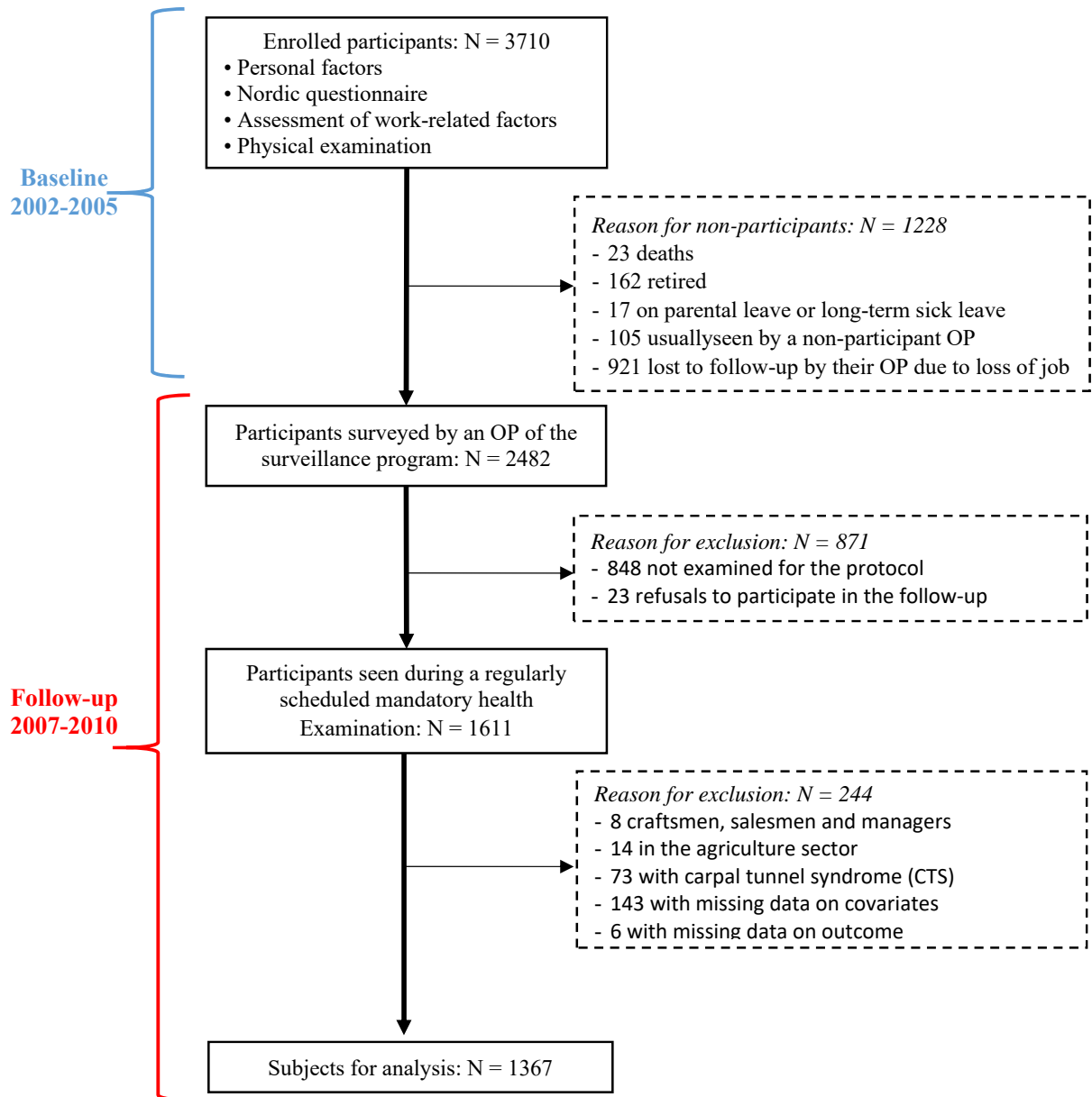


Supplementary Figure 1. Participants' flow diagram

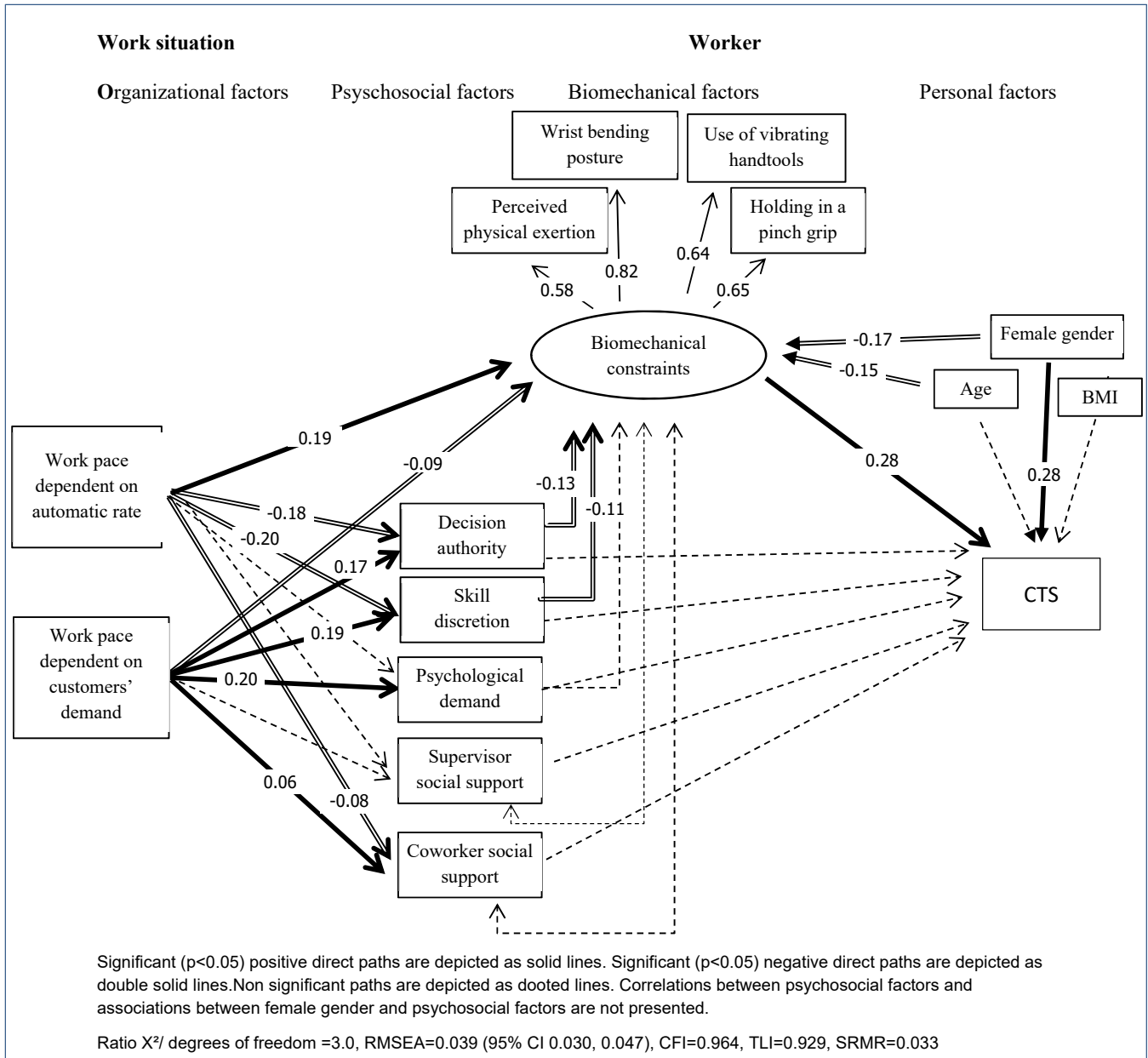


Supplementary Table 1. Results from structural equation modeling of relationships between organizational, psychosocial, biomechanical, and personal factors and carpal tunnel syndrome (CTS) in French workers, Cosali (COhorte des SALariés Ligériens) survey (n=1,367): symptomatic CTS and CTS based on symptoms and physical examination signs

