WP1 – Final Item Selection for DIMI, 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

(SPSS Syntax appended to this document)

Autonomous Choice to Use Mobile Devices
Using mobile devices out of one's own choice rather than a feeling of obligation or compulsion.

*Prosím zamysli sa nad tým, **ako často sa za normálnych okolností stávajú nasledovné veci**, keď používaš mobilné zariadenia*
(mobilný telefón, tablet alebo laptop).
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.

„Keď používam mobilné zariadenia... "
"When using a mobile device..."

Nikdy (1) - Málokedy (2) - Občas (3) - Často (4) - Vždy (5)
Never (1) - Rarely (2) - Sometimes (3) - Often (4) - Always (5)

Slovak	English	Variable name

som online, lebo si myslím, že by som vždy mal/a byť online	I am online because I feel like I have to be online all the time	autonomy_c1
som online, lebo inak mám pocit, že by som mohol/mohla niečo zmeškať	I am online because otherwise I feel like I am missing out on something	autonomy_c2
mám pocit, že to určuje môj život	I have the feeling that it is controlling my life	autonomy_c3

α = .77, CR = .78, AVE = .55 (N=558)

Reverse coded items: autonomy_c1, autonomy_c2, autonomy_c3

Autonomy Within Digital Contexts
Deliberately choosing which digital contexts to engage with, viewing content which one finds interesting and enjoys.

*Prosím zamysli sa nad tým, **ako často sa za normálnych okolností stávajú nasledovné veci**, keď používaš **mobilné zariadenia** (mobilný telefón, tablet alebo laptop).*
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.

„Keď používam mobilné zariadenia... "
"When using a mobile device..."

Nikdy (1) - Málokedy (2) - Občas (3) - Často (4) - Vždy (5)
Never (1) - Rarely (2) - Sometimes (3) - Often (4) - Always (5)

Slovak	English	Variable name
vyhľadávam obsahy, ktoré chcem vidieť	I choose the content I want to see	autonomy_w1
robím to, čo baví mňa	I do the things that I like	autonomy_w2
robím to, čo ma zaujíma, bez ohľadu na to, čo si myslia iní	I decide what I do	autonomy_w3

α = .70, CR = .70, AVE = .44 (N=558)

Digital Literacy
The technical skills to use mobile devices and the internet in a safe and effective manner.

*Prosím uveď, do akej miery sa na teba hodia nasledovné tvrdenia, keď používaš internet alebo mobilné zariadenia ako mobilný telefón, tablet alebo laptop. Predstav si, že by si mal/a teraz hneď robiť tieto veci sám/sama. **Ako veľmi sa na teba hodia tieto tvrdenia?***
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.

Vôbec nie (1) - Skôr nie (2) - Ako kedy (3) - Skôr áno (4) - Určite áno (5)
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)

Slovak	English	Variable name
Viem ako zmeniť nastavenia ochrany súkromia (napr. vymazať cookies)	I know how to change the privacy settings (for example, turn off cookies)	literacy_1
Viem ako môžem zmeniť nastavenia súkromia na sociálnych médiách (napr. Instagram, Facebook, 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)	literacy_2
Viem ako uložiť fotky, dokumenty alebo iné súbory na cloude (napr. Google Drive, iCloud)	I know how to store photos, documents or other files in the cloud (for example, Google Drive, iCloud)	literacy_3

α = .82, CR = .82, AVE = .61(N=558)

Individual Growth in Digital Contexts
The ability to use mobile devices and digital contexts for personal learning and growth.

*Prosím zamysli sa nad tým, **ako často sa za normálnych okolností stávajú nasledovné veci**, keď používaš **mobilné zariadenia** (mobilný telefón, tablet alebo laptop).*
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.

„Keď používam mobilné zariadenia... "
"When using a mobile device..."

