Table 1 - Evaluation of Module 1. 'Tr.' represents treadmill walking and 'Lo.' represents robotic-guided walking. (A) Correlation of Activation signal 1 among all the conditions of guidance force and speed in the average group. (B) Correlation of Module 1 among all the conditions of guidance force and speed in the average group.

A) Activation signal 1

	Tr. 1.5 Km/h speed	Tr. 2.0 Km/h speed	Tr. 2.5 Km/h speed	Lo. 1.5 Km/h speed 20% GF	Lo. 2.0 Km/h speed 20% GF	Lo. 2.5 Km/h speed 20% GF	Lo. 1.5 Km/h speed 40% GF	Lo. 2.0 Km/h speed 40% GF	Lo. 2.5 Km/h speed 40% GF	Lo. 1.5 Km/h speed 70% GF	Lo. 2.0 Km/h speed 70% GF	Lo. 2.5 Km/h speed 70% GF	Lo. 1.5 Km/h speed 100% GF	Lo. 2.0 Km/h speed 100% GF	Lo. 2.5 Km/h speed 100% GF
Tr. 1.5 Km/h speed	1														
Tr. 2.0 Km/h speed	,494	1													
Tr. 2.5 Km/h speed	,733	,850*	1												
Lo. 1.5 Km/h speed 20% GF	,550	-,034	,030	1											
Lo. 2.0 Km/h speed 20% GF	,636	,886**	,730	,364	1										
Lo. 2.5 Km/h speed 20% GF	,571	,872*	,685	,161	,949**	1									
Lo. 1.5 Km/h speed 40% GF	,762*	,764*	,656	,571	,957**	,879**	1								
Lo. 2.0 Km/h speed 40% GF	,857*	,834*	,849*	,361	,922**	,892**	,934**	1							
Lo. 2.5 Km/h speed 40% GF	,818*	,861*	,845*	,247	,900**	,906**	,901**	,988**	1						
Lo. 1.5 Km/h speed 70% GF	,752	,800*	,756*	,447	,959**	,895**	,956**	,958**	,921**	1					
Lo. 2.0 Km/h speed 70% GF	,758*	,869*	,848*	,247	,928**	,913**	,900**	,979**	,974**	,967**	1				
Lo. 2.5 Km/h speed 70% GF	,727	,920**	,846*	,197	,944**	,942**	,905**	,974**	,985**	,942**	,987**	1			
Lo. 1.5 Km/h speed 100% GF	,723	,897**	,779*	,290	,971**	,965**	,948**	,967**	,971**	,941**	,958**	,984**	1		
Lo. 2.0 Km/h speed 100% GF	,682	,835*	,812*	,278	,897**	,828*	,866*	,920**	,902**	,957**	,968**	,935**	,887**	1	
Lo. 2.5 Km/h speed 100% GF	,797*	,869*	,807*	,264	,899**	,902**	,908**	,965**	,985**	,882**	,932**	,966**	,974**	,842*	1

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

B) Module 1

	Tr. 1.5 Km/h speed
Tr. 1.5 Km/h speed	1

Tr. 2.0 Km/h speed	,889**	1														
Tr. 2.5 Km/h speed	,759*	,902**	1													
Lo. 1.5 Km/h speed 20% GF	,899**	,827*	,873*	1												
Lo. 2.0 Km/h speed 20% GF	,993**	,895**	,738	,865*	1											
Lo. 2.5 Km/h speed 20% GF	,980**	,916**	,765*	,854*	,995**	1										
Lo. 1.5 Km/h speed 40% GF	,974**	,872*	,699	,818*	,991**	,991**	1									
Lo. 2.0 Km/h speed 40% GF	,909**	,818*	,820*	,895**	,883**	,871*	,878**	1								
Lo. 2.5 Km/h speed 40% GF	,972**	,876**	,838*	,953**	,950**	,937**	,928**	,972**	1							
Lo. 1.5 Km/h speed 70% GF	,957**	,898**	,873*	,969**	,946**	,945**	,925**	,941**	,986**	1						
Lo. 2.0 Km/h speed 70% GF	,967**	,895**	,783*	,896**	,979**	,984**	,978**	,893**	,951**	,972**	1					
Lo. 2.5 Km/h speed 70% GF	,973**	,895**	,852*	,955**	,961**	,956**	,943**	,958**	,995**	,996**	,973**	1				
Lo. 1.5 Km/h speed 100% GF	,992**	,847*	,710	,875**	,977**	,953**	,955**	,909**	,963**	,929**	,933**	,953**	1			
Lo. 2.0 Km/h speed 100% GF	,854*	,599	,578	,896**	,808*	,758*	,760*	,798*	,872*	,846*	,795*	,852*	,871*	1		
Lo. 2.5 Km/h speed 100% GF	,972**	,915**	,875**	,948**	,959**	,957**	,938**	,956**	,992**	,990**	,963**	,996**	,953**	,825*	1	
	Tr. 1.5 Km/h speed	**Tr. 2.0 Km/h speed**	**Tr. 2.5 Km/h speed**	**Lo. 1.5 Km/h speed 20% GF**	**Lo. 2.0 Km/h speed 20% GF**	**Lo. 2.5 Km/h speed 20% GF**	**Lo. 1.5 Km/h speed 40% GF**	**Lo. 2.0 Km/h speed 40% GF**	**Lo. 2.5 Km/h speed 40% GF**	**Lo. 1.5 Km/h speed 70% GF**	**Lo. 2.0 Km/h speed 70% GF**	**Lo. 2.5 Km/h speed 70% GF**	**. 1.5 Km/h speed 100% GF**	**o. 2.0 Km/h speed 100% GF**	**Lo. 2.5 Km/h speed 100% GF**	

