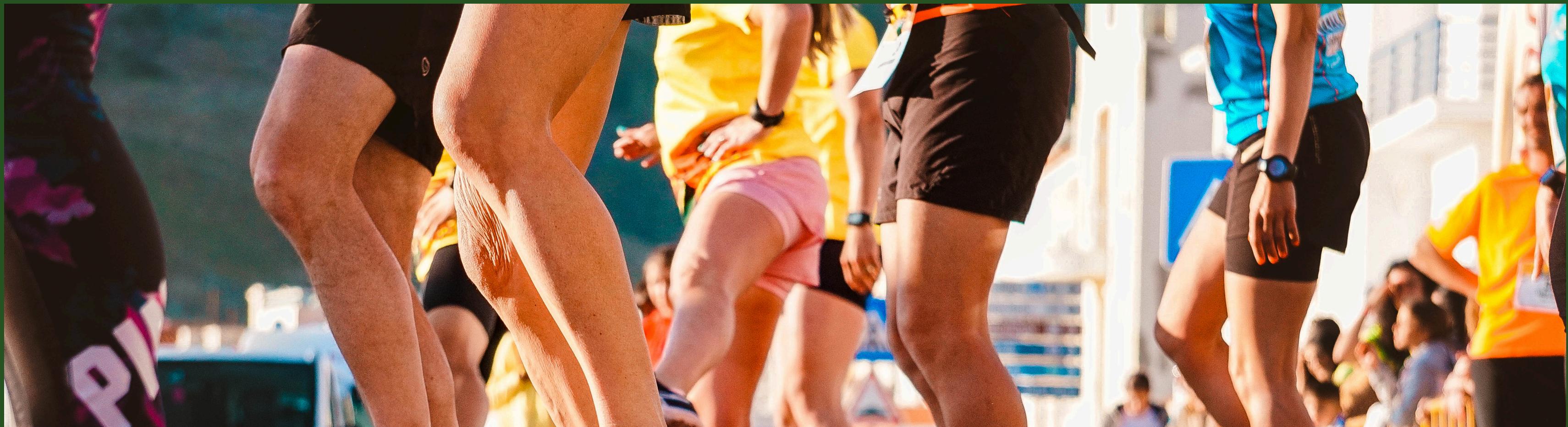


RUNNING THROUGH COVID-19

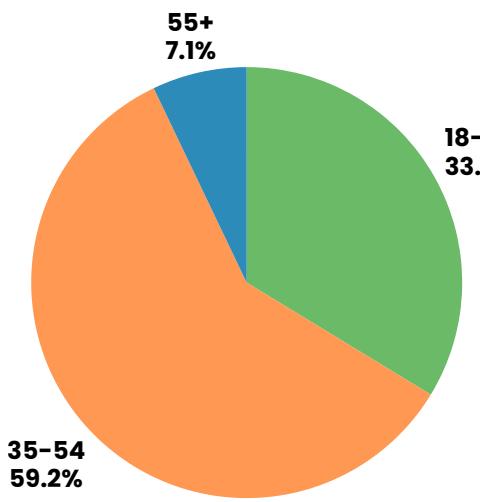
Was COVID running
trendy or tedious?



