 (95% CI [.170, 23.556], p=0.575)	.000 (95% CI [.000, -], p=.990)	1.042 (95% CI [.962, 1.128], p=0.303)	.000 (95% CI [.000, -], p=.998)	1.328 (95% CI [.419, 4.209], p=0.629)	.442 (95% CI [.064, 3.045], p=.407)	.958 (95% CI [.124, 7.383], p=0.967)	.224 (95% CI [.005, 9.491], p=.433)	.460 (95% CI [.039, 5.418], p=0.529)	NA
No: of employees	1.882 (95% CI [.111, 32.010], p=0.657)	629.000 (95% CI [.000, -], p=0.997)	1.031 (95% CI [.971, 1.095], p=1.000)	.000 (95% CI [.000, -], p=1.000)	NA	NA	.912 (95% CI [.077, 10.804], p=0.942)	.000 (95% CI [.000, -], p=0.998)	1.031 (95% CI [.971, 1.095], p=0.456)	899.594 (95% CI [.000, -], p=0.999)	.875 (95% CI [.261, 2.933], p=0.829)	.624 (95% CI [.102, 3.819], p=0.610)	1.138 (95% CI [1.003, 1.292], p=0.124)	.000 (95% CI [.000, -], p=0.994)	1.100 (95% CI [0.987, 1.225], p=0.187)	NA
CEO Qualifications	1.882 (95% CI [.111, 32.010], p=0.657)	138.830 (95% CI [.000, -], p=0.994)	0.944 (95% CI [.844, 1.056], p=0.171)	436.758 (95% CI [.000, -], p=1.000)	NA	NA	.912 (95% CI [.077, 10.804], p=0.942)	.000 (95% CI [.000, -], p=0.988)	.944 (95% CI [.844, 1.056], p=0.171)	113.800 (95% CI [.000, -], p=0.996)	.240 (95% CI [.058, .989], p=0.040)	.297 (95% CI [.053, 1.655], p=0.166)	6.400 (95% CI [0.614, 66.760], p=0.083)	387.200 (95% CI [.000, -], p=0.993)	.912 (95% CI [.077, 10.804], p=0.942)	NA