

ORIGINAL ARTICLE

SELF-GENERATED THOUGHTS AS PREDICTORS OF DEPRESSIVE SYMPTOMS AMONG UNIVERSITY STUDENTS

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Background: Self-generated thoughts (SGT) are followed by practicing daydreaming and provoked by establishing internal changes (i.e., spontaneous thoughts) that occur inside the individual instead of actual perceptual information. The current study was planned to investigate the predictive role and prevalence of self-generated thoughts (daydreaming) on depressive symptoms among university students. **Methods:** The data was collected through purposive sampling technique from different universities of Rawalpindi and Islamabad. A sample of 300 respondents including 150 male and 150 female university students with minimum education of 14 years were included. Reliable assessment tools, i.e., 'Day-Dreaming Frequency Scale' and 'Beck Depression Inventory' were used in present study. **Results:** Male and female with self-generated thoughts were 16 (5.3%) undergraduates, 127 (42.3%) graduates, and 157 (52.3%) postgraduates with age range of 18–28 years and mean age 23.76 ± 2.65 years. Self-generated thoughts were more common in females (35.08 ± 11.24), as compared to males (32.95 ± 10.54). Females scored higher (18.62 ± 9.70) on depressive symptoms than males (17.83 ± 10.31). **Conclusion:** Self-generated thoughts was a significant positive predictor of depressive symptoms and the prevalence rate of self-generated thoughts and depressive symptoms was higher in females than male university students. To overcome excessive daydreaming some intervention programs such as daydream reduction techniques, increases focus, and the activities that sustain attention should be planned.

Keywords: Self-generated thoughts, daydreaming, depressive symptoms, university students

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INTRODUCTION

In preceding years, self-generated thoughts (SGT) or daydreaming were initially studied and now have turned to a critical subject of studies.¹ Recently SGT are followed by practicing daydreaming and mind-wandering, which depicts that our mind can generate thoughts in a stimulus-independent mode, by utilizing the existing knowledge.² Self-generated thoughts has been operationalized by concentrating on autonomy from day to day task that is stimulus independent thought or the inner instead of outer information that is mentioned as spontaneous thought.^{3,4} Self-generated thoughts is operationalize as 'daydreaming' the extensive phenomenon, establish on self-generated thoughts, assemble the mental states and sharing central aspects, like the neurobiological phenomenon, and related matter.^{5–7} Though mind-wandering is the term widely applied by cognitive researchers today, Singer's favoured term is daydreaming. Daydreaming was perceived by 'thoughts that are nonworking either fanciful or spontaneous' and treated in a default manner.⁸ The explanation proposed that self-generated thoughts are not related to the task at hand, and referred as mind-wandering, moreover, when mind wanders particularly toward fanciful topics at rest period.^{7,8}

Self-generated thoughts as mental baseline, is a continuous experience. It was stated that an individual consumes 30% to 50% of mental activities aimed

awakening time in thinking, that are not linked to what is done by us or with the actual situation.^{9,10}

Thoughts that are spontaneous or daydreams can be accessible and valuable, permitting the mind to 'wander' creatively through various affairs, fulfilling individual's need, and come up with anticipated keys to problems. Different forms of spontaneous thoughts or daydreaming that jump into individual's heads, at times have negative outcome. People who encounter negative emotions and acute stress are specifically open to negative thoughts when their mind starts wandering or daydreams. The situation in which endangered people are striving to achieve a goal, their daydreams or spontaneous thoughts may leads to adverse effects. Rather than mind wandering or daydreams that is open-ended, it may get blotted into a negative, repetitive train of thoughts.¹¹

Supporting its constant results, SGT is linked with a broad range of advantages, permit us to face future challenges, solve problems, and navigate our social world.^{12,13} Certainly, from SGT, number of mental health disorders emerged and the conclusion mentions the adaptive and maladaptive demonstration of experiences which were usually different across individuals. Therefore the outcome, daydreaming, if exclusively described by negative cognitions, is related with psychopathologies like anxiety, schizophrenia, dissociation and depression.¹⁴ Which validates the possibly noxious neurobiological aspect of daydreaming

is usually raise to be afflicted in severe psychopathology like depression and schizophrenia.¹⁵

Excessive influence of daydreaming result into depression, the disorder that includes consumption of much time in an activity, after which the illustration of pleasure and mastery are at low level and high level of low mood is evident. Likewise, many researchers described a direct relationship between daydreaming and symptoms of depression.^{16,17}

All the above mentioned researches have been conducted in west whereas in eastern countries like Pakistan, the relationship among daydreaming, loneliness and perceived social support was investigated.¹⁸ Pakistan is one of those vulnerable countries where depression is at higher level and it affects 53.43% of university students.¹⁹ Due to the increase rate of depressive symptoms among university students over the years, there is a need to address the predictive role of self-generated thoughts on depressive symptoms among university students in Pakistani population as it has not been addressed in previous studies in Pakistan. Some linked phenomenon has been reported in indigenous studies. Results of the study will be helpful for mental health professionals to gain a better understanding of how self-generated thoughts can lead to depression in university students, and thus can raise more awareness about dangers associated with excessive daydreaming.

METHODOLOGY

The cross-sectional research design is used in present study. Participants were approached at their universities and written informed consent was also obtained by the participants. All relevant material was compiled in the form of booklet and was distributed among students. A sample of 300 respondents including male (n=150) and female (n=150) university students was collected, through purposive sampling technique. Only those students were selected who had minimum education of 14 years with 18 to 28 years were selected.