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 2 - Evaluation of Module 2. 'Tr.' represents treadmill walking and 'Lo.' represents robotic-guided walking. (A) Correlation of Activation signal 2 among all the conditions of guidance force and speed in the average group. (B) Correlation of Module 2 among all the conditions of guidance force and speed in the average group.

A) Activation signal 2

Tr. 1.5 Km/h speed	1	
Tr. 2.0 Km/h speed	,851*	1

Tr. 2.5 Km/h speed	,804*	,994**	1											
Lo. 1.5 Km/h speed 20% GF	,905**	,622	,575	1										
Lo. 2.0 Km/h speed 20% GF	,584	,888**	,922**	,339	1									
Lo. 2.5 Km/h speed 20% GF	,416	,786*	,844*	,187	,924**	1								
Lo. 1.5 Km/h speed 40% GF	,901**	,895**	,876**	,783*	,804*	0,586	1							
Lo. 2.0 Km/h speed 40% GF	,536	,883**	,912**	,255	,976**	,920**	,73	1						
Lo. 2.5 Km/h speed 40% GF	,047	,492	,553	-,233	,659	,851*	,146	,744	1					
Lo. 1.5 Km/h speed 70% GF	,41	,808*	,863*	,157	,960**	,974**	,633	,955**	,792*	1				
Lo. 2.0 Km/h speed 70% GF	,357	,757*	,814*	,076	,899**	,987**	,515	,913**	,901**	,966**	1			
Lo. 2.5 Km/h speed 70% GF	,128	,567	,637	-,136	,743	,925**	,254	,789*	,979**	,872*	,957**	1		
Lo. 1.5 Km/h speed 100% GF	,571	,821*	,847*	,301	,786*	,893**	,549	,818*	,828*	,818*	,907**	,863*	1	
Lo. 2.0 Km/h speed 100% GF	,318	,684	,734	,06	,733	,914**	,345	,788*	,938**	,843*	,938**	,961**	,950**	1
Lo. 2.5 Km/h speed 100% GF	,209	,579	,63	-,079	,65	,855*	,22	,715	,958**	,775*	,906**	,961**	,921**	,981**
	Tr. 1.5 Km/h speed	**Tr. 2.0 Km/h speed**	**Tr. 2.5 Km/h speed**	**Lo. 1.5 Km/h speed 20% GF**	**Lo. 2.0 Km/h speed 20% GF**	**Lo. 2.5 Km/h speed 20% GF**	**Lo. 1.5 Km/h speed 40% GF**	**Lo. 2.0 Km/h speed 40% GF**	**Lo. 2.5 Km/h speed 40% GF**	**Lo. 1.5 Km/h speed 70% GF**	**Lo. 2.0 Km/h speed 70% GF**	**Lo. 2.5 Km/h speed 70% GF**	**Lo. 1.5 Km/h speed 100% GF**	**Lo. 2.0 Km/h speed 100% GF**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

B) Module 2

Tr. 1.5 Km/h speed	1					
Tr. 2.0 Km/h speed	,902**	1				
Tr. 2.5 Km/h speed	,907**	,997**	1			
Lo. 1.5 Km/h speed 20% GF	,917**	,710	,739	1		
Lo. 2.0 Km/h speed 20% GF	,713	,919**	,903**	,474	1	
Lo. 2.5 Km/h speed 20% GF	,712	,918**	,896**	,449	,994**	1

