



Idle Thoughts Management Scale

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Abstract

The term “idle thoughts” refers to those recurring thoughts that often arise when a person is usually doing nothing, such as waiting for something etc. These thoughts have been reported to often adopt the shape of a stream, one thought often leading to another, and a person finds himself detracted and lost in a pool of random thoughts within no time. Moreover, these thoughts may also become disturbing some of the times, causing stress, panic, anxiety and even depression. The current research endeavored at constructing a scale which could measure how these idle thoughts are managed by the thinker. Idle Thoughts Management Scale comprises of twenty-one items and five subscales: Engaging Thoughts, Strategize and Plan, Diverting through social media, Diverting through book reading and Prayers for fulfillment of thoughts. The tool has well established psychometric properties, a considerable internal consistency reliability and a significant construct validity. It can be utilized for further research especially in Cognitive Psychology.

Keywords: Idle thoughts, recurring thoughts, random thoughts

Introduction

Raffaelli et al., (2023) conducted a study to assess if the engaging the idle thoughts make people more creative or not. The study was motivated by the observations made during COVID era in which people were asked to lock themselves up at their homes. While staying at home, they might have engaged in a number of tasks, however there was time in the routines of many people in which they were fed up by excessively utilizing mobile, TV, social media, etc., and would just sit idle. However mind is never at rest (Roseman, 2007), as it is always engaged in recurring thoughts (Stocks et al, 2017). Even the construct of consciousness itself means “stream of thoughts”, a mellifluously flowing river which never stops throughout your life. Therefore, even while sitting idle, people encounter a variety of thoughts and these are termed as “Idle thoughts”.

In simplest terms, idle thoughts are the thoughts that one go through while he or she is sitting completely idle (Jerome, 1890). For example, while waiting for a bus at bus top, while waiting for doctor’s appointment at his clinic, we all have some time in our daily lives where we are completely idle. Idle thoughts hence are those thoughts that emerge in this duration of idleness. These thoughts are seldom considered as a considerable variable because many of us just engage themselves in a number of activities instead of thinking and engaging these idle thoughts. For example we may start using mobile, engage in informal



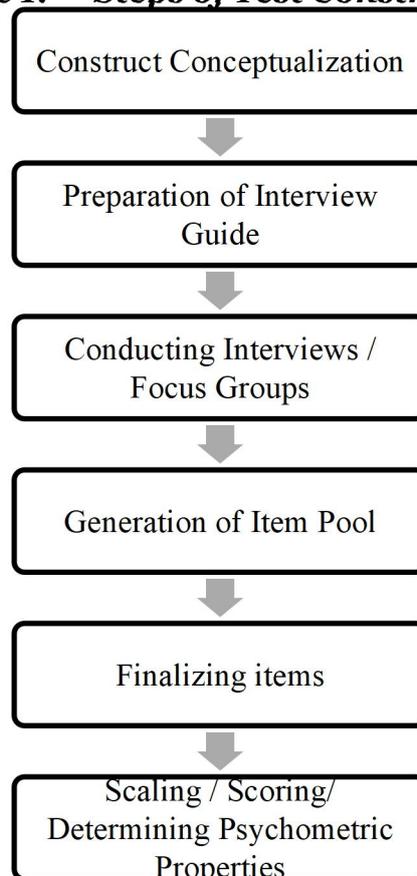
conversations with people sitting around us, or may just engage ourselves in any random activity.

The tool that this study intends to construct will help assess the ways of managing our idle thoughts in a variety of ways. Idle Thoughts Management Tool is going to assess the following dimensions related to idle thoughts.

A) It will analyze how various people manage their idle thoughts.

B) What are the strategies and techniques they adopt to manage their idle thoughts. The tool will be constructed through following steps.

Figure 1: Steps of Test Construction



Construct Conceptualization

Previous studies have looked into many a variables that are closely associated with idle thoughts such as mind wandering, daydreaming, spontaneous cognition, etc. (Raffaelli et al, 2023). Idle thoughts however differ from these closely associated variables. This construct is conceptualized as the recurring thoughts that occur when a person is sitting idle, or not indulged in any specific task.

