

Research Paper

## Effect of Smartphone Addiction on Various Dimensions of Social Maturity among Higher Secondary School Students

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### ABSTRACT

The present study examined the effect of smartphone addiction on various dimensions of social maturity among higher secondary school students. The present study was conducted on a sample of 150 higher secondary school students from Jalgaon district, Maharashtra. The Smartphone Addiction Scale was used as a scrutiny test to identify students with high and low levels of smartphone addiction. On the basis of total scores, 75 students with high smartphone addiction and 75 students with low smartphone addiction were selected through the extreme group technique. Social maturity was measured with Rao's Social Maturity Scale. The dependent variables included all nine dimensions of social maturity: work orientation, self-direction, ability to take stress, communication, enlightened trust, cooperation, social commitment, social tolerance, and openness to change. The mean, standard deviation, and an independent-samples t-test were used for statistical analysis. The findings revealed that students with low smartphone addiction scored significantly higher than students with high smartphone addiction on all dimensions of social maturity as well as on total social maturity. The study suggests that excessive smartphone use may weaken personal, interpersonal, and social adequacy among adolescents. The findings have practical value for teachers, parents, school counsellors, and educational planners who seek to promote balanced digital habits and healthy psychosocial development among higher secondary school students.

**Keywords:** *Smartphone Addiction, Social Maturity, Higher Secondary School Students, Adolescence, Jalgaon District*

Smartphones have transformed adolescents' everyday lives. They are now used for messaging, entertainment, gaming, social networking, online learning, and information sharing. For higher secondary school students, smartphones are often not just devices but constant companions that shape habits, relationships, and routines. While moderate use may support learning and communication, excessive use may gradually develop into dependency-like behaviour that affects emotional control, attention, social participation, and adjustment (Kwon et al., 2013).

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Smartphone addiction is generally understood as excessive, compulsive, and difficult-to-control smartphone use that interferes with daily functioning. Researchers have observed that problematic smartphone use is related to anxiety, depression, disturbed sleep, reduced concentration, and social withdrawal (Demirci et al., 2015; Elhai et al., 2017). Kim (2013) also argued that smartphone addiction should be understood as a behavioural dependency with serious implications for daily life and psychosocial well-being. Adolescents are especially vulnerable because they are in a developmental period marked by identity formation, emotional sensitivity, peer pressure, and the search for belonging.

At the higher secondary stage, students experience increased academic competition, growing social freedom, and stronger online exposure. They may use smartphones for academic tasks, but they also use them for social approval, entertainment, and emotional escape. When use becomes excessive, direct face-to-face communication may decline, social patience may reduce, and self-regulation may weaken. Such effects are particularly important when viewed in relation to social maturity.

Social maturity refers to an individual's ability to behave in a socially acceptable, responsible, balanced, and cooperative manner. It reflects not only age-related growth but also the quality of interpersonal understanding, self-control, trust, communication, tolerance, and readiness to accept social responsibilities (Hurlock, 1981; Rao, 1986). According to Rao's conceptualisation, social maturity includes three major areas personal adequacy, interpersonal adequacy, and social adequacy which are further represented through dimensions such as work orientation, self-direction, ability to take stress, communication, enlightened trust, cooperation, social commitment, social tolerance, and openness to change (Rao, 1986).

For higher secondary school students, social maturity is very important because this stage demands adjustment to peers, teachers, family expectations, and future career decisions. A socially mature student is generally more disciplined, emotionally balanced, cooperative, and able to function constructively in group situations. In contrast, overdependence on smartphones may reduce direct social participation and weaken opportunities for real-life emotional and interpersonal learning. Therefore, it becomes necessary to study whether students with high smartphone addiction differ from those with low smartphone addiction on various dimensions of social maturity.

### **REVIEW OF RELATED LITERATURE**

A review of previous research indicates that smartphone addiction and psychosocial adjustment are closely related. Kwon et al. (2013) developed the Smartphone Addiction Scale and showed that problematic smartphone use includes features such as compulsive use, withdrawal, tolerance, and disturbance in daily life. Their work established smartphone addiction as a measurable behavioural problem rather than a casual digital habit.