Nikdy (1) - Málokedy (2) - Občas (3) - Často (4) - Vždy (5)
Never (1) - Rarely (2) - Sometimes (3) - Often (4) - Always (5)

Slovak	English	Variable name
učím sa nové veci	I learn new things	growth_1
učím sa užitočné veci	I learn something useful	growth_2

Slovak	English	Variable name
viem sa sám/sama naučiť niečo nové	I learn new skills	growth_3

α = .81, CR = .81, AVE = .59 (N=558)

Digital Risk Awareness
Managing risks related to mobile devices and the online environment by being aware of potential dangers and influences.

*Prosím zamysli sa nad tým, **ako často sa za normálnych okolností stávajú nasledovné veci**, keď používaš **mobilné zariadenia** (mobilný telefón, tablet alebo laptop).*
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.

„Keď používam mobilné zariadenia... "
"When using a mobile device..."

Nikdy (1) - Málokedy (2) - Občas (3) - Často (4) - Vždy (5)
Never (1) - Rarely (2) - Sometimes (3) - Often (4) - Always (5)

Slovak	English	Variable name
som veľmi opatrný/á	I am very careful	risk_1
moja vlastná bezpečnosť je pre mňa veľmi dôležitá	my own safety is very important to me	risk_2
dávam si pozor, aby som bol/a opatrný/á	I make sure to be careful	risk_3

α = .85, CR = .85, AVE = .66 (N=558)

Regulation of Negative Emotions in Digital Contexts
The ability to control and effectively regulate negative emotions due to frustrations in digital contexts.

*Prosím zamysli sa nad tým, **ako často sa za normálnych okolností stávajú nasledovné veci**, keď používaš **mobilné zariadenia** (mobilný telefón, tablet alebo laptop).*
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.

„Keď používam mobilné zariadenia... "
"When using a mobile device..."

Nikdy (1) - Málokedy (2) - Občas (3) - Často (4) - Vždy (5)
Never (1) - Rarely (2) - Sometimes (3) - Often (4) - Always (5)

Slovak	English	Variable name

Slovak	English	Variable name
a niečo ma na internete nahnevá alebo raní, trvá dlho, kým sa znova cítim lepšie	and I become annoyed or upset online, it takes me a long time to feel better	emotion_n1
a niečo ma internete na nahnevá alebo raní, mám dlho zlú náladu	and I become annoyed or upset online, I stay in a bad mood for a long time	emotion_n2
a niečo ma internete na nahnevá alebo raní, je len málo vecí, ktoré ma vedia rozveseliť	and I become annoyed or upset online, there are only few things that can make me feel better	emotion_n3

α = .84, CR = .85, AVE = .65 (N=558)

Reverse coded items: emotion_n1, emotion_n2, emotion_n3

Regulation of Impulses in Digital Contexts
The ability to control one's behaviour and reactions to negative experiences in digital contexts.

*Prosím zamysli sa nad tým, **ako často sa za normálnych okolností stávajú nasledovné veci**, keď používaš **mobilné zariadenia** (mobilný telefón, tablet alebo laptop).*
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.

„Keď používam mobilné zariadenia... "
"When using a mobile device..."

Nikdy (1) - Málokedy (2) - Občas (3) - Často (4) - Vždy (5)
Never (1) - Rarely (2) - Sometimes (3) - Often (4) - Always (5)

Slovak	English	Variable name
a niekto ma na internete alebo v správe kritizuje, reagujem okamžite bez toho, aby som rozmýšľal/a nad dôsledkami	and somebody says something bad about me online or in a text, I immediately react without thinking about the consequences	emotion_a1
a dostanem nejakú správu, ktorá ma nahnevá, reagujem prirýchlo a potom to ľutujem	and a message makes me angry, I react too quickly and then later regret the way I responded	emotion_a2
a niekto ma urazí, snažím sa mu/jej to odplatiť	and somebody insults me, I try to get back at them	emotion_a3

α = .77, CR = .78, AVE = .54 (N=558)

Reverse coded items: emotion_a1, emotion_a2, emotion_a3

Support-Seeking Regarding Digital Problems
The ability to seek support from others when encountering problems regarding mobile devices or digital contexts.