Lo. 1.5 Km/h speed 40% GF	,931**	,983**	,986**	,791*	,875*	,860*	1													
Lo. 2.0 Km/h speed 40% GF	,591	,863*	,842*	,328	,980**	,976**	,809*	1												
Lo. 2.5 Km/h speed 40% GF	,643	,860*	,832*	,373	,983**	,990**	,799*	,974**	1											
Lo. 1.5 Km/h speed 70% GF	,727	,928**	,900**	,444	,948**	,972**	,868*	,945**	,950**	1										
Lo. 2.0 Km/h speed 70% GF	,764*	,954**	,935**	,495	,952**	,971**	,892**	,935**	,936**	,991**	1									
Lo. 2.5 Km/h speed 70% GF	,733	,939**	,917**	,462	,987**	,995**	,885**	,973**	,976**	,985**	,985**	1								
Lo. 1.5 Km/h speed 100% GF	,752	,942**	,920**	,484	,974**	,991**	,881**	,953**	,969**	,990**	,993**	,995**	1							
Lo. 2.0 Km/h speed 100% GF	,716	,912**	,889**	,458	,981**	,995**	,849*	,961**	,986**	,976**	,975**	,988**	,993**	1						
Lo. 2.5 Km/h speed 100% GF	,770*	,947**	,924**	,500	,980**	,992**	,893**	,953**	,972**	,984**	,986**	,996**	,997**	,988**	1					
	Tr. 1.5 Km/h speed	**Tr. 2.0 Km/h speed**	**Tr. 2.5 Km/h speed**	**Lo. 1.5 Km/h speed 20% GF**	**Lo. 2.0 Km/h speed 20% GF**	**Lo. 2.5 Km/h speed 20% GF**	**Lo. 1.5 Km/h speed 40% GF**	**Lo. 2.0 Km/h speed 40% GF**	**Lo. 2.5 Km/h speed 40% GF**	**Lo. 1.5 Km/h speed 70% GF**	**Lo. 2.0 Km/h speed 70% GF**	**Lo. 2.5 Km/h speed 70% GF**	**Lo. 1.5 Km/h speed 100% GF**	**Lo. 2.0 Km/h speed 100% GF**	**Lo. 2.5 Km/h speed 100% GF**					

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 3 – Evaluation of Module 3. 'Tr.' represents treadmill walking and 'Lo.' represents robotic-guided walking. (A) Correlation of Activation signal 3 among all the conditions of guidance force and speed in the average group. (B) Correlation of Module 3 among all the conditions of guidance force and speed in the average group..

A) Activation signal 3

Tr. 1.5 Km/h speed	1																			
Tr. 2.0 Km/h speed	,997**	1																		
Tr. 2.5 Km/h speed	,993**	,997**	1																	
Lo. 1.5 Km/h speed 20% GF	,963**	,953**	,960**	1																
Lo. 2.0 Km/h speed 20% GF	,977**	,977**	,961**	,928**	1															
Lo. 2.5 Km/h speed 20% GF	,943**	,946**	,921**	,861*	,984**	1														
Lo. 1.5 Km/h speed 40% GF	,945**	,944**	,921**	,847*	,976**	,979**	1													
Lo. 2.0 Km/h speed	,834*	,851*	,821*	,681	,896**	,932**	,951**	1												

40% GF															
Lo. 2.5 Km/h speed 40% GF	,894**	,908**	,886**	,784*	,950**	,978**	,964**	,972**	1						
Lo. 1.5 Km/h speed 70% GF	,935**	,940**	,919**	,825*	,968**	,978**	,996**	,971**	,979**	1					
Lo. 2.0 Km/h speed 70% GF	,849*	,860*	,831*	,697	,904**	,940**	,966**	,995**	,971**	,980**	1				
Lo. 2.5 Km/h speed 70% GF	,888**	,909**	,892**	,759*	,921**	,933**	,951**	,981**	,972**	,974**	,973**	1			
Lo. 1.5 Km/h speed 100% GF	,935**	,942**	,917**	,821*	,968**	,985**	,990**	,970**	,979**	,995**	,975**	,971**	1		
Lo. 2.0 Km/h speed 100% GF	,940**	,950**	,928**	,860*	,976**	,990**	,956**	,927**	,975**	,963**	,923**	,943**	,978**	1	
Lo. 2.5 Km/h speed 100% GF	,890**	,913**	,901**	,797*	,935**	,948**	,928**	,946**	,985**	,952**	,934**	,974**	,951**	,964**	1

