WP1 – Final Item Selection for Digital Maturity, 12-18 years

DIMI citation:

Formula for creating an overall Digital Maturity Score:

1. Create an average score for each dimension
2. Multiply these average scores with their respective weights, then add these for the overall score:
   DM Score = AutonomyChoice_score*9.91 + AutonomyWithin_score*9.39 + Literacy_score*10.17 + Growth_score*10.43 + Risk_score*11.73 + EmoNeg_score*10.30 + EmoAgg_score*9.91 + Support_score*9.39 + Respect_score*10.30 + Citizenship_score*8.47

Questionnaire:

For all dimensions except digital Literacy:
*Please think about **how often the following things happen to you** while you are using a **mobile device** such as mobile phones, tablets, iPads, or laptop computers.*

"When using a mobile device..."

Never (1) – Rarely (2) – Sometimes (3) – Often (4) – Always (5)

For digital Literacy dimension:
*Please tell us how true the following statements are of you when thinking about how you use the internet and mobile devices such as mobile phones, tablets, iPads, or laptop computers. Think about **how true this would be of you** if you had to do it now, on your own.*

Not at all true of me (1) – Not very true of me (2) – Neither true or untrue of me (3) – Mostly true of me (4) – Very true of me (5)

Dimensions	Items
Autonomous Choice to Use Mobile Devices **→ Reverse coded**	… I am online because I feel like I have to be online all the time
	… I am online because otherwise I feel like I am missing out on something
	… I have the feeling that it is controlling my life
Autonomy Within Digital Contexts	… I choose the content I want to see
	… I do the things that I like
	… I decide what I do
Digital Literacy	I know how to change the privacy settings (for example, deactivate cookies)
	I know how to adjust the privacy settings of social media sites (for example, Instagram, Snapchat, TikTok)
	I know how to store photos, documents or other files in the cloud (for example, Google Drive, iCloud)
Individual Growth in digital Contexts	… I learn new things
	… I learn something useful
	… I learn new skills
Digital Risk Awareness	… I am very careful
	… my own safety is very important to me
	… I make sure to be careful
Support-Seeking Regarding Digital Problems	… I ask others for help when I have a problem
	… and I don't know what to do, I ask others for help
	… and there is a technical problem, I ask others for help (for example, a friend, parent, sibling)
	… and I have problems with others on the internet, I get help
Regulation of Negative Emotions in Digital Contexts **→ Reverse coded**	… and I become annoyed or upset online, it takes me a long time to feel better
	… and I become annoyed or upset online, I stay in a bad mood for a long time
	… and I become annoyed or upset online, there are only few things that can make me feel better
Regulation of Impulses in Digital Contexts **→ Reverse coded**	… and somebody criticizes me online or in a text, I immediately react without considering the consequences
	… and a message makes me angry, I react too quickly and then later regret the way I responded
	… and somebody insults me, I try to get back at them

Respect towards others in digital Contexts	… I watch my language when I disagree with someone, so that what I say doesn't come across as mean
	… I care about the feelings of others
	… I make sure that pictures I post or send of other people will not insult them or get them into trouble
	… I respect the opinions and knowledge of others
Digital Citizenship	… I use it to improve life in my neighborhood, town or world
	… I use the internet to support campaigns for issues like environmental protection or to spread awareness for climate change
	… I use it to stand up for things that really matter in the world

SPSS Syntax for the Digital Maturity Score

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#recode reverse scored items

RECODE autonomy_c1 (5=1) (4=2) (3=3) (2=4) (1=5) INTO autonomy_c1r.
EXECUTE.

RECODE autonomy_c2 (5=1) (4=2) (3=3) (2=4) (1=5) INTO autonomy_c2r.
EXECUTE.

RECODE autonomy_c3 (5=1) (4=2) (3=3) (2=4) (1=5) INTO autonomy_c3r.
EXECUTE.

RECODE emotion_n1 (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_n1r.
EXECUTE.

RECODE emotion_n2 (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_n2r.
EXECUTE.

RECODE emotion_n3 (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_n3r.
EXECUTE.

RECODE emotion_a1 (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_a1r.
EXECUTE.

RECODE emotion_a2 (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_a2r.
EXECUTE.

RECODE emotion_a3 (5=1) (4=2) (3=3) (2=4) (1=5) INTO emotion_a3r.
EXECUTE.
```

```
#computing scale scores

COMPUTE
AutonomyChoice_score=MEAN.2(autonomy_c1r,autonomy_c2r,autonomy_c3r).
EXECUTE.

COMPUTE
AutonomyWithin_score=MEAN.2(autonomy_w1,autonomy_w2,autonomy_w3).
EXECUTE.


COMPUTE Literacy_score=MEAN.2(literacy_1,literacy_2,literacy_3).
EXECUTE.


COMPUTE Growth_score=MEAN.2(growth_1,growth_2,growth_3).
EXECUTE.


COMPUTE Risk_score=MEAN.2(risk_1,risk_2,risk_3).
EXECUTE.


COMPUTE EmoNeg_score=MEAN.2(emotion_n1r,emotion_n2r,emotion_n3r).
EXECUTE.


COMPUTE EmoAgg_score=MEAN.2(emotion_a1r,emotion_a2r,emotion_a3r).
EXECUTE.

COMPUTE Support_score=MEAN.3(support_1,support_2,support_3,support_4).
EXECUTE.

COMPUTE Respect_score=MEAN.3(respect_1,respect_2,respect_3,respect_4).
EXECUTE.


COMPUTE Citizenship_score=MEAN.2(citizenship_1,citizenship_2,citizenship_3).
EXECUTE.


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

COMPUTE Literacy_Pweighted=10.17 * Literacy_score.
EXECUTE.

COMPUTE Growth_Pweighted=10.43 * Growth_score.
EXECUTE.
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COMPUTE AutonomyC_Pweighted=9.91 * AutonomyChoice_score.
EXECUTE.

COMPUTE AutonomyW_Pweighted=9.39 * AutonomyWithin_score.
EXECUTE.

COMPUTE EmotionN_Pweighted=10.30 * EmoNeg_score.
EXECUTE.

COMPUTE EmotionA_Pweighted=9.91 * EmoAgg_score.
EXECUTE.

COMPUTE Risk_Pweighted=11.73 * Risk_score.
EXECUTE.

COMPUTE Citizenship_Pweighted=8.47 * Citizenship_score.
EXECUTE.

COMPUTE Respect_Pweighted=10.30 * Respect_score.
EXECUTE.

COMPUTE Support_Pweighted=9.39 * Support_score.
EXECUTE.

#creating composite measure by adding the weighted dimension scores

COMPUTE DigMat_Pcomposite=(Literacy_Pweighted + Growth_Pweighted +
AutonomyC_Pweighted +
    AutonomyW_Pweighted + EmotionN_Pweighted + EmotionA_Pweighted +
Risk_Pweighted + Citizenship_Pweighted +
    Respect_Pweighted + Support_Pweighted).
EXECUTE.
```