**S1 Appendix. Constructs**

**Cyber-aggression and Cyber-victimization Scale** (Shapka & Maghsoudi, 2017)

Please indicate how often YOU behaved as described below towards OTHERS on social media.

[Never, Rarely, Sometimes, Often, Always]

|  |  |
| --- | --- |
| Construct | Survey questions |
| Cyber-aggression | * Posted or re-posted something embarrassing or mean about another person * Sent or forwarded a hurtful message to someone * Posted or re-posted an embarrassing photo or video of someone that they did not want others to see * Posted a hurtful comment about an online photo or video of somebody else (for example, made fun of how they look) * Posted messages to purposely exclude a certain person or group of people * Posted or re-posted something private about another person that they did not want others to know * Spread rumours or gossip about someone * Made hurtful comments about somebody's race or ethnicity * Made hurtful comments about somebody's perceived sexual orientation * Made hurtful comments about somebody's perceived sexual behaviors (for example, called somebody a slut or a pervert) * Said something sexual to somebody else to embarrass them or to be mean * Sent sexual content (photos or jokes) to somebody else to embarrass them or to be mean |

**Online Disinhibition Scale** (Udris, 2014)

Please indicate the extent to which you agree with the following statements:

[Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

|  |  |
| --- | --- |
| Construct | Survey questions |
| Benign disinhibition | * It is easier to connect with others via social media than talking in person * Social media is anonymous so it is easier for me to express my true feelings or thoughts * It is easier to post things on social media that would be hard to say in real life because you don’t see the other’s face * It is easier to communicate via social media because you can reply anytime you like * I have an image of the other person in my head when I read their social media post(s) * I feel like a different person when I use social media * I feel that on social media I can communicate on the same level with others who are older or have higher status |
| Toxic disinhibition | * I don’t mind writing insulting things about others on social media because it’s anonymous * It is easy to post insulting things on social media because there are no repercussions * There are no rules on social media therefore you can do whatever you want * Posting insulting content on social media is not bullying |

**Cyber-Aggression Typology Questionnaire** (Runions et al., 2017 - adapted by Antipina et al., 2019)

How much do you agree with the statements below?

[Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

|  |  |
| --- | --- |
| Construct | Survey questions |
| Rage | * I use social media to get back at someone as soon as they post a hurtful message about me * If someone makes fun of me on the internet, I get frustrated and respond angrily online right away * If I see a message on social media that gets me angry, I react too quickly and then regret the way I responded * If someone tries to cyberbully me, I quickly lash back with something online * If someone says something online to hurt me, I post something back right away to get back at them |
| Revenge | * If someone tries to hurt me, I will use social media to get back at them in my own time * I get back at people who make fun of me on social media because their posts hurt more the more I think about them * I like using social media to plan my revenge when I feel angry at someone * If I need to get revenge on someone, I would rather strike back using social media where I can plan out how to do it * If I see a mean message about me on social media, it bothers me more and more when I think about it, and I try to get even |
| Reward | * If I don’t like someone, I use social media to turn others against them * Sometimes I’ll team up with my friends to bring someone down on social media * Sometimes I can be mean to people on social media to get what I want * When I don’t like a person, I use social media to make them feel like they do not belong in my group * I pretend to be someone else online to ruin somebody else’s friendships |
| Recreation | * I get carried away having fun online and others think I’m being a cyberbully or a troll * I make fun of people I don’t know on social media without thinking about whether they will see it or not * If I’m having fun and joking online, I don’t care if someone’s feelings get hurt * I repeatedly annoy people online because I think it’s funny * Joking on social media is so much fun that I don’t worry about whether someone might be bothered by what I say |

**Rosenberg's Self-Esteem Scale** (Rosenberg, 2015)

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

[Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

|  |  |
| --- | --- |
| Construct | Survey questions |
| Self-confidence | * On the whole, I am satisfied with myself * I feel that I have a number of good qualities * I am able to do things as well as most other people * I feel that I'm a person of worth, at least on an equal plane with others * I take a positive attitude toward myself |
| Self-deprecation | * At times I think I am no good at all * I feel I do not have much to be proud of * I certainly feel useless at times * I wish I could have more respect for myself * All in all, I am inclined to feel that I am a failure |

**Basic Empathy Scale** (Jolliffe & Farrington, 2006)

Think about your ability to understand and share the feelings of another. For each statement below, please indicate your agreement or disagreement.

[Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree]

|  |  |
| --- | --- |
| Construct | Survey questions |
| Affective empathy | * My friends’ emotions don’t affect me much * After being with a friend who is sad about something, I usually feel sad * I get frightened when I watch characters in a good scary movie * I get caught up in other people’s feelings easily * I don’t become sad when I see other people crying * Other people’s feeling don’t bother me at all * I often become sad when watching sad things on TV or in films * Seeing a person who has been angered has no effect on my feelings * I tend to feel scared when I am with friends who are afraid * I often get swept up in my friends’ feelings * My friend’s unhappiness doesn’t make me feel anything |
| Cognitive empathy | * I can understand my friend’s happiness when they do well at something * I find it hard to know when my friends are frightened * When someone is feeling ‘down’ I can usually understand how they feel * I can usually work out when my friends are scared * I can often understand how people are feeling even before they tell me * I can usually recognize when people are cheerful * I can usually realize quickly when a friend is angry * I am not usually aware of my friends’ feelings * I have trouble figuring out when my friends are happy |