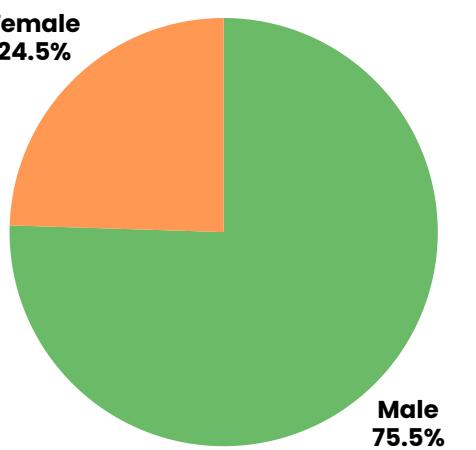
PRESENTED BY QUINLAN O'CONNELL

KEY INSIGHTS

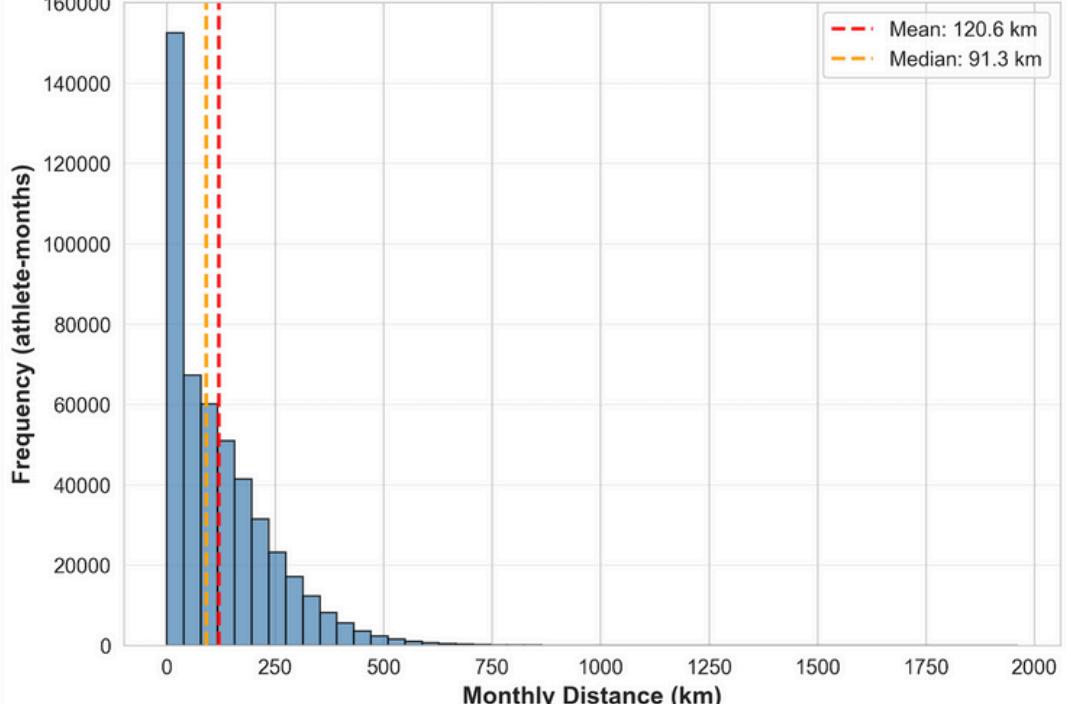
Age Demographics



Gender Demographics



Distribution of Running Distance (All Data)