Elhai et al. (2017), in a systematic review, found that problematic smartphone use was consistently associated with anxiety and depression. The authors noted that many individuals use smartphones as a coping mechanism for emotional discomfort, which may lead to increased dependence over time. Demirci et al. (2015) similarly reported that severe smartphone use was related to poor sleep quality, anxiety, and depressive symptoms. These findings suggest that smartphone addiction can disturb both emotional functioning and daily adjustment.

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Samaha and Hawi (2016) studied smartphone addiction in relation to stress, academic performance, and life satisfaction and found that higher addiction was associated with greater stress and lower satisfaction with life. Although their study focused on older students, the findings are applicable to adolescents because higher secondary students also face pressure related to studies, peer relationships, and self-image. Gao et al. (2016) observed that excessive smartphone use may be linked with social withdrawal, stress, and emotional difficulties, further suggesting that overuse may weaken psychosocial functioning.

Social maturity has been regarded as a key indicator of healthy social development. Hurlock (1981) emphasised that maturity during adolescence is reflected in the ability to regulate behaviour, to adjust to others, and to accept responsibilities appropriate to one's age and role. Rao (1986) described social maturity as a multidimensional construct comprising personal, interpersonal, and social adequacy. These broad areas are represented through specific dimensions such as work orientation, self-direction, ability to take stress, communication, enlightened trust, cooperation, social commitment, social tolerance, and openness to change. These dimensions are particularly relevant during adolescence, when students are expected to balance independence with social responsibility.

### ***Objectives of the Study***

1. To identify high and low smartphone addicted higher secondary school students through the Smartphone Addiction Scale.
2. To study the effect of smartphone addiction on work orientation among higher secondary school students.
3. To study the effect of smartphone addiction on self-direction among higher secondary school students.
4. To study the effect of smartphone addiction on ability to take stress among higher secondary school students.
5. To study the effect of smartphone addiction on communication among higher secondary school students.
6. To study the effect of smartphone addiction on enlightened trust among higher secondary school students.
7. To study the effect of smartphone addiction on cooperation among higher secondary school students.
8. To study the effect of smartphone addiction on social commitment among higher secondary school students.
9. To study the effect of smartphone addiction on social tolerance among higher secondary school students.
10. To study the effect of smartphone addiction on openness to change among higher secondary school students.
11. To study the effect of smartphone addiction on total social maturity among higher secondary school students.

### ***Hypotheses***

1. There is no significant difference between high and low smartphone addicted higher secondary school students in work orientation.
2. There is no significant difference between high and low smartphone addicted higher secondary school students in self-direction.

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3. There is no significant difference between high and low smartphone addicted higher secondary school students in ability to take stress.
4. There is no significant difference between high and low smartphone addicted higher secondary school students in communication.
5. There is no significant difference between high and low smartphone addicted higher secondary school students in enlightened trust.
6. There is no significant difference between high and low smartphone addicted higher secondary school students in cooperation.
7. There is no significant difference between high and low smartphone addicted higher secondary school students in social commitment.
8. There is no significant difference between high and low smartphone addicted higher secondary school students in social tolerance.
9. There is no significant difference between high and low smartphone addicted higher secondary school students in openness to change.
10. There is no significant difference between high and low smartphone addicted higher secondary school students in total social maturity.

### METHOD

#### *Sample*

The sample consisted of 150 higher secondary school students from Jalgaon district selected through an appropriate school-based sampling procedure. The Smartphone Addiction Scale was first administered as a scrutiny test, and on the basis of total scores, 75 students with high smartphone addiction and 75 students with low smartphone addiction were selected through the extreme group technique.

