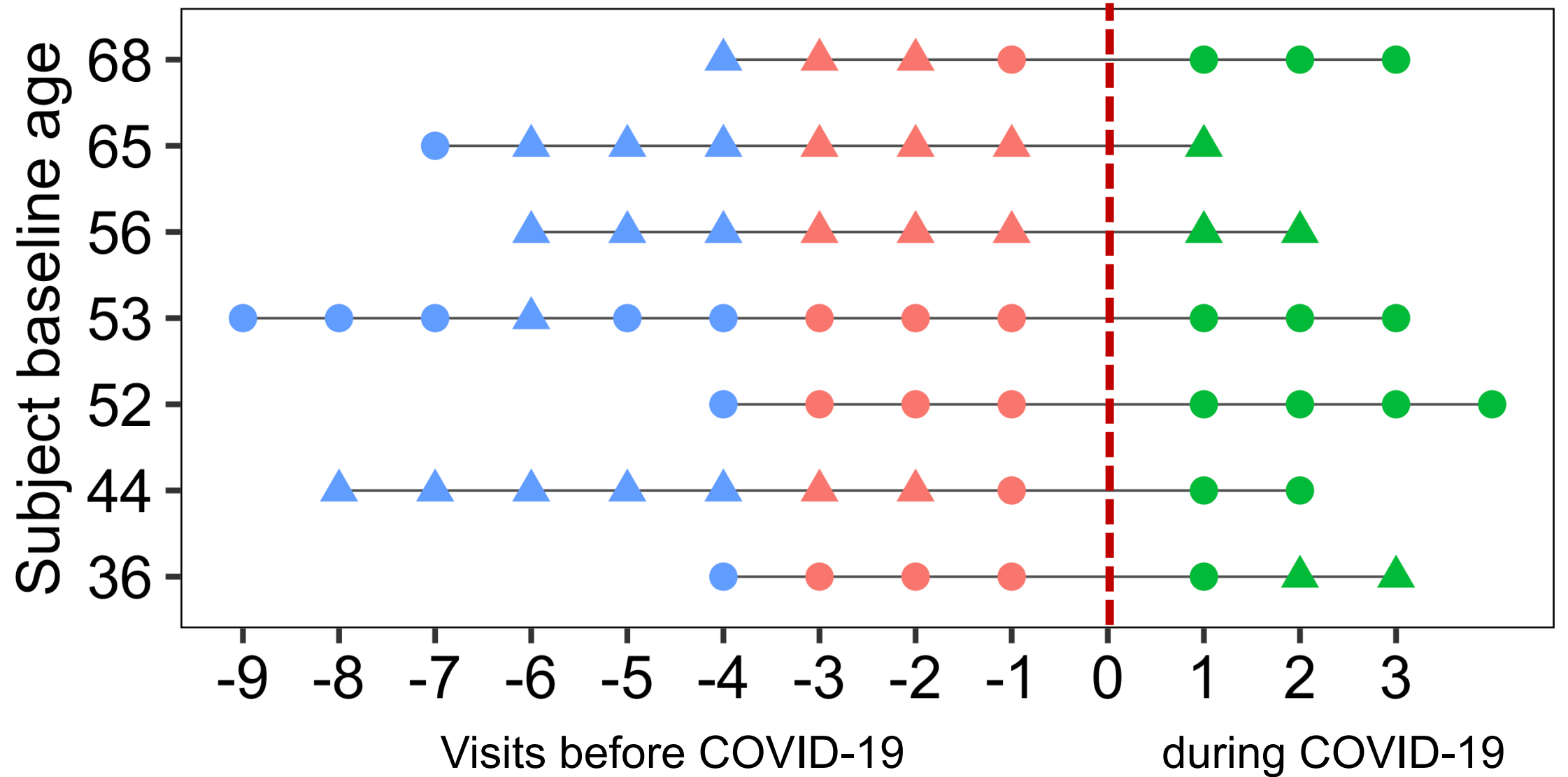


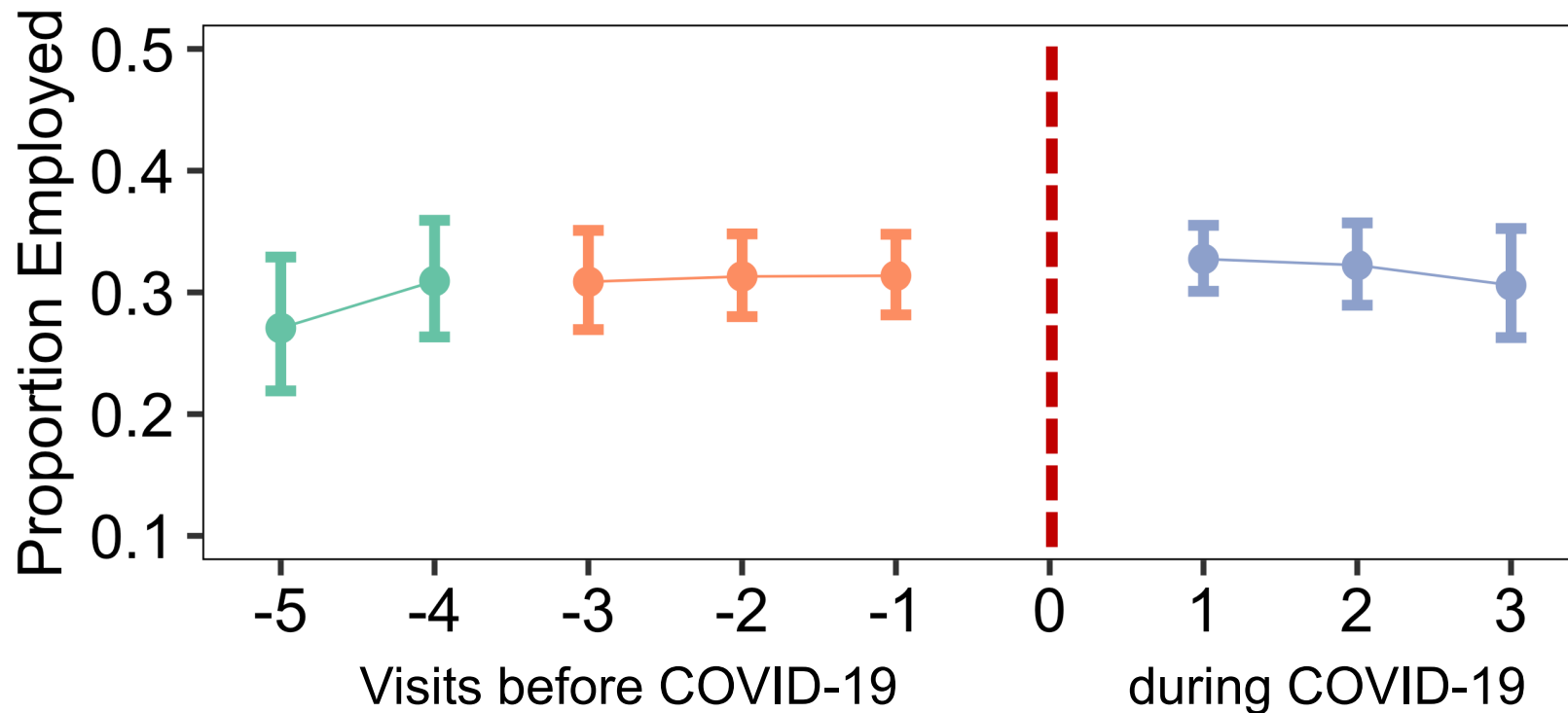
Modeling COVID-19 disruptions in longitudinal health registry data