*Prosím zamysli sa nad tým, **ako často sa za normálnych okolností stávajú nasledovné veci**, keď používaš **mobilné zariadenia** (mobilný telefón, tablet alebo laptop).*
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.

„Keď používam mobilné zariadenia..."
"When using a mobile device..."

Nikdy (1) - Málokedy (2) - Občas (3) - Často (4) - Vždy (5)
Never (1) - Rarely (2) - Sometimes (3) - Often (4) - Always (5)

Slovak	English	Variable name
spýtam sa iných, aby mi pomohli, keď mám nejaký problém	I ask others for help when I have a problem	support_1
a neviem ako ďalej, požiadam niekoho iného o pomoc	and I don't know what to do, I ask others for help	support_2
a mám nejaký technický problém, popýtam niekoho iného o pomoc (napr. kamaráta/kamarátku, rodiča, súrodenca)	and there is a technical problem, I ask others for help (for example, a friend, parent, sibling)	support_3
a mám problémy s inými na internete, požiadam o pomoc	and I have problems with others on the internet, I get help	support_4

$\alpha = .80$, CR = .81, AVE = .52 (N=558)

Respect Towards Others in Digital Contexts
Acting respectfully when engaging with others and in content one shares online.

*Prosím zamysli sa nad tým, **ako často sa za normálnych okolností stávajú nasledovné veci**, keď používaš **mobilné zariadenia**
(mobilný telefón, tablet alebo laptop).*
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.

„Keď používam mobilné zariadenia... "
"When using a mobile device..."

Nikdy (1) - Málokedy (2) - Občas (3) - Často (4) - Vždy (5)
Never (1) - Rarely (2) - Sometimes (3) - Often (4) - Always (5)

Slovak	English	Variable name
keď nemám rovnaký názor ako niekto iný, snažím sa, aby som nepovedal/a niečo hrubé	and I disagree with someone, I try not to say anything mean	respect_1
beriem ohľad na pocity iných	I think about the feelings of other people	respect_2
a uverejňujem fotky, na ktorých sú iní ľudia, dávam pozor na to, aby nikoho neurážali alebo nikomu nemohli spôsobiť problémy	I make sure that pictures I post or send of other people will not insult them or get them into trouble	respect_3
rešpektujem názory a vedomosti iných ľudí	I respect the opinions and knowledge of others	respect_4

$\alpha = .83, CR = .83, AVE = .55 (N=558)$

Digital Citizenship
Using mobile devices and digital contexts to contribute to society and support important causes.

*Prosím zamysli sa nad tým, **ako často sa za normálnych okolností stávajú nasledovné veci**, keď používaš **mobilné zariadenia***
(mobilný telefón, tablet alebo laptop).
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.

„Keď používam mobilné zariadenia... "
"When using a mobile device..."

Nikdy (1) - Málokedy (2) - Občas (3) - Často (4) - Vždy (5)
Never (1) - Rarely (2) - Sometimes (3) - Often (4) - Always (5)

Slovak	English	Variable name
používam ich, aby som zlepšil/a život v mojom okolí, mojom meste alebo vo svete celkovo	I use it to improve life in my neighborhood, town or world	citizenship_1
používam internet, aby som podporil/a kampane ako napr. na ochranu životného prostredia alebo upozorňoval/a na klimatické zmeny	I use the internet to support things like environmental protection or to make other people aware of climate change	citizenship_2
používam ich, aby som sa zasadzoval/a o veci, ktoré sú naozaj dôležité vo svete	I use it to support things that are really important in this world	citizenship_3

$\alpha = .85, CR = .85, AVE = .66 (N=558)$

SPSS Syntax for the Digital Maturity Score

#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.

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.
```