Rice (2021) claims that the idle thoughts usually occur when a person remains idle for at least 10 minutes. However this duration could be contradicted as there is no specific of measuring it, but it could be claimed that these thoughts emerge in a person's idle time. Moreover, these are random thoughts that could be about anything: An event that has already occurred, some stressful impending task, certain negative recurring thoughts, joyously remembering some good time spent with someone, etc. However previous researches have claimed that most of these thoughts are negative in nature (Marchetti, 2014). However, regardless of its nature the construct of idle thoughts simply just describes itself as random thoughts that occur in a person's free time.

This definition was further translated into native language for the better



understanding of focus participants. The definition of idle thoughts in Urdu is as following:

فارغ وقت کی سوچوں سے مراد وہ سوچیں ہیں جو کسی انسان کو اس وقت آتی ہیں جب وہ کچھ بھی نہ کر رہا ہو۔ یہ وقت ہماری روز مرہ کی زندگی میں آتا ہے جیسے جب ہم بس سٹیشن پر بیٹھے بس کا انتظار کر رہے ہوں، ڈاکٹر کے کلینک پہ بیٹھے اپنی باری کا انتظار کرتے، وغیرہ وغیرہ۔ ان اوقات کے دوران ہمارا ذہن جن سوچوں میں گھرا ہوتا ہے اور انکے بارے میں سوچتا ہے انہیں فارغ وقت کی سوچیں کہتے ہیں۔ مثلاً اپنے کام، بزنس کے بارے میں سوچنا، ماضی یا مستقبل میں ہونے والے واقعات کے بارے میں سوچنا، مختلف چیزوں جیسا کہ والدین کی صحت، اپنے مستقبل کے بارے میں فکر مند ہونا، وغیرہ وغیرہ۔

Preparation of Interview Guide and Conducting Interviews

A number of focus groups were conducted with early adults to understand the various techniques and management styles adopted to manage idle thoughts. An interview guide was prepared which consisted of the questions to be asked from the participants of focus group. The participants included in the focus group were college and university students. The questions included in interview guide on the basis of existing literature are as follows

Table 1: Questions for Interview Guide

کو جانچنے کا management کے مواد اور (Thoughts Idle) فارغ وقت میں آنے والی سوچوں پیمانہ
1. خیال میں آپ کو فارغ وقت میں کیا سوچیں آتی ہیں؟
2. فارغ وقت میں آنے والی سوچوں کہ اکثریتی مواد کیا ہوتا ہے؟
3. کرتے ہیں؟ manage جب آپ کو فارغ وقت میں سوچیں آتی ہیں تو آپ انکو کیسے
4. فارغ وقت میں آنے والی سوچوں سے نمٹنے کے لئے کیا کیا کام کرتے ہیں؟

Sample

The participants included in the focus group were college and university students as the tool intends to measure idle thoughts in early adults. Convenient sampling technique was utilized to recruit sample for focus group. 8 participants were included in the only focus group conducted for this purpose. Initially only one focus group was conducted, however the item pool could be increased later. Some of the salient characteristics of participants of focus group were they were BS Honors students, 1 male and 7 females, had a varied CGPA, and most of them had a rural background.

Procedure

The focus group included 8 participants chosen on the basis of convenient sampling technique. They all were university juniors, 6 of them were females and 2 of them were males. These participants were requested to be at a specific place at a specific time. All of the participants came at the designated place timely. It was ensured that the environment in which focus group was conducted was peaceful and quite. All of the participants were requested to sit and make themselves comfortable in the room. Once they reported that they felt comfortable enough to talk, the focus group was initiated. Initially the participants were explicitly informed that their responses are going to be audio recorded. It was made sure that all of them expressed their explicit consent freely to record their voices. Another ethical consideration that the participants were ensured was that their responses will be kept completely confidential. Once the



consent was taken, the recording device was switched on, the topic was introduced, and the purpose of gathering together i.e. to know about the management styles and techniques of idle thoughts, was told to them. After this they were asked interview guide questions one by one and their responses were recorded individually. The process of questioning was repeated until the last question of interview guide was asked. Once the discussion was complete, the recording device was switched off and it was ensured that it recorded the responses. Lastly, the participants were thanked for their participation. The verbatim was then transcribed from audio to written form, and items were extracted from transcription.

