




## **Construction and validation of social media attention span assessment toolkit (SMASAT)**

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<i>Article History:</i>	Abstract 
Received on: 13 Jan 2024 Revised on: 18 Mar 2024 Accepted on: 20 Apr 2024	In the current study, the Social Media Attention Span Assessment Toolkit (SMASAT), was designed and standardised to evaluate the impact of social media on the attention span of higher secondary pupils. This scale has 73 statements. The current study employed a basic random sampling approach, with a sample of 30 higher secondary students from Chengalpattu District. The study instrument was verified using Cronbach's alpha. The new Social Media Attention Span Assessment Toolkit (SMASAT) for measuring the influence of social media on the attention span of higher secondary pupils was created with 81 statements, 73 of which were kept. Thus, the standardised tool contains 73 items. The new Social Media Attention Span Assessment Toolkit (SMASAT) will be used as a research instrument in the final study.
<i>Keywords:</i>  Construction, Validation, Assessment Toolkit, SMASAT	

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### **INTRODUCTION**

In recent years, the pervasive influence of social media has transformed the daily lives of

adolescents, shaping their interactions, behaviors, and cognitive processes. High school students, in particular, are immersed in a digital landscape characterized by constant connectivity and information overload. While social media offers unprecedented opportunities for communication and information sharing, concerns have arisen about its potential effects on cognitive abilities, notably attention span.

Attention span, the ability to focus and sustain concentration on a task, is a fundamental cognitive skill essential for academic success and overall well-being. However, the allure of social media platforms, with their captivating content and instant gratification features,

poses significant challenges to maintaining sustained attention among adolescents.

Research indicates that high school students spend a substantial amount of time engaging with social media on various devices, including smartphones, tablets, and computers. This digital immersion often leads to multitasking behaviors, where students simultaneously consume social media content while attempting to complete schoolwork or other activities. Such multitasking can fragment attention, resulting in reduced efficiency and performance across tasks requiring cognitive engagement.

Moreover, the design of social media platforms, characterized by endless scrolling, notifications, and interactive features, is engineered to capture and retain users' attention. This constant stimulation and the addictive nature of digital interactions can potentially rewire neural circuits associated with attention, leading to decreased attentional control and increased distractibility. Despite the growing concerns, empirical research specifically focusing on the impact of social media on attention span among higher secondary school students remains relatively limited. Understanding the relationship between social media usage patterns and attentional capacities is crucial for educators, parents, and policymakers seeking to support adolescents in navigating the digital landscape effectively.

### **NEED AND IMPORTANCE OF THE STUDY**

Digitalization being the saga of the current day advancement, it has even revolutionized the way we learn. Thus, the psychological aspects related to learning and the other attributes are being under certain modeling and modification. The learning process which is concerned with learner's memory, motivation, inspiration, aspiration and attention etc.,

Learning is a sum of all these attributes which are listed above. The disturbance or adverse impact on any of these factors will directly affect the learning process as such. Thus, there is a great need to study the implication of all such that plays a vital role in learning. Attention in education is the act or power of fixing one's mind upon into learning. Learning is directly dependent on learner's attention. The time duration for which a person can actively pay attention is called attention span. It varies from person to person-based on age, experience and interest. The learning videos which were posted in the social media have a prefunding impact on the viewer's attention span and there indirectly has its grip over learning. Thus, the need for the study will enable the educators to prepare their contents according to the end user and thereby could bring in effective improvement in learning.

### **OPERATIONAL DEFINITION OF KEY TERMS**

#### **Social media**

Interactive technologies that allow people to develop, share, and exchange ideas, information, and interests inside online communities and networks are referred to as social media. Social media can be difficult to define because there are so many different integrated and independent platforms out there, but they all typically have several things in common.

In the context of media, the word "social" denotes that these platforms value user engagement and promote group activities. Consequently, social media platforms may be seen as digital instruments that support and enhance human networks by bringing people together and improving social connectedness.

#### **YouTube**

YouTube is a widely recognized online video-sharing website where users may create,

watch, and share videos. It was started in 2005 and has grown to become one of the world's largest and most popular websites. YouTube offers a wide range of videos, including entertainment, educational information, music, tutorials, vlogs, news, and more.

The platform allows individuals, organizations, and corporations to access a large audience and interact with viewers through video content. YouTube also provides a variety of tools for producers, including statistics, monetization possibilities, and community involvement features like as comments and likes.

### **Attention span**

The attention span describes the length of time spent focusing on an activity before being distracted. Distractibility happens when your attention is impulsively drawn to another activity or feeling. Attention training is believed to be an element of education, notably in how pupils are taught to stay concentrated on a topic of conversation for lengthy periods of time, building listening and analytical abilities in the process. The estimated attention span of people is determined on the task at hand. The words "transient attention" and "selective sustained attention" are used to distinguish between short term and focused attention.

### **Higher Secondary School Students**

Secondary education pertains to students ages 14 to 18. The latter two years of secondary education are commonly known as upper secondary (HS), senior secondary, intermediate, or simply the "+2" level. A Higher Secondary School is an institution that offers senior secondary education. pupils in the eleventh and twelfth grades (i.e., those between the ages of 16 and 17) are classified as higher secondary school pupils.

### **METHOD AND SAMPLE**

Survey method was used to collect data from the selected sample. The sample for the present study were 30 higher secondary school students.