A case study of conventional methods producing
incoherent results



Employed ● No ▲ Yes

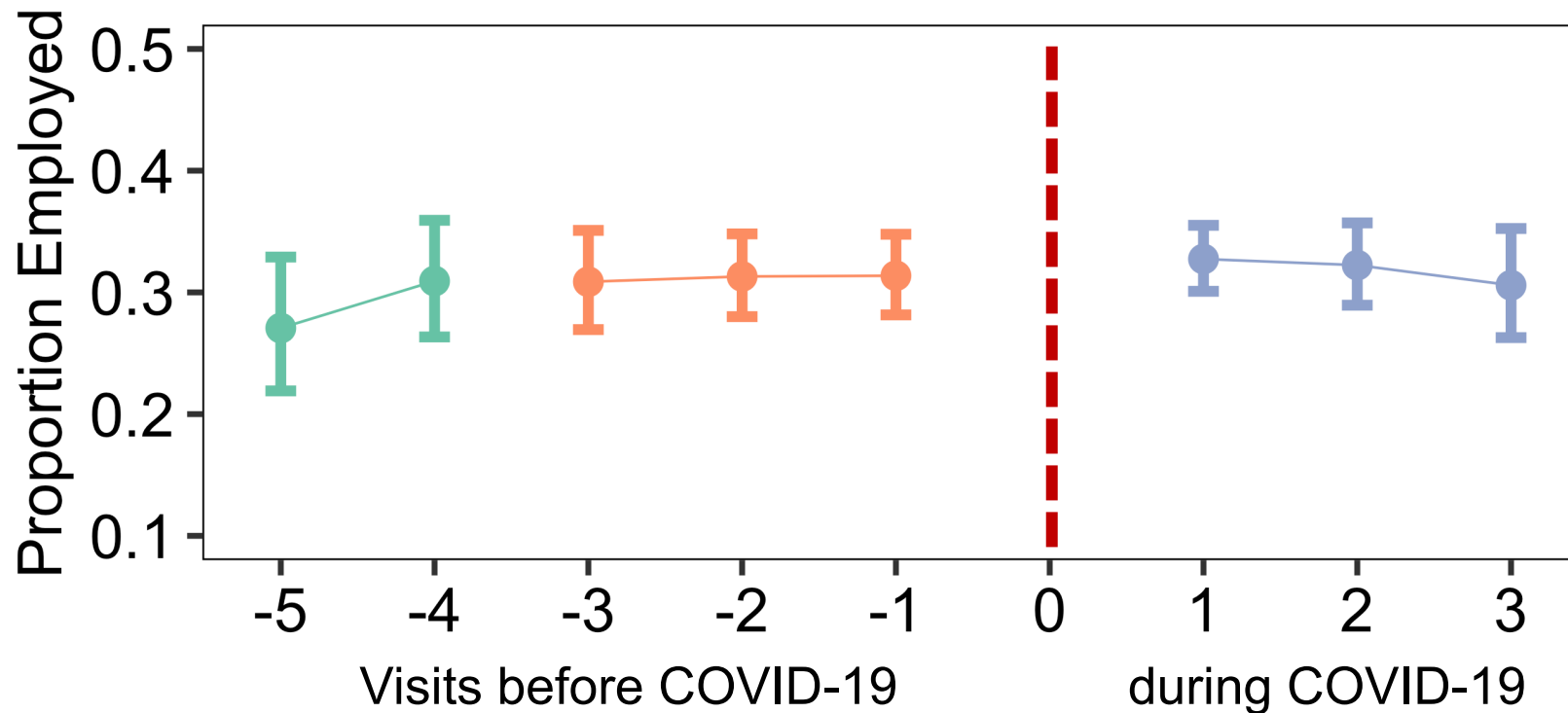
Patient employment over time



Pandemic Phase ● Historical ● Pre-COVID ● COVID

Results from GLMM	Odds Ratio	p-value
Phase: Historical	2.237	0.001
Phase: COVID	0.558	0.007
Age (Decade)	0.481	<0.001