Self-report measures scales were administered to measure self-generated thoughts and depression respectively. DDFS consists of 12 items used to assess the frequency of daydreaming. Scoring was done on a 5 point Likert scale which ranges from infrequently to frequently. A score of 1 was given to infrequently and 5 was given to frequent daydreamers. Beck Depression Inventory (BDI-II) is used to measure the severity of symptoms of depression. It is composed of 21-item self-report questionnaire, which assesses the severity of affective, somatic and cognitive symptoms of depressive phenomenology. Scoring is done on a 4-point likert scale ranging from ‘0’ to ‘3’. Items are scored from 0=No symptoms to 3=Severe symptom; overall scores range between 0 and 63. The standardized cut-offs used differ from the original: 0–13: minimal depression, 14–

19: mild depression and 20–28: moderate depression, 29–63: severe depression. The SPSS-22 was used for data analysis. Descriptive analysis was performed. Comparison between groups was done using *t*-test and *p*<0.05 was taken as significant.

RESULTS

There were 300 respondents including male (n=150) and female (n=150) university students with age ranges from 18 to 28 years.

Table-1 indicates the frequencies and percentages of self-generated thoughts with education of undergraduates 16 (5.3%), graduates 127 (42.3%), and postgraduates 157 (52.3%), university students.

Table-2 reveals that self-generated though is a significant predictor of depression in positive direction and accounted for 11% variance in predicting depression.

Table-3 shows comparison of self-generated thoughts and depressive symptoms between male and female university students.

Table-1: Self-generated thoughts (daydreaming) across education male and female (n=300)

Education	Frequency	Percentage
Undergraduates	16	5.3
Graduates	127	42.3
Postgraduates	157	52.3

Table-2: Effect of daydreaming on depressive symptoms among university students (n=300)

Predictor	B	Outcome: Depression 95% CI
Constant	7.80***	4.29–11.32
Depression	0.31***	0.21–0.40
R ²	0.11	
F	37.62***	

****p*<0.001

Table-3: Daydreaming and depressive symptoms in males and females (n=300)

Groups	Mean±SD	95% CI	<i>p</i>	Cohen’s d
Self-Generated Thoughts (Daydreaming)				
Male (n=150)	32.95±10.54	-4.60–0.35	0.45	0.07
Female (n=150)	35.08±11.24			
Depressive Symptoms				
Male (n=150)	17.83±10.31	-3.06–1.48	0.10	0.06
Female (n=150)	18.62±9.70			

DISCUSSION

The current study intended to examine self-generated thoughts as a predictor of depressive symptoms among university students. The prevalence of self-generated thoughts and depressive symptoms was also determined.

The results obtained from the present study shows that self-generated thoughts will positively predict depressive symptoms among university students. In current study the main aim was to establish the relationship between self-generated thoughts and depressive symptoms. The regression analysis indicates

that self-generated thought is a significant positive predictor of depressive symptoms. In literature, study indicated that if daydreaming exclusively described by negative cognitions then it is linked with psychopathology symptoms, such as dissociation, schizophrenia, depression.²⁰ Past studies also revealed that there is a direct and strong relationship between daydreaming and symptoms of depression.^{16,21} In laboratory experiments, it was established that high level of internal focus during relaxation, anticipated high level of repetitive thinking which, in turns progressed to a short-term bad mood.²² Igor Marchetti *et al* proposed that when people are under stress and struggling with negative thoughts then their mind wanders. Consequently, their daydreams and spontaneous thoughts may take a dark turn. These negative and repetitive thoughts share many of the risk factors for depression.¹¹

Prevalence of self-generated thoughts shows that males and females have slight non-significant differences. It indicates that females indulged more in daydreaming as compared to males. Prior studies also recorded that females have higher levels of daydreaming and emotional reactions to daydreaming.^{22,23} There is a high level of daydreaming in women as compared to men. Women are more inclined to daydream (SGT) because they are more dissatisfied with their real lives.¹⁸

Forms of daydreaming and related mental actions were investigated for gender differences in another research. Well-educated aristocrats and common people, with age range 17–92 years were studied using Imaginal Processes Inventory (IPI). It was found that females showed higher levels of daydreaming (SGT), frequency of night dreaming and emotional response to daydreaming, along with more daydreams related to solving problem. Apart from daydreams associated with problem solving, all daydreaming material reviewed decreased with growing age.^{23,24} Daydreaming is more common in young people and it reduces with age.²⁵ In another study findings, it was also evident that there were significant gender differences found in daydreaming, as the results revealed that females scored high on daydreaming as compared to males.²⁴

The results of this study also indicated that in Pakistan, depressive symptoms are more common in females than males. As the study results revealed that females 18.62 ± 9.70 score higher on depressive symptoms as compared to males 17.83 ± 10.31 . Literature also supported our current results. Previous researches showed that one third of women experience episodes of major depressive symptoms in their life. As in many other countries, women in Pakistan generally have higher rate of illness than men. As with depression, anxiety disorders are more common among females than males.¹⁸ It was also concluded that females are

more into experiencing depression as compared to males. The finding of the study indicated significant disparity in the prevalence (53.43%) of depression across male (38.07%) and females (61.00%).¹⁹ Literature also shows that females specifically are expected to involve more in daydreaming and depressive symptoms.

The present study included the population from different universities of Rawalpindi and Islamabad; therefore findings cannot be generalized on overall population of Pakistan and for further investigation the sample size should be increase along with the sample of adolescents. In future descriptive as well as experimental studies needed to explain with this framework in a better way. Accordingly, future studies should include additional significant variables in order to better specify under which circumstances daydreaming leads to depressive outcomes and, most importantly, when this is not the case. We did not take into account the possibly positive effects of self-generated thoughts. Some intervention programs such as daydream reduction techniques, increases focus, and engage in activities that sustain attention should be planned for the targeted group with these problems.

CONCLUSION

Self-generated thought is a significant positive predictor of depressive symptoms among university students. It was also concluded that the prevalence of self-generated thoughts and symptoms of depression was higher in females as compared to male.

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