### **CONSTRUCTION OF SOCIAL MEDIA ATTENTION SPAN ASSESSMENT TOOLKIT (SMASAT)**

After consulting with the research supervisor and other experts, the investigator had constructed the Social Media Attention Span Assessment Toolkit (SMASAT) for evaluating the impact of social media on the attention span of Higher Secondary Students. The drafted tool consisted of 95 items initially. After the suggestions of experts, the drafted tool was modified and it consisted of 81 items. The tool was arranged in a Five-point rating scale with the options, "I agree with this completely", "I agree with this", "I am neutral", "I disagree with this" and "I totally disagree with this". For positive response the marks allotted was 'I agree with this completely - 5', 'I agree with this - 4', 'I am neutral - 3', 'I disagree with this - 2' and 'I totally disagree with this -1' and for negative response the marks allotted was 'I agree with this completely - 1', 'I agree with this -2', 'I am neutral - 3', 'I disagree with this - 4' and 'I totally disagree with this -5'.

### **PILOT STUDY**

The tool was administered to 30 higher secondary school students. The researcher gave necessary instructions to the students while giving the tool and 90 minutes was given to the students to complete.

### **ITEM ANALYSIS**

The responses of the higher secondary school students were collected and the scores were computed. Items with 't' value less than 1.96 were rejected and the other items with value greater than 1.96 were selected. The total tool consisted of 71 items.

**Table 1 Item Analysis for Social Media Attention Span Assessment Toolkit (SMASAT) of Higher Secondary Students and Selection of Statements for Final Study**

ITEM NUMBER	't' VALUE	ITEM SELECTED
1	6.06	S
2	4.36	S
3	4.3	S
4	3.66	S
5	5.27	S
6	5.12	S
7	4.3	S
8	3.66	S
9	5.27	S
10	5.12	S
11	4.3	S
12	3.66	S
13	5.27	S
14	4.36	S
15	4.3	S
16	3.66	S
17	1.91	NS
18	3.1	S
19	2.44	S
20	5.27	S
21	3.66	S
22	4.3	S
23	5.12	S
24	5.27	S
25	3.66	S
26	4.3	S
27	4.36	S
28	5.27	S
29	3.66	S
30	4.74	S
31	1.8	NS
32	3.04	S
33	4.3	S
34	4.35	S
35	4.98	S
36	4.35	S
37	4.3	S
38	4.35	S
39	4.98	S
40	4.35	S
41	4.3	S
42	4.76	S
43	4.31	S
44	4.36	S

45	5.27	S
46	3.66	S
47	4.3	S
48	4.98	S
49	5.27	S
50	3.66	S
51	4.3	S
52	5	S
53	5.27	S
54	3.66	S
55	4.3	S
56	5	S
57	5.27	S
58	3.66	S
59	5.27	S
60	3.66	S
61	4.3	S
62	5	S
63	5.27	S
64	3.66	S
65	4.3	S
66	5	S
67	5.27	S
68	3.66	S
69	4.74	S
70	5.32	S
71	1.68	NS
72	2.97	S
73	0.9	NS
74	2.18	S
75	0.92	NS
76	1.09	NS
77	1.21	NS
78	1.94	NS
79	3.99	S
80	3.66	S
81	4.58	S

**Key:** NS – Not selected; S – Selected

**VALIDITY AND RELIABILITY OF THE TOOL**

**Reliability**

The reliability of the Social Media Attention Span Assessment Toolkit (SMASAT) was determined by the split-half method. The scale was divided into two halves and each half was treated as separate test. The statements were numbered from 1 to 30. The odd numbered items were made into a test

and the even numbered items were made into another test. The reliability of the scale by split-half technique (consistency) followed by the use of spearman-Brown prophecy formula is found to be 0.98.

The intrinsic validity is also called as the index of reliability (Guildford, 1954). The formula for determining intrinsic validity is the square root of its dependability. Thus, the validity of this is

$$r = 0.93$$

$$V = \sqrt{r}$$

$$V = \sqrt{(0.93)} = 0.98$$

Thus, from the two co-efficient it may be inferred that this test is highly reliable and valid.

### Validity

In order to establish the validity of the prepared tool the researcher submitted the draft tool to the experts in the field of education and psychology for suggestions and modifications. The researcher has carried out the suggestions of the experts for modification of the tool for better clarity. Thus, the validity of the tool is established.

### CONCLUSION

The researcher is optimistic about the potential of the developed scale to effectively measure the impact of social media on the attention span of Higher Secondary Students. The Social Media Attention Span Assessment Toolkit (SMASAT) that has been constructed holds promise as a valuable tool for assessing how social media usage affects the attention span of these students. This toolkit is expected to offer a structured and reliable means of evaluating the extent to which social media engagement influences attention levels among Higher Secondary Students. By utilizing SMASAT, the investigator aims to gain deeper insights into the relationship between

social media use and attention span, which could have significant implications for understanding and addressing this issue within educational contexts. The development of SMASAT represents an important step forward in research methodology focused on studying the impact of social media on cognitive processes, particularly among adolescents in educational settings. Its use is anticipated to contribute valuable data and insights that can inform strategies for promoting healthier social media behaviors and attention management among Higher Secondary Students.

### Ethical Approval

No ethical approval was necessary for this study.

### Author Contribution

All authors made substantial contributions to the conception, design, acquisition, analysis, or interpretation of data for the work. They were involved in drafting the manuscript or revising it critically for important intellectual content. All authors gave final approval of the version to be published and agreed to be accountable for all aspects of the work, ensuring its accuracy and integrity.

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