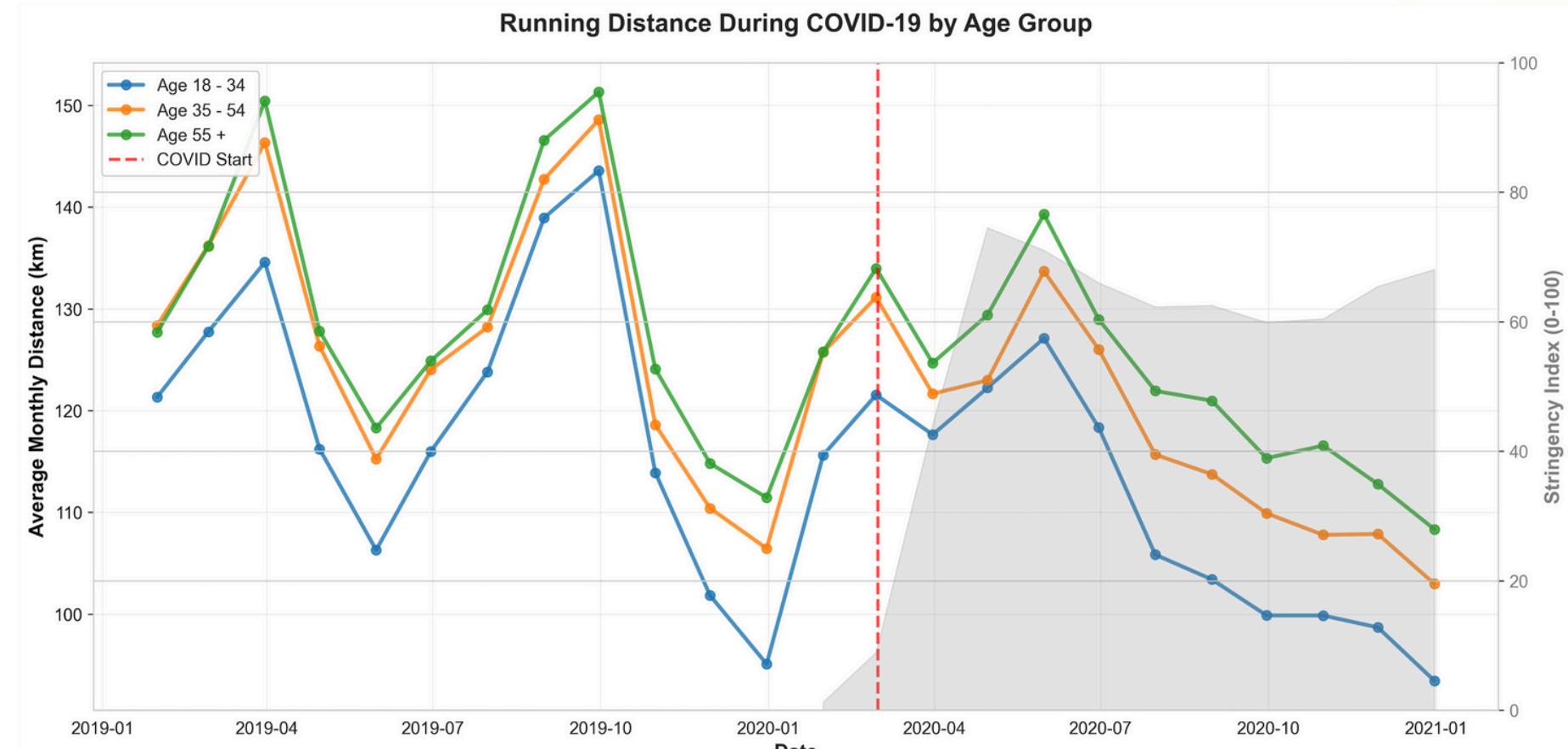


Stringency Index Scale:

