



WP1 – Adapted Items for DIMI, for 9-11 years

DIMI citation:

Laaber, F., Florack, A., Koch, T., & Hubert, M. (2023). Digital maturity: Development and validation of the digital maturity inventory (DIMI). *Computers in Human Behavior*, 143, 107709. <https://doi.org/10.1016/j.chb.2023.107709>

The goal of the adaptation was to simplify the wording of the items for younger children, as some reported poor understanding of these items.

In translating these items, please consider how they could be phrased in an easy way in the respective language, which children at age 9 could understand.

Variable	Original English Version	Easier English Version
literacy_1_young	I know how to change the privacy settings (for example, deactivate cookies)	I know how to change the privacy settings (for example, turn off cookies)
literacy_2_young	I know how to adjust the privacy settings of social media sites (for example, Instagram, Snapchat, TikTok)	I know how to change the privacy settings in social media (for example, who can see things about me on Instagram, Snapchat or TikTok)
growth_3_young	I learn new skills	<i>In German, we had to simplify this item due to the German word for 'skills' being difficult and changed it to "I can teach myself something new". However, in English we concluded that the original version is clear enough. We would ask you to use your own judgement regarding the item difficulty in your language.</i>
emotion_a1_young	and somebody criticizes me online or in a text, I immediately react without considering the consequences	and somebody says something bad about me online or in a text, I immediately react without thinking about the consequences



citizenship_2_young	I use the internet to support campaigns for issues like environmental protection or to spread awareness for climate change	I use the internet to support things like environmental protection or to make other people aware of climate change
citizenship_3_young	I use it to stand up for things that really matter in the world	I use it to support things that are really important in this world
respect_1_young	I watch my language when I disagree with someone, so that what I say doesn't come across as mean	and I disagree with someone, I try not to say anything mean
respect_2_young	I care about the feelings of others	I think about the feelings of other people

For more detailed information regarding how to use the DIMI (instructions, labels), please refer to the version for adolescents aged 12-18 years.

SPSS Syntax for the Digital Maturity Score

#recode reverse scored items

```
RECODE autonomy_c1_young (5=1) (4=2) (3=3) (2=4) (1=5) INTO
autonomy_c1r_young.
EXECUTE.
```

```
RECODE autonomy_c2_young (5=1) (4=2) (3=3) (2=4) (1=5) INTO
autonomy_c2r_young.
EXECUTE.
```

```
RECODE autonomy_c3_young (5=1) (4=2) (3=3) (2=4) (1=5) INTO
autonomy_c3r_young.
EXECUTE.
```

```
RECODE emotion_n1_young (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_n1r_young.
EXECUTE.
```

```
RECODE emotion_n2_young (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_n2r_young.
EXECUTE.
```

```
RECODE emotion_n3_young (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_n3r_young.
EXECUTE.
```

```
RECODE emotion_a1_young (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_a1r_young.
EXECUTE.
```



```
RECODE emotion_a2_young (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_a2r_young.  
EXECUTE.
```

```
RECODE emotion_a3_young (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_a3r_young.  
EXECUTE.
```

#computing scale scores

```
COMPUTE AutonomyChoice_score_young  
=MEAN.2(autonomy_c1r_young,autonomy_c2r_young,autonomy_c3r_young).  
EXECUTE.
```

```
COMPUTE AutonomyWithin_score_young  
=MEAN.2(autonomy_w1_young,autonomy_w2_young,autonomy_w3_young).  
EXECUTE.
```

```
COMPUTE Literacy_score_young  
=MEAN.2(literacy_1_young,literacy_2_young,literacy_3_young).  
EXECUTE.
```

```
COMPUTE Growth_score_young  
=MEAN.2(growth_1_young,growth_2_young,growth_3_young).  
EXECUTE.
```

```
COMPUTE Risk_score_young =MEAN.2(risk_1_young,risk_2_young,risk_3_young).  
EXECUTE.
```

```
COMPUTE EmoNeg_score_young  
=MEAN.2(emotion_n1r_young,emotion_n2r_young,emotion_n3r_young).  
EXECUTE.
```

```
COMPUTE EmoAgg_score_young  
=MEAN.2(emotion_a1r_young,emotion_a2r_young,emotion_a3r_young).  
EXECUTE.
```

```
COMPUTE Support_score_young  
=MEAN.3(support_1_young,support_2_young,support_3_young,support_4_young).  
EXECUTE.
```

```
COMPUTE  
Respect_score_young=MEAN.3(respect_1_young,respect_2_young,respect_3_young,resp  
ect_4_young).  
EXECUTE.
```



```
COMPUTE Citizenship_score_young  
=MEAN.2(citizenship_1_young,citizenship_2_young,citizenship_3_young).  
EXECUTE.
```

#Creating weighted dimension scores using the mean scores of expert importance rating
(as seen in Rijdsdijk et al., 2007).

```
COMPUTE Literacy_Pweighted_young =10.17 * Literacy_score_young.  
EXECUTE.
```

```
COMPUTE Growth_Pweighted_young =10.43 * Growth_score_young.  
EXECUTE.
```

```
COMPUTE AutonomyC_Pweighted_young =9.91 * AutonomyChoice_score_young.  
EXECUTE.
```

```
COMPUTE AutonomyW_Pweighted_young =9.39 * AutonomyWithin_score_young.  
EXECUTE.
```

```
COMPUTE EmotionN_Pweighted_young =10.30 * EmoNeg_score_young.  
EXECUTE.
```

```
COMPUTE EmotionA_Pweighted_young =9.91 * EmoAgg_score_young.  
EXECUTE.
```

```
COMPUTE Risk_Pweighted_young =11.73 * Risk_score_young.  
EXECUTE.
```

```
COMPUTE Citizenship_Pweighted_young =8.47 * Citizenship_score_young.  
EXECUTE.
```

```
COMPUTE Respect_Pweighted_young =10.30 * Respect_score_young.  
EXECUTE.
```

```
COMPUTE Support_Pweighted_young =9.39 * Support_score_young.  
EXECUTE.
```

#creating composite measure by adding the weighted dimension scores

```
COMPUTE DigMat_Pcomposite_young =(Literacy_Pweighted_young +  
Growth_Pweighted_young + AutonomyC_Pweighted_young +  
AutonomyW_Pweighted_young + EmotionN_Pweighted_young +  
EmotionA_Pweighted_young + Risk_Pweighted_young + Citizenship_Pweighted_young  
+  
Respect_Pweighted_young + Support_Pweighted_young).  
EXECUTE.
```

