## Supplementary material

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- 1 Proportion of missing records across population density and socioeconomic deprivation classes,
- 1.1 Facebook Population baseline data
- 1.2 For Facebook Movements baseline data
- 1.3 For Facebook Movements during crisis
- 2 References

Table 1: Percentage of missing Facebook Population data records during the baseline period, across population density and socioeconomic deprivation classes (class 1 is the most sparsely populated and the most deprived).

Country	Records count	Variable	Class 1	Class 2	Class 3
Argentina	Total				
	Missing	Pop. density			
		Socioec. deprivation			
	Percentage missing	Pop. density			
		Socioec. deprivation			
	Total				
Chile	Missing	Pop. density			
		Socioec. deprivation			
	Percentage missing	Pop. density			
		Socioec. deprivation			
	Total				
Colombia	Missing	Pop. density			
		Socioec. deprivation			
	Percentage missing	Pop. density			
		Socioec. deprivation			
Mexico	Total				
	Missing	Pop. density			
		Socioec. deprivation			
	Percentage missing	Pop. density			
		Socioec. deprivation			
		Socioec. deprivation			

Table 2: Percentage of missing Facebook Movement data records during the baseline period, across population density and socioeconomic deprivation classes of origin tile (class 1 is the most sparsely populated and the most deprived).

Country	Records count	Variable	Class 1	Class 2	Class 3
Argentina	Total				
	Missing	Pop. density			
		Socioec. deprivation			
	Percentage missing	Pop. density			
		Socioec. deprivation			
Chile	Total				
	Missing	Pop. density			
		Socioec. deprivation			
	Percentage missing	Pop. density			
		Socioec. deprivation			
	Total				
Colombia	Missing	Pop. density			
		Socioec. deprivation			
	Percentage missing	Pop. density			
		Socioec. deprivation			
Mexico	Total				
	Missing	Pop. density			
		Socioec. deprivation			
	Percentage missing	Pop. density			
		Socioec. deprivation			

Table 3: Percentage of missing Facebook Movement data records during the crisis period, across population density and socioeconomic deprivation classes of origin tile (class 1 is the most sparsely populated and the most deprived).

Records count	Variable	Class 1	Class 2	Class 3
Total				
Missing	Pop. density			
	Socioec. deprivation			
Percentage missing	Pop. density			
	Socioec. deprivation			
Total				
Missing	Pop. density			
	Socioec. deprivation			
Percentage missing	Pop. density			
	Socioec. deprivation			
Total				
Missing	Pop. density			
	Socioec. deprivation			
Percentage missing	Pop. density			
	Socioec. deprivation			
Total				
Missing	Pop. density			
	Socioec. deprivation			
Percentage missing	Pop. density			
	Socioec. deprivation			
	Total Missing  Percentage missing  Total Missing  Percentage missing  Total Missing  Percentage missing  Total Missing  Total Missing	Total  Missing Pop. density Socioec. deprivation Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density	Total  Missing Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Total  Missing Pop. density Socioec. deprivation  Total  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Total  Missing Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density	Total  Missing Pop. density Socioec. deprivation  Percentage missing Pop. density Socioec. deprivation  Total  Missing Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Total  Missing Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Total  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Total  Missing Pop. density Socioec. deprivation  Total  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density Socioec. deprivation  Pop. density