

Annex 11.A. Staff sense of self-efficacy in supporting child development, learning and well-being (S1SECD)

The scale *Staff sense of self-efficacy in supporting child development, learning and well-being* (S1SECD) was not part of the first data release in 2019, but was added in 2020 to the data set. The analyses followed the same procedures as the main scaling for TALIS Starting Strong Survey 2018. Detailed description of the procedures is included in the TALIS Starting Strong Survey 2018 Technical Report. This document contains only the results from the scale evaluation for the newly added scale. Of note, Denmark did not meet the requirements determined in the TALIS Starting Strong 2018 technical standards (the adjudication process rated their data as “insufficient”).

Items

The items for the scale *Staff sense of self-efficacy in supporting child development, learning and well-being* (S1SECD) are presented in Table 11.A.1. Staff working at Early Childhood Education and Care centres had to indicate the extent to which they feel they can do activities supporting child development, learning and well-being.

Table 11.A.1. Item wording for the scale S1SECD

S1SECD: Staff sense of self-efficacy in supporting child development, learning and well-being	
SS1G24:	In your work with children, to what extent do you feel that you can do the following?
Response options: Not at all (1), To some extent (2), Quite a bit (3), A lot (4)	
SS1G24C	Help children develop their capacity to learn independently
SS1G24F	Help children to interact with each other and show good social behaviour (e.g. sharing, helping others)
SS1G24G	Calm a child who is upset
SS1G24H	Monitor and observe children's development
SS1G24I	Help children to develop self-confidence
SS1G24J	Help children develop creativity and problem solving
SS1G24L	Provide all children with a feeling of security

Source: OECD, TALIS Starting Strong Survey 2018 database.

Scale reliabilities and model fits

Table 11.A.2 includes the reliabilities and model fits for the scale S1SECD. The reliability coefficients are high in all participating countries for both populations. The model fits are good for all countries, except for Denmark in both populations.

Table 11.A.2. Reliability coefficients and model fit from the confirmatory factor analysis for the scale S1SECD

Participating country	Cronbach's alpha based on standardised items	CFI	TLI	RMSEA	SRMR
ISCED level 02					
Chile	0.879	0.987	0.981	0.040	0.019
Germany	0.797	0.968	0.952	0.053	0.028
Iceland	0.872	0.951	0.926	0.078	0.037
Israel	0.883	0.965	0.948	0.059	0.029
Japan	0.885	0.984	0.976	0.043	0.022
Korea	0.910	0.977	0.966	0.052	0.025
Norway	0.879	0.977	0.966	0.059	0.027
Turkey	0.893	0.987	0.98	0.029	0.022
Denmark	0.813	0.831	0.831	0.103	0.697
U3					
Germany	0.797	0.952	0.928	0.064	0.036
Israel	0.888	0.941	0.911	0.078	0.037
Norway	0.875	0.951	0.926	0.080	0.035
Denmark	0.858	0.844	0.844	0.102	0.737

Source: OECD, TALIS Starting Strong Survey 2018 database.

Invariance testing

Table 11.A.3 presents the invariance testing results for the scale S1SECD. It shows that the scale reached metric invariance for both populations.

Table 11.A.3. Invariance test results for the scale S1SECD

	CFI	TLI	RMSEA	SRMR	Δ CFI	Δ TLI	Δ RMSEA	Δ SRMR
Invariance level for ISCED level 02								
Configural	0.975	0.963	0.050	0.027				
Metric	0.962	0.959	0.053	0.097	0.013	0.004	-0.003	-0.070
Scalar	0.871	0.890	0.087	0.156	0.091	0.069	-0.034	-0.059
Invariance level for U3								
Configural	0.947	0.920	0.075	0.036				
Metric	0.943	0.933	0.069	0.060	0.004	-0.013	0.006	-0.024
Scalar	0.864	0.870	0.096	0.075	0.079	0.063	-0.027	-0.015

Source: OECD, TALIS Starting Strong Survey 2018 database.

Item parameters

Unstandardised factor loadings are presented in Table 11.A.4. The standardised factor loadings are reported in Table 11.A.5 and the unstandardised intercepts in Table 11.A.6. All of the standardised factor loadings are above 0.45 and, in most countries and populations, also above 0.60, indicating that the latent factor is well represented by the items in all countries.

Table 11.A.4. Unstandardised factor loadings for the scale S1SECD

Items	Factor loadings
SS1G24C	0.446
SS1G24F	0.435
SS1G24G	0.438
SS1G24H	0.513
SS1G24I	0.564
SS1G24J	0.559
SS1G24L	0.422

Source: OECD, TALIS Starting Strong Survey 2018 database.

Table 11.A.5. Standardised factor loadings for the scale S1SECD

Participating country	Standardised factor loadings						
	SS1G24C	SS1G24F	SS1G24G	SS1G24H	SS1G24I	SS1G24J	SS1G24L
ISCED level 02							
Chile	0.555	0.675	0.609	0.729	0.885	0.791	0.696
Germany	0.535	0.623	0.569	0.510	0.761	0.711	0.553
Iceland	0.594	0.710	0.709	0.677	0.834	0.729	0.687
Israel	0.606	0.687	0.714	0.681	0.845	0.788	0.711
Japan	0.719	0.681	0.671	0.673	0.819	0.826	0.596
Korea	0.683	0.715	0.708	0.753	0.883	0.845	0.731
Norway	0.619	0.684	0.681	0.718	0.853	0.798	0.681
Turkey	0.588	0.686	0.599	0.777	0.882	0.831	0.737
Denmark	0.652	0.726	0.802	0.758	0.857	0.780	0.722
U3							
Germany	0.548	0.616	0.578	0.507	0.774	0.711	0.576
Israel	0.647	0.637	0.721	0.733	0.822	0.778	0.720
Norway	0.608	0.684	0.698	0.714	0.812	0.758	0.692
Denmark	0.657	0.750	0.834	0.743	0.863	0.780	0.774

Source: OECD, TALIS Starting Strong Survey 2018 database.

Table 11.A.6. Unstandardised intercepts for the scale S1SECD

Participating country	Unstandardised intercepts						
	SS1G24C	SS1G24F	SS1G24G	SS1G24H	SS1G24I	SS1G24J	SS1G24L
ISCED level 02							
Chile	3.328	3.668	3.525	3.546	3.666	3.532	3.615
Germany	3.215	3.569	3.527	2.876	3.364	3.205	3.600
Iceland	3.119	3.573	3.623	3.277	3.395	3.208	3.655
Israel	3.300	3.542	3.588	3.370	3.449	3.368	3.700
Japan	2.386	2.526	2.683	2.497	2.642	2.436	2.699
Korea	2.924	3.266	3.177	3.042	3.250	3.095	3.217
Norway	3.073	3.510	3.558	3.337	3.350	3.180	3.710
Turkey	3.520	3.742	3.642	3.718	3.747	3.697	3.768
Denmark	3.376	3.715	3.821	3.535	3.603	3.378	3.751
U3							
Germany	3.215	3.569	3.527	2.876	3.364	3.205	3.600
Israel	3.300	3.542	3.588	3.370	3.449	3.368	3.700
Norway	3.073	3.510	3.558	3.337	3.350	3.180	3.710
Denmark	3.434	3.753	3.857	3.573	3.630	3.367	3.813

Source: OECD, TALIS Starting Strong Survey 2018 database.