Patient employment over time

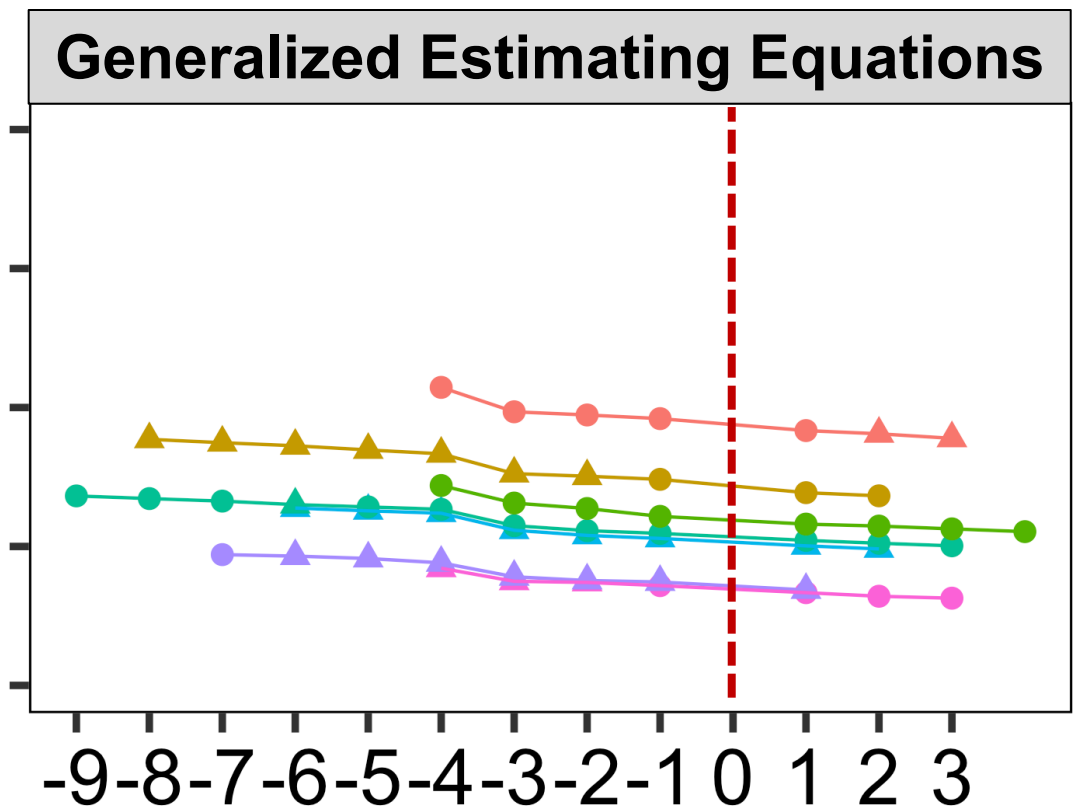
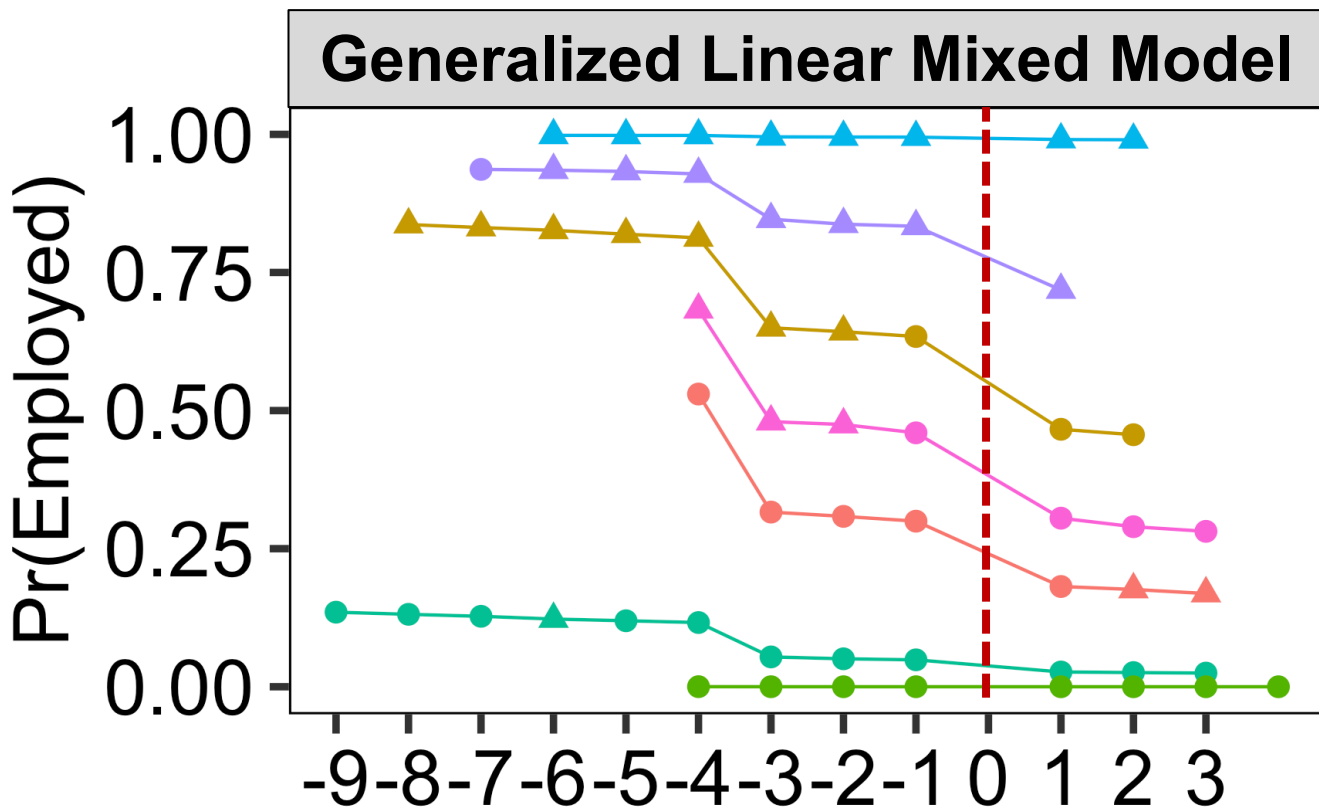