	Tr. 1.5 Km/h speed	**Tr. 2.0 Km/h speed**	**Tr. 2.5 Km/h speed**	**Lo. 1.5 Km/h speed 20% GF**	**Lo. 2.0 Km/h speed 20% GF**	**Lo. 2.5 Km/h speed 20% GF**	**Lo. 1.5 Km/h speed 40% GF**	**Lo. 2.0 Km/h speed 40% GF**	**Lo. 2.5 Km/h speed 40% GF**	**Lo. 1.5 Km/h speed 70% GF**	**Lo. 2.0 Km/h speed 70% GF**	**Lo. 2.5 Km/h speed 70% GF**	**Lo. 1.5 Km/h speed 100% GF**	**Lo. 2.0 Km/h speed 100% GF**	**Lo. 2.5 Km/h speed 100% GF**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

B) Module 3

Tr. 1.5 Km/h speed	1														
Tr. 2.0 Km/h speed	,970**	1													
Tr. 2.5 Km/h speed	,931**	,984**	1												
Lo. 1.5 Km/h speed 20% GF	,929**	,980**	,972**	1											
Lo. 2.0 Km/h speed 20% GF	,999**	,977**	,939**	,935**	1										
Lo. 2.5 Km/h speed 20% GF	,990**	,952**	,906**	,906**	,988**	1									
Lo. 1.5 Km/h speed 40% GF	,996**	,962**	,911**	,913**	,997**	,984**	1								
Lo. 2.0 Km/h speed 40% GF	,965**	,993**	,982**	,974**	,973**	,938**	,957**	1							
Lo. 2.5 Km/h speed 40% GF	,963**	,984**	,979**	,973**	,968**	,930**	,951**	,996**	1						
Lo. 1.5 Km/h speed 70% GF	,960**	,991**	,988**	,988**	,965**	,939**	,943**	,993**	,993**	1					
Lo. 2.0 Km/h speed 70% GF	,970**	,986**	,976**	,983**	,973**	,947**	,955**	,992**	,995**	,997**	1				

Lo. 2.5 Km/h speed 70% GF	,965**	,990**	,982**	,983**	,971**	,939**	,952**	,997**	,998**	,998**	,998**	1			
Lo. 1.5 Km/h speed 100% GF	,984**	,990**	,970**	,972**	,988**	,963**	,975**	,994**	,994**	,992**	,997**	,996**	1		
Lo. 2.0 Km/h speed 100% GF	,980**	,935**	,912**	,873*	,974**	,966**	,971**	,928**	,931**	,923**	,934**	,926**	,951**	1	
Lo. 2.5 Km/h speed 100% GF	,960**	,989**	,988**	,981**	,965**	,931**	,944**	,996**	,998**	,998**	,997**	,999**	,993**	,928**	1
	Tr. 1.5 Km/h speed	**Tr. 2.0 Km/h speed**	**Tr. 2.5 Km/h speed**	**Lo. 1.5 Km/h speed 20% GF**	**Lo. 2.0 Km/h speed 20% GF**	**Lo. 2.5 Km/h speed 20% GF**	**Lo. 1.5 Km/h speed 40% GF**	**Lo. 2.0 Km/h speed 40% GF**	**Lo. 2.5 Km/h speed 40% GF**	**Lo. 1.5 Km/h speed 70% GF**	**Lo. 2.0 Km/h speed 70% GF**	**Lo. 2.5 Km/h speed 70% GF**	**Lo. 1.5 Km/h speed 100% GF**	**Lo. 2.0 Km/h speed 100% GF**	**Lo. 2.5 Km/h speed 100% GF**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 4 - Evaluation of Module 4. 'Tr.' represents treadmill walking and 'Lo.' represents robotic-guided walking. (A) Correlation of Activation signal 4 among all the conditions of guidance force and speed in the average group. (B) Correlation of Module 4 among all the conditions of guidance force and speed in the average group..