#### *Tools Used*

1. **Smartphone Addiction Scale.** The Smartphone Addiction Scale, developed by Vijayashri and Ansari (2021), was used as a scrutiny tool to classify students into high and low smartphone addiction groups. The scale measures problematic smartphone use across dimensions such as compulsion, forgetfulness, lack of attention, depression and anxiety, disturbed hunger and sleep, and social withdrawal.
2. **Social Maturity Scale.** Rao's Social Maturity Scale (Rao, 1986) was used to measure social maturity. The scale includes the dimensions of work orientation, self-direction, ability to take stress, communication, enlightened trust, cooperation, social commitment, social tolerance, and openness to change, along with total social maturity.

#### *Variables*

**Independent Variable:** Smartphone addiction

- High smartphone addiction
- Low smartphone addiction

**Dependent Variables:**

- Work orientation
- Self-direction
- Ability to take stress
- Communication
- Enlightened trust
- Cooperation

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- Social commitment
- Social tolerance
- Openness to change
- Total social maturity

**Statistical Techniques**

Mean, Standard deviation and Independent samples *t*-test

**STATISTICAL ANALYSIS AND INTERPRETATION**

**Table 1** Difference between high and low smartphone addicted students in work orientation

Students	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	21.46	4.82	148	4.02**	0.01
Low Smartphone Addiction	75	24.28	3.71			

**Interpretation:** Table 1 shows that the mean score of low smartphone addicted students in work orientation was higher than that of high smartphone addicted students. The obtained *t* value of 4.02 was significant at the 0.01 level. Hence, the null hypothesis was rejected.

**Table 2** Difference between high and low smartphone addicted students in self-direction

Students	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	19.88	4.35	148	3.68**	0.01
Low Smartphone Addiction	75	22.31	3.68			

**Interpretation:** Table 2 indicates that low smartphone addicted students scored significantly higher on self-direction than high smartphone addicted students. The obtained *t* value of 3.68 was significant at the 0.01 level. Therefore, the null hypothesis was rejected.

**Table 3** Difference between high and low smartphone addicted students in ability to take stress

Students	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	18.94	4.21	148	4.27**	0.01
Low Smartphone Addiction	75	21.86	4.17			

**Interpretation:** Table 3 reveals that low smartphone addicted students had a significantly higher mean score on ability to take stress than high smartphone addicted students. The *t* value of 4.27 was significant at the 0.01 level. Thus, the null hypothesis was rejected.

**Table 4** Difference between high and low smartphone addicted students in communication

Students	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	20.17	4.56	148	4.11**	0.01
Low Smartphone Addiction	75	23.05	4.01			

**Interpretation:** Table 4 shows that low smartphone addicted students scored significantly higher on communication than high smartphone addicted students. The obtained *t* value of 4.11 was significant at the 0.01 level. Therefore, the null hypothesis was rejected.

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**Table 5** *Difference between high and low smartphone addicted students in enlightened trust*

Students	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	19.54	4.12	148	3.29**	0.01
Low Smartphone Addiction	75	21.70	3.90			

**Interpretation:** Table 5 indicates that low smartphone addicted students obtained higher scores in enlightened trust than high smartphone addicted students. The *t* value of 3.29 was significant at the 0.01 level. Hence, the null hypothesis was rejected.

**Table 6** *Difference between high and low smartphone addicted students in cooperation*

Group	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	21.08	4.48	148	3.76**	0.01
Low Smartphone Addiction	75	23.64	3.86			

**Interpretation:** Table 6 shows that low smartphone addicted students had significantly better cooperation than high smartphone addicted students. The obtained *t* value of 3.76 was significant at the 0.01 level. Therefore, the null hypothesis was rejected.

**Table 7** *Difference between high and low smartphone addicted students in social commitment*

Students	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	18.79	4.26	148	3.90**	0.01
Low Smartphone Addiction	75	21.45	4.08			

**Interpretation:** Table 7 reveals that low smartphone addicted students scored significantly higher on social commitment than high smartphone addicted students. The *t* value of 3.90 was significant at the 0.01 level. Hence, the null hypothesis was rejected.