Table 2: Demographic Characteristics of Sample (N=25)

Variables	f(%)	M(SD)
Semester		
6 th	16(64)	
8 th	9(36)	
Gender		
Male	7(28)	
Female	18(72)	
Age		21.68(.94)

Results

Determining Psychometric Properties of Tool

Construct Validity

The factor loadings were extracted using Principal Component Analysis with Varimax rotation. However before conducting PCA, the data was assessed for various assumptions. Firstly, to analyze the sample adequacy of data collected on 21 items, Kaiser-Meyer-Olkin Measure of Sampling Adequacy was conducted. The criteria given by Kaiser (1960) for assessing sampling adequacy is: 0.5-0.7= mediocre, 0.7-0.8 is termed as good, whereas 0.8-0.9 is regarded excellent, and more than 0.9 is taken as superb. KMO value for the current analysis was 0.323. Although the KMO value was below the levels suggested by Kaiser (1960), it was considered adequate as the tool was only being pilot tested right now on the sample of 25 participants only.

However Bartlett's Test of Sphericity reported significant results, in which χ^2 was reported to 319.628, $p < .000$. Fulfillment of this assumption provided a green signal for the conduction of PCA. The results of the analysis are summarized in the table below:

Table 3: Kaiser-Myer Test for Sampling Adequacy and Bartlett's Test of Sphericity (N=25)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.323
Bartlett's Test of Sphericity, Approx. Chi Suqaure	319.628**
Df	210

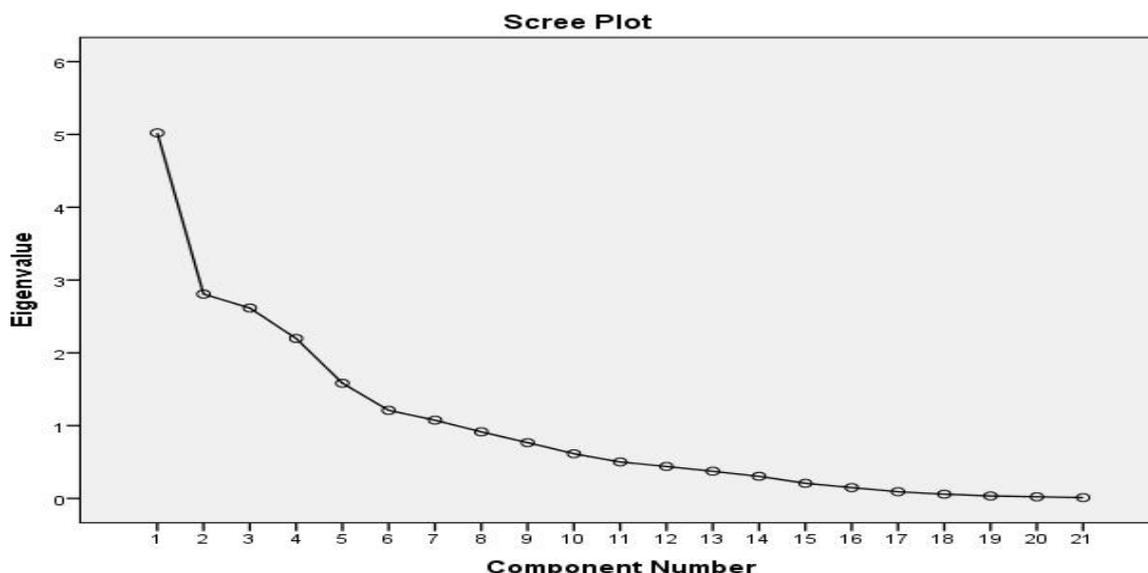
**p < .001

Furthermore, Kaiser (1970) has also defined the criteria for the extraction of factors. His study suggests that the factors that are above 1 eigenvalue can be considered. The current analysis reported that there were 5 factors that were above 1 eigenvalue. Thus items loadings on 5 items were extracted.



In addition to the given criteria of Eigenvalue by Kaiser (1960), Catell’s (1966) has suggested to construct a scree plot to see how many number of factors should be extracted. He suggests that the number of factors that are above 1 in the scree plot are to be considered. Hence again the scree plot confirmed that there should be 5 factors on which items loadings should be extracted. Scree plot is given in figure 2.