	Symptomatic CTS			CTS based on symptoms and physical examination signs		
	Standardized beta	Standard error	p-value	Standardized beta	Standard error	p-value
Hypothesis 1						
Biomechanical factors → CTS	0.19	0.08	0.011	0.28	0.08	0.001
Decision authority → CTS	0.02	0.07	0.765	-0.08	0.07	0.256
Skill discretion → CTS	-0.02	0.08	0.778	0.01	0.08	0.863
Psychological demand → CTS	0.02	0.06	0.752	0.05	0.07	0.462
Supervisor social support → CTS	-0.06	0.07	0.373	0.04	0.11	0.672
Coworker social support → CTS	-0.02	0.06	0.721	0.03	0.08	0.722
Hypothesis 2						
Workpace dependent on automatic rate →						
Biomechanical factors	0.19	0.03	< 0.001	0.19	0.03	< 0.001
Decision authority	-0.18	0.02	< 0.001	-0.18	0.02	< 0.001
Skill discretion	-0.20	0.02	< 0.001	-0.20	0.02	< 0.001
Psychological demand	0.03	0.03	0.382	0.03	0.03	0.369
Supervisor social support	-0.05	0.03	0.070	-0.04	0.03	0.075
Coworker social support	-0.08	0.03	0.002	-0.08	0.03	0.002
Workpace dependent on customers' demand →						
Biomechanical factors	-0.09	0.03	0.006	-0.09	0.03	0.006
Decision authority	0.17	0.03	< 0.001	0.17	0.03	< 0.001
Skill discretion	0.19	0.03	< 0.001	0.19	0.03	< 0.001
Psychological demand	0.20	0.03	< 0.001	0.20	0.03	< 0.001
Supervisor social support	0.00	0.03	0.891	0.00	0.03	0.873
Coworker social support	0.06	0.03	0.041	0.06	0.03	0.042
Hypothesis 3						
Decision authority → Biomechanical factors	-0.13	0.04	< 0.001	-0.13	0.04	< 0.001
Skill discretion → Biomechanical factors	-0.11	0.04	0.003	-0.11	0.04	0.003
Psychological demand → Biomechanical factors	0.05	0.03	0.113	0.05	0.03	0.112
Hypothesis 4						
Supervisor social support ↔ Biomechanical factors	0.05	0.03	0.104	0.05	0.03	0.106
Coworker social support ↔ Biomechanical factors	0.04	0.03	0.170	0.04	0.03	0.172
Other hypotheses						
Age → Biomechanical factors	-0.15	0.03	< 0.001	-0.15	0.03	< 0.001
Age → CTS at follow-up	0.15	0.07	0.042	0.12	0.09	0.164
Body mass index → CTS at follow-up	0.01	0.07	0.890	0.02	0.08	0.763
Female gender → CTS at follow-up	0.25	0.06	< 0.001	0.28	0.08	< 0.001
Female gender → Biomechanical factors	-0.17	0.03	< 0.001	-0.17	0.03	< 0.001
Female gender → Decision authority	-0.14	0.03	< 0.001	-0.14	0.03	< 0.001
Female gender → Skill discretion	-0.17	0.03	< 0.001	-0.17	0.03	< 0.001
Female gender → Psychological demand	0.02	0.03	0.514	0.02	0.03	0.552
Female gender → Supervisor social support	0.04	0.03	0.153	0.04	0.03	0.151
Female gender → Coworker social support	0.02	0.03	0.514	0.02	0.03	0.466
Correlations						
Decision authority ↔ Skill discretion	0.49	0.02	< 0.001	0.49	0.02	< 0.001
Decision authority ↔ Psychological demand	-0.01	0.02	0.629	-0.01	0.02	0.638
Decision authority ↔ Supervisor social support	0.22	0.02	< 0.001	0.22	0.02	< 0.001
Decision authority ↔ Coworker social support	0.12	0.02	< 0.001	0.12	0.02	< 0.001
Skill discretion ↔ Psychological demand	0.20	0.02	< 0.001	0.20	0.02	< 0.001
Skill discretion ↔ Supervisor social support	0.27	0.02	< 0.001	0.27	0.02	< 0.001
Skill discretion ↔ Coworker social support	0.14	0.02	< 0.001	0.14	0.02	< 0.001
Psychological demand ↔ Supervisor social support	-0.15	0.02	< 0.001	-0.15	0.02	< 0.001
Psychological demand ↔ Coworker social support	-0.07	0.02	0.005	-0.07	0.02	0.005
Supervisor social support ↔ Coworker social support	0.32	0.02	< 0.001	0.32	0.02	< 0.001

In bold, p-value < 0.05.