Pandemic Phase ● Historical ● Pre-COVID ● COVID

Results from GLMM	Odds Ratio	p-value
Phase: Historical	2.237	0.001
Phase: COVID	0.558	0.007
Age (Decade)	0.481	<0.001

Employed • 0 ▲ 1

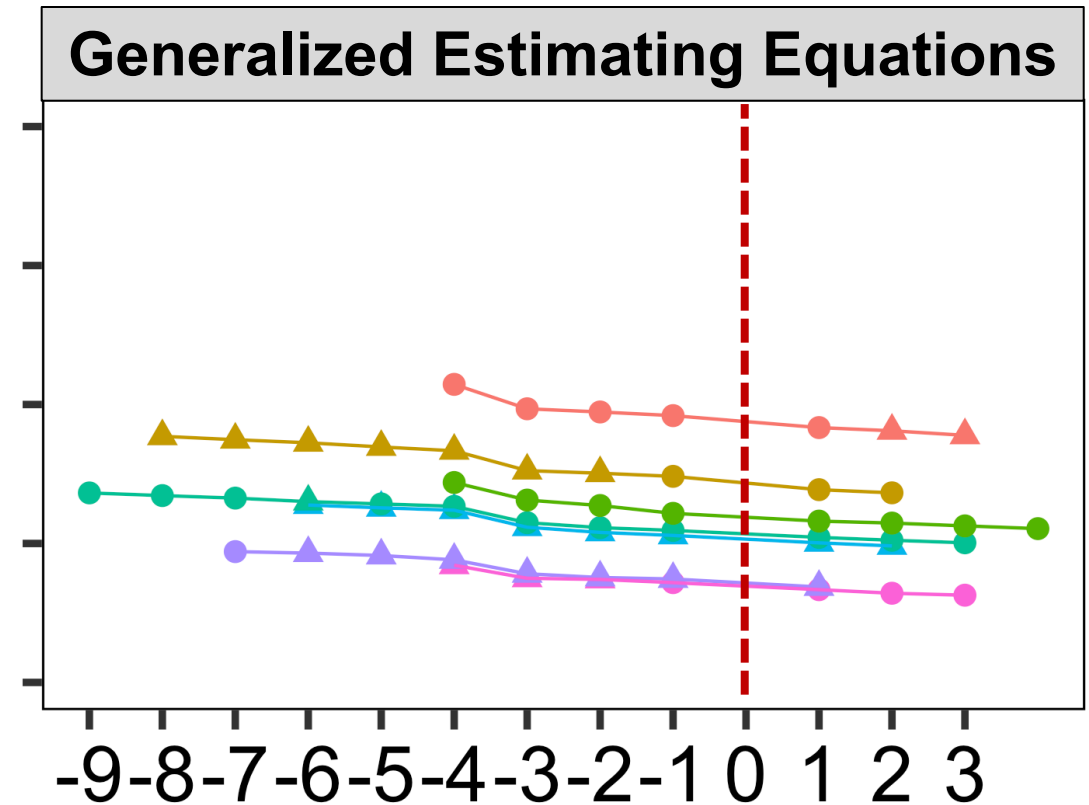
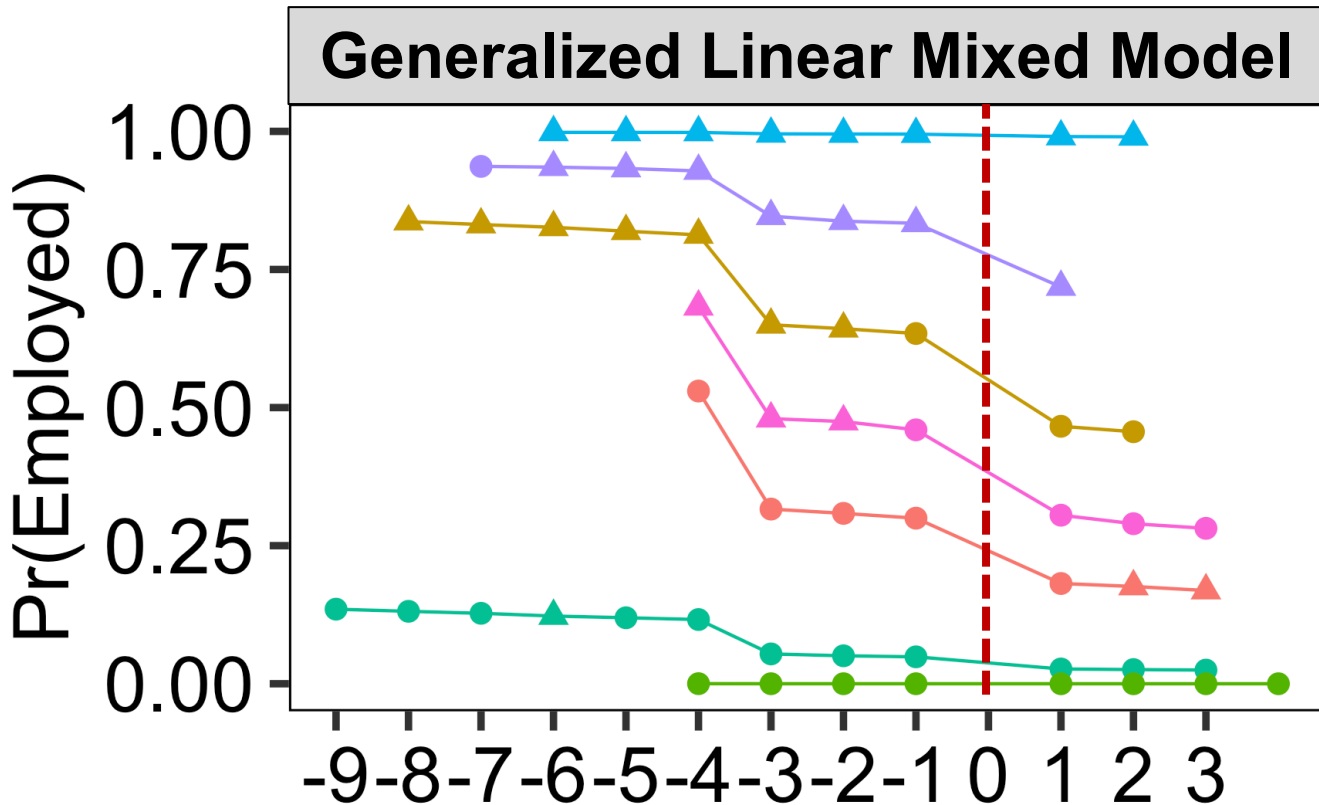
Age ● 36 ● 44 ● 52 ● 53 ● 56 ● 65 ● 68



	Odds Ratio	p-value	Odds Ratio	p-value
Phase: Historical	2.237	0.001	1.129	0.077
Phase: COVID	0.558	0.007	0.962	0.454
Age (Decade)	0.481	<0.001	0.627	<0.001

Employed • 0 ▲ 1

Age ● 36 ▲ 52 ● 56 ● 68
● 44 ● 53 ● 65



	Odds Ratio	p-value	Odds Ratio	p-value
Phase: Historical	2.237	0.001	1.129	0.077
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Age (Decade)	0.481	<0.001	0.627	<0.001

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