

“The impact of shyness on internet addiction in preadolescence: the mediating role of somatic symptoms”

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INTERNET HAS BROUGHT THE WORLD INTO THE PALM OF A HAND

Increasingly high percentage of youth were involved in the excessive use of the Internet

- Highest number of adolescents with daily or more Internet use were from Hong Kong among 6 Asian Countries

(Mak et al., 2014)

- Pathological internet users ranging from 1.2% in Italy to 11.8% in Israel among 11 European countries

(Durkee et al., 2012)

- Italian studies: 19.5% of adolescents were considered abusers of mobile phone and Internet, while 14.9% were classified as Internet only abusers

(Cerutti et al., 2017)

POTENTIAL ADVERSE EFFECTS OF INTERNET

Technological advances produce continuous changes in our daily lives with relevant effects on health, redefining the concept of normal and abnormal behavior.



GROWING INTEREST AMONG RESEARCHERS IN THIS FIELD TO INVESTIGATE RISK FACTORS OF COMPULSIVE INTERNET USE IN YOUTH.

Shyness has been found to be a risk factor of Internet addiction, but there aren't studies that have studied the mechanism by which shyness influences Internet addiction

Chak and Leung (2004) suggested that research directions should integrate the concept of mediation when investigating the relationship between shyness and Internet addiction.

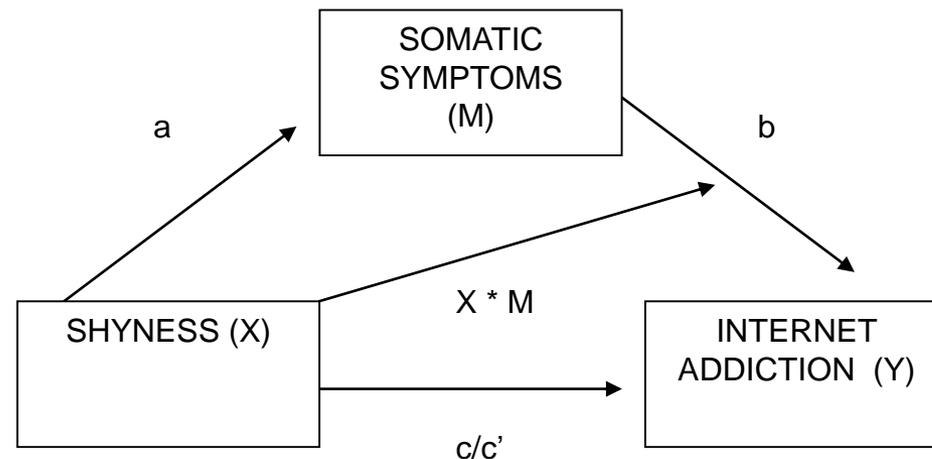
Research on shyess and internet addiction

- Shy people frequently felt an urge to be online to avoid loneliness (Brady et al., 2010)
- The Internet use was reliably associated with more satisfaction with social bonds and less loneliness (Karabacak & Oztunc, 2014).
- Loneliness avoidance may predispose shy youth to become addicted to the Internet (Ang et al., 2018)

THE CURRENT STUDY

GOALS:

- to investigate the mediating role of somatic symptoms in the relationship between shyness and internet addiction
- to explore the moderator role of shyness in the association between somatic symptoms and internet addiction.