A) Activation signal 4

Tr. 1.5 Km/h speed	1												
Tr. 2.0 Km/h speed	,941**	1											
Tr. 2.5 Km/h speed	,846*	,881**	1										
Lo. 1.5 Km/h speed 20% GF	,413	,557	,310	1									
Lo. 2.0 Km/h speed 20% GF	,741	,914**	,869*	,555	1								
Lo. 2.5 Km/h speed 20% GF	,306	,418	,734	-,125	,633	1							
Lo. 1.5 Km/h speed 40% GF	,784*	,797*	,631	,526	,714	,289	1						
Lo. 2.0 Km/h speed 40% GF	,233	,133	,543	-,509	,186	,792*	,112	1					
Lo. 2.5 Km/h speed 40% GF	,285	,331	,725	-,182	,493	,948**	,132	,867*	1				
Lo. 1.5 Km/h speed 70% GF	,061	-,049	,401	-,569	,021	,715	-,063	,977**	,830*	1			
Lo. 2.0 Km/h speed 70% GF	,286	,263	,668	-,351	,374	,912**	,157	,964**	,966**	,924**	1		
Lo. 2.5 Km/h speed 70% GF	,359	,385	,755*	-,206	,519	,957**	,238	,897**	,987**	,836*	,981**	1	
Lo. 1.5 Km/h speed	,068	-,006	,450	-,515	,095	,784*	-,055	,971**	,892**	,985**	,957**	,895**	1

100% GF														
Lo. 2.0 Km/h speed 100% GF	,108	,088	,533	-,432	,206	,788*	-,200	,869*	,921**	,887**	,913**	,882**	,919**	1
Lo. 2.5 Km/h speed 100% GF	,397	,362	,750	-,240	,429	,879**	,192	,927**	,968**	,880**	,981**	,978**	,923**	,912**

	Tr. 1.5 Km/h speed	**Tr. 2.0 Km/h speed**	**Tr. 2.5 Km/h speed**	**Lo. 1.5 Km/h speed 20% GF**	**Lo. 2.0 Km/h speed 20% GF**	**Lo. 2.5 Km/h speed 20% GF**	**Lo. 1.5 Km/h speed 40% GF**	**Lo. 2.0 Km/h speed 40% GF**	**Lo. 2.5 Km/h speed 40% GF**	**Lo. 1.5 Km/h speed 70% GF**	**Lo. 2.0 Km/h speed 70% GF**	**Lo. 2.5 Km/h speed 70% GF**	**Lo. 1.5 Km/h speed 100% GF**	**Lo. 2.0 Km/h speed 100% GF**	**Lo. 2.5 Km/h speed 100% GF**
Tr. 1.5 Km/h speed	1														
Tr. 2.0 Km/h speed	,941**	1													
Tr. 2.5 Km/h speed	,620	,726	1												
Lo. 1.5 Km/h speed 20% GF	,831*	,635	,463	1											
Lo. 2.0 Km/h speed 20% GF	,673	,723	,623	,616	1										
Lo. 2.5 Km/h speed 20% GF	,683	,771*	,889**	,537	,874*	1									
Lo. 1.5 Km/h speed 40% GF	,920**	,915**	,430	,649	,719	,623	1								
Lo. 2.0 Km/h speed 40% GF	,625	,726	,989**	,491	,624	,873*	,425	1							
Lo. 2.5 Km/h speed 40% GF	,622	,724	,969**	,437	,673	,945**	,483	,948**	1						
Lo. 1.5 Km/h speed 70% GF	,705	,754	,949**	,529	,609	,891**	,530	,907**	,965**	1					
Lo. 2.0 Km/h speed 70% GF	,778*	,786*	,873*	,623	,702	,918**	,648	,831*	,932**	,970**	1				
Lo. 2.5 Km/h speed 70% GF	,661	,714	,962**	,519	,626	,912**	,478	,930**	,983**	,992**	,962**	1			
Lo. 1.5 Km/h speed 100% GF	,882**	,934**	,849*	,692	,792*	,852*	,784*	,832*	,812*	,853*	,852*	,823*	1		
Lo. 2.0 Km/h speed 100% GF	,635	,757*	,769*	,220	,345	,661	,562	,705	,790*	,854*	,800*	,803*	,733	1	
Lo. 2.5 Km/h speed 100% GF	,754	,828*	,979**	,580	,703	,921**	,589	,961**	,964**	,972**	,933**	,969**	,926**	,805*	1

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

B) Module 4

Tr. 1.5 Km/h speed	
Tr. 2.0 Km/h speed	
Tr. 2.5 Km/h speed	
o. 1.5 Km/h speed 20% GF	
. 2.0 Km/h speed 20% G	
o. 2.5 Km/h speed 20% GF	
Lo. 1.5 Km/h speed 40% GF	
Lo. 2.0 Km/h speed 40% GF	
. 2.5 Km/h speed 40%	
o. 1.5 Km/h speed 70% GF	
o. 2.0 Km/h speed 70% GF	
. 2.5 Km/h speed 70%	
o. 1.5 Km/h speed 100% GF	
o. 2.0 Km/h speed 100% GF	
Lo. 2.5 Km/h speed 100% GF	

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).