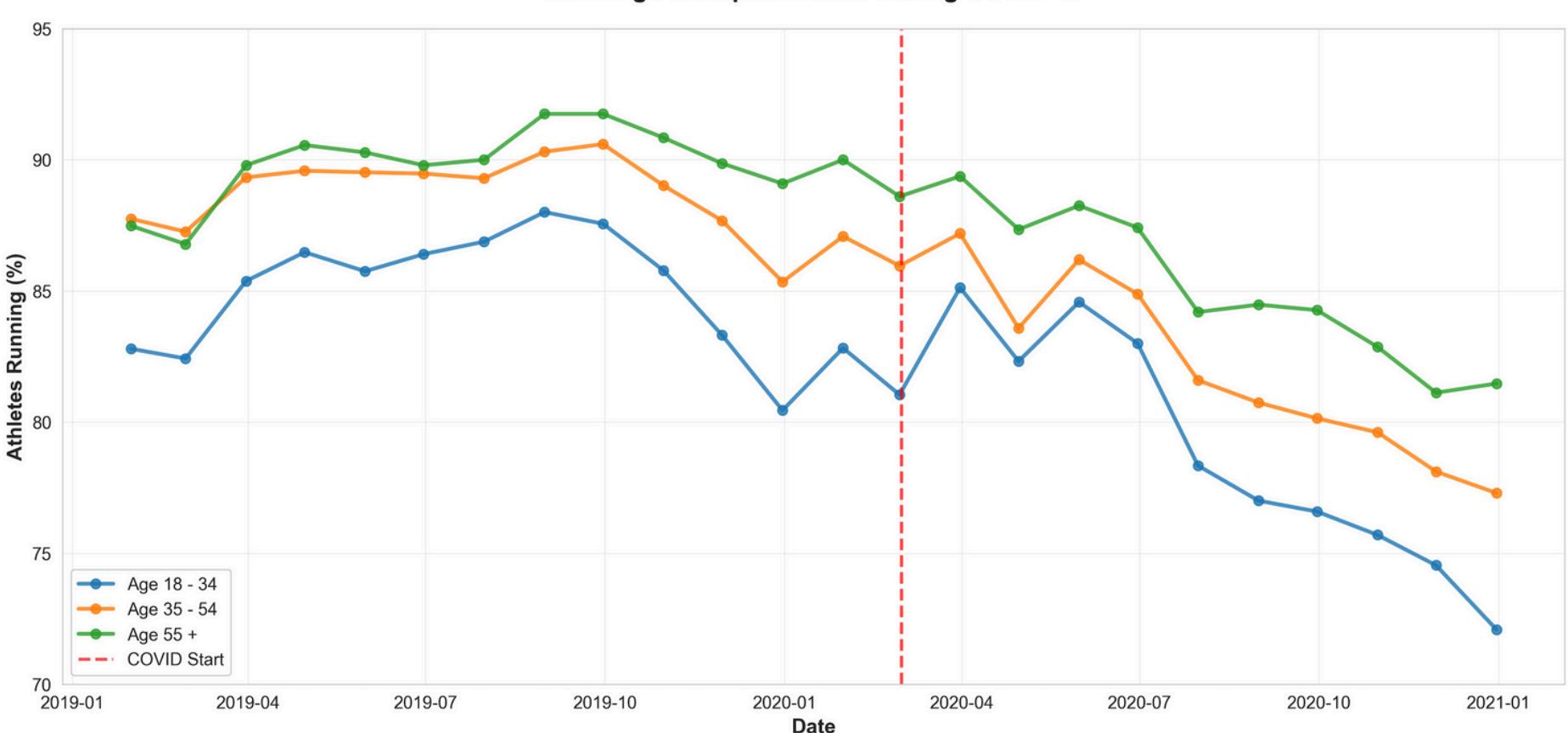
- Measure assigns score based on average of 9 policy indicators

0-20	Minimal Restrictions
20-40	Light Restrictions
40-60	Moderate Lockdown
60-80	Strict Lockdown
80-100	Extreme Lockdown

- As stringency levels stayed stable, distance steadily decreased
- 2020 yearly peak for all three groups hit a few months into COVID (then decreased by 20-30km through EoY)



Running Participation Rate During COVID-19



Activity Rate: % of athletes ran at least some distance that month

ANALYSIS BREAKDOWN

Linear Regression Model:

$$\text{Distance} = \beta_0 + \beta_1(\text{Time_Trend}) + \beta_2(\text{COVID_Period}) + \beta_3(\text{Stringency_Index}) + \beta_4(\text{Age_35-54}) + \beta_5(\text{Age_55+}) + \beta_6(\text{Female})$$

Variable	Coefficient	Std Error	P-Value Significance
Intercept	134.333	0.470	***
Time Trend (per month)	-1.603	0.048	***
COVID Period	-10.032	1.258	***
Stringency (per 10-point increase)	2.896	0.182	***
Age 35-54	6.465	0.372	***
Age 55+	9.319	0.709	***
Female	-13.845	0.402	***

- All coefficients highly significant ($p < 0.001$) - strong predictors
- Large sample size (480,000 observations) - Good statistical power
- R-Squared = 0.82% → low, but okay because of other significance and impossibility to account for all variability (running is highly personal → influenced by a multitude of factors)

Cabin Fever?

- Stricter rules = more distance!
- Initial shock of COVID caused a 10km drop

Data Overview	
Number of Athletes	20,000
Time Period	January 2019 – December 2020
Activity Rate 2019	87.60%
Activity Rate 2020	81.80%
Average Stringency	56.7 (moderate/strict lockdown)