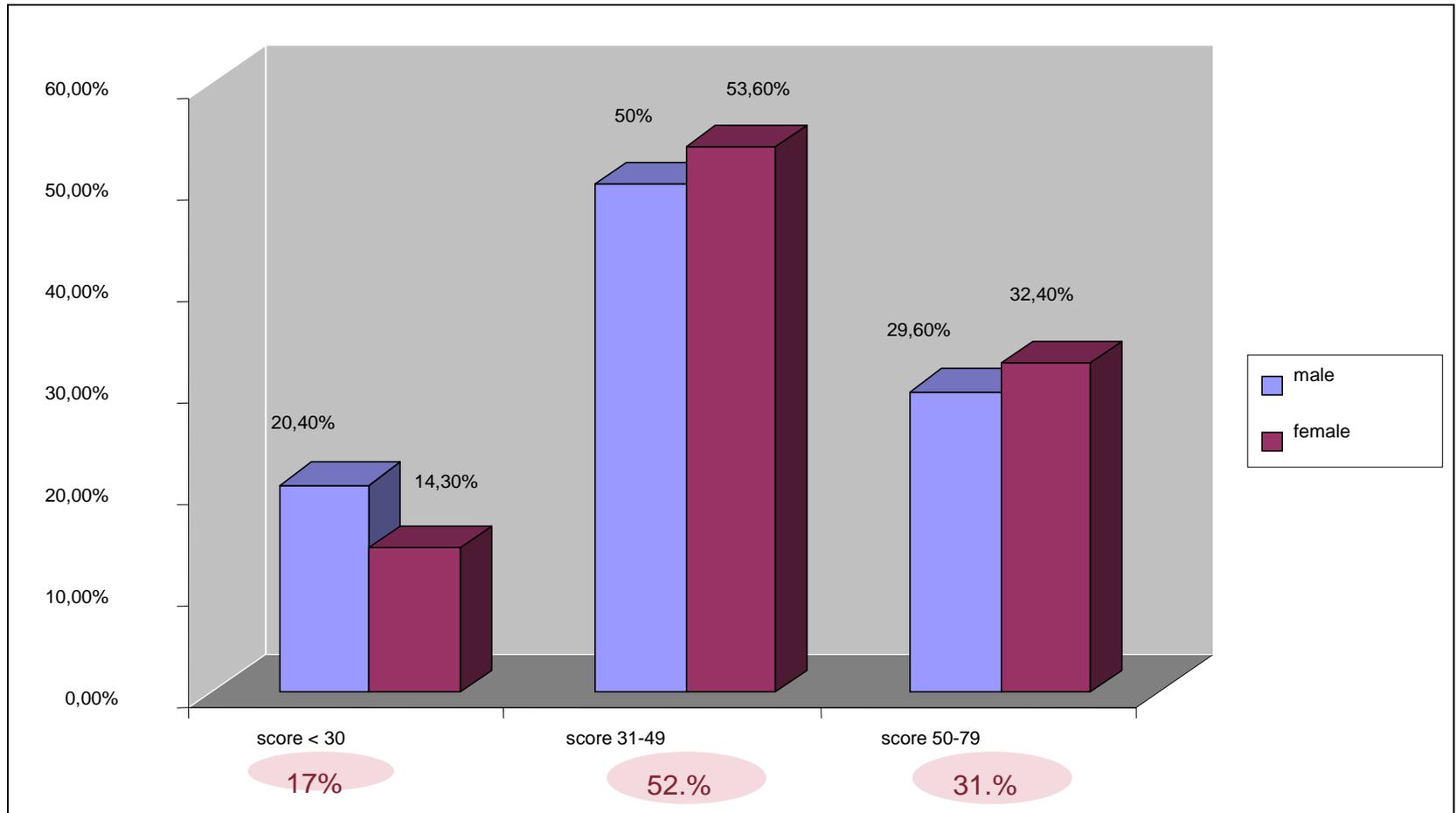
THE CURRENT STUDY

- **METHODS:**
- **Participants:** 200 Italian preadolescents (48.9% males) aging from 10 to 15 years (mean age= 12.50 \pm 0.99 years).
- **Self-reported Measures:**
- Internet Addiction Test (IAT; Young 1998)
- Children's Shyness Questionnaire (CSQ; Crozier, 1995)
- Children's Somatic Symptoms (CSI-24; Walker et al. 2009)

Data Analytic Plan

- **Descriptive statistics:** socio-demographic features and Internet use characteristics
- **Pearson correlations:** linear relationships between Internet addiction, somatic symptoms and shyness
- **ANOVA:** to compare Internet addiction test scores between shy males and females
- **SPSS macro PROCESS (model 74):** shyness is modelled to exert an effect on internet addiction indirectly through somatic symptoms as well as directly, with moderation of the effect of somatic symptoms on internet addiction by shyness.

IAT Descriptive statistics



SHY* CHILDREN STATISTICS

Measures	Gender	n	Mean	SD
IAT_TOT	Male	6	36.67	15.20
	Female	12	52.42	13.09
CSI-24	Male	6	1.67	2.66
	female	12	4.50	3.18

IAT ANOVA: $F(1,16) = 5.22, p < .05$

* CSQ cut-off= 1SD above the mean

Correlational analysis

	1	2	3	4	5
1. IAT	1	.244*			
2. CSQ	.244*	1	.275**		
3. CSI-24		.275**	1		
4. GENDER		.257**		1	
5. AGE	.305**	.246**			1

•p<.05

•**p<.01

Verifying of Moderated Mediation Model

Path a: $\beta = 0.51^*$. Influence of shyness on somatic symptoms

Path b: $\beta = 0.28^*$. Influence of somatic symptoms on internet addiction

Indirect effect of somatic symptoms (path a * path b) on internet addiction was significant moderated by shyness ($\beta = 0.02^{**}$)

Path c: $\beta = 0.04$, $p = 0.81$. The direct effect of shyness on internet addiction was not significant

Discussion

- Today youth have new and different communication tools than those used by previous generations
- Excessive Internet use and its problematic outcomes have been gaining increasing attention by researchers since the early 1990s given that the sizable time spent on the internet coincides, among other concerns, with increased loneliness and social withdrawal
- As demonstrated by previous research, excessive Internet use is related to poorer perceived overall health status and physical complaints

Discussion

- Given that shyness has been consistently linked to Internet addiction in youth, an examination into the mediating effect of a desire to avoid loneliness on the shyness-Internet addiction link could offer potential insights into a possible explanatory mechanism as well as directions for Internet addiction prevention and intervention in young adulthood.
- Shyness could predict addiction to internet only in presence of somatic symptoms.

Limitations

- Findings obtained from healthy adolescents. Thus, the extent to which these findings are applicable to clinical samples remains unclear;
- Data based on self-reported measures rather than objective assessment;
- This is a cross-sectional study. Conclusions should be considered within the limits of correlational studies

Conclusion

- The lack of agreement on an unambiguous and shared definition of Internet overuse reflects the difficulties in classifying this problematic condition



There is also a debate regarding the question of whether Internet overuse represents a primary disorder or rather, should be viewed as a vehicle for expressing emotional problems or maladaptive behavior among youth

**THANKS FOR YOUR
ATTENTION!!**

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