Figure 2: Scree Plot



The results of these two analysis paved way for Principal Component Analysis. They confirmed that a total of 5 factors are to extracted and items loadings are to be considered on these 5 dimensions. Thus PCA was conducted with varimax rotation on 21 items of Idle Thoughts Management Tool. The results are mentioned below.

Table 4: Factor Structure and Item Analysis for Idle Thoughts Management Scale (N= 25)

Sr. #	Item. #	Items Verbatim	Loadings					Y ^{it}
			1	2	3	4	5	
1.	8		.82	-	-	-	-	.70
2.	9		.77	-	-	-	-	.66
3.	1		.72	-	-	-	-	.70
4.	11		-	.94	-	-	-	.68
5.	13		-	.91	-	-	-	.68
6.	10		-	.74	-	-	-	.63
7.	2		-	.67	-	-	-	.66
8.	14		-	-	.81	-	-	.61
9.	15		-	-	.78	-	-	.64
10.	3		-	-	.75	-	-	.73
11.	12		-	-	.60	-	-	.62
12.	4		-	-	.30	-	-	.69
13.	18		-	-	-	.82	-	.76
14.	20		-	-	-	.75	-	.53
15.	21		-	-	-	.57	-	.69



Sr. #	Item. #	Items Verbatim	Loadings					Y ^{it}
			1	2	3	4	5	
16.	19		-	-	-	.55	-	.65
17.	6		-	-	-	.54	-	.70
18.	5		-	-	-	-	.88	.69
19.	7		-	-	-	-	.74	.60
20.	17		-	-	-	-	.58	.67
21.	16		-	-	-	-	.43	.60
Eigen Value			5.02	2.80	2.61	2.19	1.5	
% of Variance			23.91	13.37	12.45	10.46	7.53	
Cumulative % of Variance			23.91	37.28	49.73	60.20	67.73	
Cronbach's Alpha			.76	.61	.67	.67	.67	

Note: Factor Loadings $\geq .3$, Y^{it} = item total correlations $\geq .25$

See Appendix for complete statements

The five factors that were extracted using PCA were consequently named as following subscales of Idle Thoughts Management Scale: Engaging thoughts, Strategize and Plan, Diverting Thoughts using Social Media, Diverting Thoughts by Book Reading and Prayers for Fulfillment of Thoughts.

Factor 1: Engaging thoughts. The eigenvalue for this factor was reported to be 5.02 which accounted for 23.91 percent of the explained variance. This factor comprises of 3 items, these are: 8, 9 and 1. This factor characterized the items related to engaging the idle thoughts that are coming in mind, such as “انکو plan اور manage کا سوچنا ہوں اور کرنے کا سوچنا ہوں”.

Factor 2: Strategize and Plan. The eigenvalue in this factor was 2.80. This accounted for 13.37 percent of the explained variance. There were 4 items in this factor: 11, 13, 10 and 2. The items included in this factor reflected the intentions of planning for the idle thoughts that are coming into one's mind, such as “سوچوں پہ arrange کرنا ہوں کو پایہ تکمیل تک پہنچانے کے لیے ترجیحی بنیادوں پہ”.

Factor 3: Diverting Thoughts using Social Media. The eigenvalue in this factor was 2.61, and the factor accounts for 12.45 percent of explained variance. This factor included 5 items: 14, 15, 3, 12 and 4. This factor reflects diverting the mind from idle thoughts by engaging oneself in social media such as Instagram, etc. An example of items included in this subscale is “استعمال کرتا ہوں Instagram”.

Factor 4: Diverting Thoughts by Book Reading. This factor denotes another way of diverting idle thoughts by engaging in activity like book reading, scrolling through poetry, etc. The eigenvalue for this factor was 2.19, and it accounted for 10.46 percent of explained variance. The items in this subscale were: 18, 20, 21, 19 and 6.

Factor 5: Prayers for Fulfillment of Thoughts. In this management style of idle thoughts, the individual engages in spiritual connection by either asking for help from God for the fulfillment of thoughts that are coming in his mind, or leaving the matters to God. The eigenvalue for this factor was 1.5 and this accounted for 7.53 percent of explained variance. Overall, the five factors accounted for 67.73 percent of explained variance. The items in this factor were: 5, 7, 17 and 16. An example of items included in this subscale is, “دعا کرتا ہوں اور”

”معاملات اللہ پر چھوڑ دیتا ہوں۔“



Inter-correlations between subscales and total score

Furthermore, inter-subscale correlations were also calculated to assess if these sub-categories of the tool are significantly associated with each other. The following table reports the results of inter-correlations of subscales with each other as well as total score of Idle Thoughts Management Tool.