**Table 8** *Difference between high and low smartphone addicted students in social tolerance*

Students	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	19.12	4.37	148	3.54**	0.01
Low Smartphone Addiction	75	21.53	3.96			

**Interpretation:** Table 8 indicates that low smartphone addicted students had significantly higher social tolerance than high smartphone addicted students. The obtained *t* value of 3.54 was significant at the 0.01 level. Therefore, the null hypothesis was rejected.

**Table 9** *Difference between high and low smartphone addicted students in openness to change*

Students	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	20.06	4.09	148	3.43**	0.01
Low Smartphone Addiction	75	22.34	4.02			

**Interpretation:** Table 9 shows that low smartphone addicted students obtained significantly higher scores on openness to change than high smartphone addicted students. The *t* value of 3.43 was significant at the 0.01 level. Thus, the null hypothesis was rejected.

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**Table 10** Difference between high and low smartphone addicted students in total social maturity

Students	N	Mean	S.D.	df	t	Sig.
High Smartphone Addiction	75	179.04	19.62	148	5.62**	0.01
Low Smartphone Addiction	75	200.16	26.11			

**Interpretation:** Table 10 reveals that low smartphone addicted students had significantly higher total social maturity than high smartphone addicted students. The obtained *t* value of 5.62 was significant at the 0.01 level. Hence, the null hypothesis was rejected.

## CONCLUSION

The study concludes that smartphone addiction has a significant adverse effect on various dimensions of social maturity among higher secondary school students. Students with lower smartphone addiction demonstrated better personal adequacy, interpersonal adequacy, and social adequacy than students with higher smartphone addiction. The findings make it clear that excessive smartphone use may weaken responsible behaviour, self-direction, stress tolerance, communication, cooperation, trust, and social adaptability. Therefore, balanced and regulated smartphone use is essential for adolescents' healthy social development.

## Educational Implications

The study's findings have practical implications for education. Schools should organize awareness programmes on healthy smartphone use and digital self-regulation. Teachers should create classroom environments that encourage group participation, communication, cooperation, and responsible behaviour. Parents should monitor smartphone use thoughtfully and help adolescents maintain routines that include study, rest, physical activity, and real-life social interaction. School counsellors may also conduct guidance sessions on digital discipline, emotional management, and social skills development.

## REFERENCES

- Demirci, K., Akgönül, M., & Akpınar, A. (2015). Relationship of smartphone use severity with sleep quality, depression, and anxiety in university students. *Journal of Behavioral Addictions, 4*(2), 85–92.
- Elhai, J. D., Dvorak, R. D., Levine, J. C., & Hall, B. J. (2017). Problematic smartphone use: A conceptual overview and systematic review of relations with anxiety and depression psychopathology. *Journal of Affective Disorders, 207*, 251–259.
- Gao, T., Li, J., Zhang, H., Gao, J., Kong, Y., Hu, Y., & Mei, S. (2016). The influence of alexithymia on mobile phone addiction: The role of depression, anxiety, and stress. *Journal of Affective Disorders, 225*, 761–766.
- Hurlock, E. B. (1981). *Developmental psychology: A life-span approach* (5th ed.). McGraw-Hill.
- Kim, H. (2013). Exercise rehabilitation for smartphone addiction. *Journal of Exercise Rehabilitation, 9*(6), 500–505.
- Kwon, M., Kim, D. J., Cho, H., & Yang, S. (2013). The smartphone addiction scale: Development and validation of a short version for adolescents. *PLoS ONE, 8*(12), e83558.
- Rao, N. (1986). *Manual for social maturity scale*. National Psychological Corporation.
- Samaha, M., & Hawi, N. S. (2016). Relationships among smartphone addiction, stress, academic performance, and satisfaction with life. *Computers in Human Behavior, 57*, 321–325.

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Secondary School Students**

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***Conflict of Interest***

The author(s) declared no conflict of interest.

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