Supplementary Figure 2. Structural equation model of the relationships between organizational, psychosocial, biomechanical, and personal factors and carpal tunnel syndrome (CTS based on symptoms and physical examination signs) in French workers, Cosali (COhorte des SALariés Ligériens) survey (n=1,367)



Supplementary Table 2. Results from structural equation modeling of relationships between organizational, psychosocial, biomechanical, and personal factors and carpal tunnel syndrome (CTS) in French workers, Cosali (COhorte des SALariés Ligériens) survey: men (n=804) and women (n=563)

	Men (n=804)			Women (n=563)		
	Standardized beta	Standard error	p-value	Standardized beta	Standard error	p-value
Hypothesis 1						
Biomechanical factors → CTS	0.36	0.11	0.002	0.22	0.11	0.047
Decision authority → CTS	-0.07	0.11	0.548	0.09	0.10	0.372
Skill discretion → CTS	-0.05	0.12	0.672	0.03	0.11	0.793
Psychological demand → CTS	0.05	0.08	0.505	-0.01	0.09	0.895
Supervisor social support → CTS	-0.11	0.09	0.227	-0.02	0.09	0.844
Coworker social support → CTS	0.08	0.07	0.229	-0.09	0.10	0.327
Hypothesis 2						
Workpace dependent on automatic rate →						
Biomechanical factors	0.18	0.05	<0.001	0.19	0.05	<0.001
Decision authority	-0.16	0.03	<0.001	-0.22	0.03	<0.001
Skill discretion	-0.21	0.03	<0.001	-0.19	0.04	<0.001
Psychological demand	0.00	0.04	0.994	0.08	0.04	0.074
Supervisor social support	-0.01	0.03	0.696	-0.11	0.04	0.005
Coworker social support	-0.06	0.04	0.095	-0.13	0.04	0.002
Workpace dependent on customers' demand →						
Biomechanical factors	-0.15	0.05	0.002	-0.05	0.05	0.333
Decision authority	0.21	0.03	<0.001	0.11	0.04	0.008
Skill discretion	0.19	0.03	<0.001	0.18	0.04	<0.001
Psychological demand	0.17	0.03	<0.001	0.25	0.04	<0.001
Supervisor social support	0.02	0.04	0.616	-0.02	0.04	0.575
Coworker social support	0.10	0.04	0.005	0.00	0.04	0.985
Hypothesis 3						
Decision authority → Biomechanical factors	-0.06	0.05	0.206	-0.22	0.05	<0.001
Skill discretion → Biomechanical factors	-0.09	0.05	0.073	-0.17	0.06	0.004
Psychological demand → Biomechanical factors	0.06	0.04	0.152	0.00	0.05	0.937
Hypothesis 4						
Supervisor social support ↔ Biomechanical factors	0.00	0.04	0.988	0.13	0.05	0.004
Coworker social support ↔ Biomechanical factors	-0.02	0.04	0.608	0.08	0.05	0.117
Other hypotheses						
Age → Biomechanical factors	-0.17	0.04	<0.001	-0.16	0.05	0.001
Age → CTS at follow-up	0.16	0.13	0.192	0.18	0.10	0.065
Body mass index → CTS at follow-up	-0.17	0.14	0.238	0.10	0.09	0.292
Correlations						
Decision authority ↔ Skill discretion	0.49	0.02	<0.001	0.49	0.03	<0.001
Decision authority ↔ Psychological demand	-0.02	0.03	0.605	0.00	0.04	0.911
Decision authority ↔ Supervisor social support	0.22	0.03	<0.001	0.20	0.04	<0.001
Decision authority ↔ Coworker social support	0.18	0.03	<0.001	0.04	0.03	0.278
Skill discretion ↔ Psychological demand	0.20	0.03	<0.001	0.18	0.04	<0.001
Skill discretion ↔ Supervisor social support	0.27	0.03	<0.001	0.28	0.03	<0.001
Skill discretion ↔ Coworker social support	0.22	0.03	<0.001	0.05	0.04	0.213
Psychological demand ↔ Supervisor social support	-0.14	0.03	<0.001	-0.17	0.04	<0.001
Psychological demand ↔ Coworker social support	-0.01	0.03	0.622	-0.13	0.04	0.001
Supervisor social support ↔ Coworker social support	0.27	0.02	<0.001	0.38	0.03	<0.001

In bold, p-value < 0.05.