Table 5: Inter-correlations between Subscales and Total Score (N=25)

Variables	1	2	3	4	5	6
1. Engaging thoughts	-	.47*	.17	.41*	.03	.62**
2. Devise Strategies and Plan		-	.38	.20	.33	.71**
3. Diverting Thoughts using Social Media for			-	.35	.20	.69**
4. Diverting Thoughts by Book Reading Prayers				-	.01	.67**
5. Fulfillment of Thoughts.					-	.47*
6. ITMT Total						-

**p<.01, *p<.05

The results of inter-correlations are mixed, where some are significant and other are non-significant. The reason could be small sample size. It is justified because the tool was being only pilot tested. Once pilot testing is done, the sample size could be increased to get more sound correlations. However, all of the subscales reported significant positive correlations with the total score of the tool. This shows that tool is internally coherent and all subscales are measuring what the tool overall is measuring.

Scoring and Interpretation

Idle Thoughts Management Tool consists of 21 items. Each item is rated on five point Likert scale, i.e. from Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree. Moreover there are five sub-scales of the tool: Engaging thoughts, Devise Strategies and Plan, Diverting Thoughts using Social Media, Diverting Thoughts by Book Reading and Prayers for Fulfillment of Thoughts. The scoring of the tool can be simply done by adding on the scores of items of respective scales. The item numbers are mentioned in previous section. Moreover, a total score can also be taken by simply adding up the 21 items of the tool. This total score will signify the extent to which a person tends to manage his or her idle thoughts.

Reliability and Item Analysis

The internal consistency reliability of five sub-scales was also computed. The Cronbach alpha for five sub-scales was reported to be .76, .61, .67, .67 and .67. The minimum reliability of any sub-scale was .61. As the criteria suggests that reliability above .6 is acceptable (Agbo, 2010), all of the sub-scales can be claimed to be reliable. The overall reliability of the tool was .80, which can be considered excellent as per the criteria.

Conclusion

The current study intended to construct a tool to measure various styles of idle thoughts management. For this purpose, firstly the construct was operationally



defined. Then an interview guide was prepared which consisted of the questions that were to be asked in the focus group. Once it was prepared, a focus group was conducted with 7 participants. This focus group was then transcribed and items were yielded. A pool of 21 items was then tested on 25 participants. The Principal Component Analysis with varimax rotation reported five factors of the tools, which were: Engaging thoughts, Devise Strategies and Plan, Diverting Thoughts using Social Media, Diverting Thoughts by Book Reading and Prayers for Fulfillment of Thoughts. The psychometric properties were also calculated.

References

- Agbo, A. A. (2010). Cronbach's alpha: Review of limitations and associated recommendations. *Journal of Psychology in Africa*, 20(2), 233-239.
- Jerome, J. K. (1890). *The idle thoughts of an idle fellow* (Vol. 3320). Hurst.
- Marchetti, I., Van de Putte, E., & Koster, E. H. (2014). Self-generated thoughts and depression: from daydreaming to depressive symptoms. *Frontiers in human neuroscience*, 8, 131.
- Raffaelli, Q., Malusa, R., de Stefano, N. A., Andrews, E., Grilli, M. D., Mills, C. & Andrews-Hanna, J. R. (2023). Creative minds at rest: Creative individuals are more associative and engaged with their idle thoughts. *Creativity Research Journal*, 1-17.
- Rice, A. (2021, November 24). Research Shows How Rumination Unfolds During Idle Time. Psych Central. <https://psychcentral.com/news/what-your-wandering-thoughts-can-reveal-about-your-mental-health>
- Roseman, E. C. (2007). *The Mind Is Never at Rest: A Functional Magnetic Resonance Imaging Examination*. Drexel University.
- Stocks, E. L., López-Pérez, B., & Ocejja, L. V. (2017). Can't get you out of my mind: empathy, distress, and recurring thoughts about a person in need. *Motivation and Emotion*, 41, 84-95.