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Self-Control and Cybercultural Transgressions: How Social Media Users Differ

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Abstract

Cyber transgressions (nonnormative behaviors, attitudes and conditions)– both cultural and criminal– have raised social control concerns among different stakeholders. A group comparison research design was adopted to examine the effects of sociodemographic factors and social media use habits of Iranian social media users (n= 989) on their self-control, cybercultural transgressive behaviors, and transgressive content consumption. The study has contributed to the literature by recognizing the impacts of gender, age, relationship status, parental, educational, and occupational status, and household income level on the outcome variables. Altogether, it can be inferred from the results that individuals (especially women) who are older, married, have children, are middle-income, university educated, non-student, have more years of Internet use experience, and less daily internet use, and have a job (also retired individuals and housewives) are less likely than others to commit online transgressive behaviors, or consume transgressive content. The findings of this study can be employed to



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devise new policies and initiatives to socially control the cybercultural transgressions, without applying coercion.

Keywords: cyber social control, cybercultural transgressions, self-control, social media use habits, sociodemographics.

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Introduction

Social media platforms have significant potential for culturalization, socialization, and education of their users. They are capable of forming and reforming socio-cultural norms, enforcing some of them, while making some others extinct. Their users' cyber behaviors, whether good or bad, can be contagious to the real world, as well. Cyber transgressions (nonnormative behaviors, attitudes and conditions; Herington & van de Fliert, 2017: 2)– both cultural and criminal– have raised concerns among different stakeholders, such as scholars. Cyber deviance and crime are growing due to the increasing use of the Internet, the expansion of criminal opportunities, anonymity, and the lack of (formal) online social control (Berenblum, et al., 2019: 616-617). Indeed, Internet has prepared a ground for malicious users (e.g., trolls and vandals) and malicious information (e.g., rumors and hoaxes; Kumar, 2017: 2). Cyber transgressions can have consequences for the community exposed to them, and may result in experiencing emotional consequences, or even offline violence (Cheng et al., 2017: 1-2; Kumar, 2017: 3).

The sociology of transgression (i.e., normative violations), and the field of criminology (i.e., legal violations) study and theorize the “different but overlapping phenomena” (Worthen, 2016: 57; Goode, 2015: 20). Gottfredson and Hirschi's General Theory of Crime demonstrated that low self-control is the major cause of crime and deviance regardless of its place in time, history, and context, and for all types of criminal acts at all ages, under all circumstances (Akers, 2010: 265; Piquero, 2009: 153-154; Tittle et al., 2003: 333). The theory argues that the probability of antisocial/ criminal activity will increase when low self-control, and

the tendency to pursue immediate gratification, mix with the available crime opportunities (Piquero, 2009: 153-154). Self-control dimensions can be measured through five or six of following variables: impulsivity, a preference for simple tasks, risk-seeking, preference for physical over mental activities, self-centeredness, volatile temper, hyperactivity, concentration problems, oppositional-defiant behavior, and helplessness (Worthen, 2016: 53; Na & Paternoster, 2012: 14; Piquero, 2009: 153-154).

In cyberspace research, Cho and Glassner (2020), Purba & Istiana (2019), Lyngs et al. (2019), Choi, Lee and Lee (2017), Li et al. (2016: 131), Vazsonyi et al. (2012), and Higgins, Wolfe and Marcum (2008) showed significant associations between low self-control and cyber transgressions (i.e., cyberbullying, media addiction, problematic use of digital devices, online sexual harassment, and digital piracy). The authors' (Meraji Oskuie et al., 2022: 60) research, conducted on 989 Iranian social media users, also showed that Low Self-Control increases Transgressive Behaviors, and Transgressive Content Consumption, and partially or fully mediates the effects of Depression, Computer/ Internet Self-Efficacy, Netiquette, and Normative Beliefs on Transgressive Behaviors, and Transgressive Content Consumption.

The extensive diffusion of transgressions and misconducts in cyberspace has created an urge to socially control them. Hence, as aimed here, due to the important role of self-control in influencing deviance, it is of a high significance to understand the effects of sociodemographic factors and social media use habits on user's self-control, and also on cybercultural transgressive behaviors, and transgressive content consumption. To achieve this research purpose, the current study was conducted in an Iranian social media sphere. In order to control cyberspace, and restrict consumption of allegedly socially, politically, and religiously harmful content, Iranian government employs different means such as criminalization of some online conducts, disruption and slowdown of social media platforms, and blockage of many websites and social media platforms including but not restricted to pornography and gambling websites, some news agencies websites, Facebook, Twitter, YouTube, Telegram, and recently Instagram and WhatsApp. But 10 to 12 million Iranian users employ virtual private networks (*ISNA*, 2018) to access these blocked websites and apps; an online behavior that is considered transgressive from the government perspective. It is noteworthy that some of the cybercultural transgressions are topics under the criminology umbrella, but the focus of the current study is on those cybercultural transgressions that do not have criminal essence. The related literature will be discussed in the following section.

Theoretical foundations and research background

Transgression and Social control

Transgression is any action, attitude, or state of being that goes beyond the accepted practices, rules, and conventions. It crosses and recrosses boundaries, and violates limits and norms. Transgression is anything that indeed, underconforms or overconforms to norms, and is either negatively or positively evaluated, and/or sanctioned (Heckert & Heckert, 2015: 96-97; Sara & Littlefield, 2014: 295-297; Cieślak & Rasmus, 2012: 85; Jenks, 2003: 3). Transgressions are situation-specific and vary across social space, place, territory, and through time (Jenks, 2003: 2-3; Cresswell, 1996: 166).

Transgressions evoke social reactions called social control. These organized and purposive reactions from individuals and societies toward transgression are functional as means to prevent or reduce transgressive conditions or their consequences, and are also means of inducing and monitoring compliance with values and norms. Indeed, it is social control that defines transgression, gives society a trend toward an ideal, and maintains social order and morality (Dijker & Koomen, 2007: 4; Innes, 2003: 3; Horwitz, 1990: 9; Janowitz, 1975: 83).

As a necessity for every society and community, each culture chooses and values different mechanisms to prevent and respond to crime/deviance, that can fall into two major categories of formal social control (legal control based on law), and informal social control (implemented by unofficial individuals or controlling groups based on moral rules). These mechanisms can also be distinguished in two forms of internal (personal, internalized norms, values and standards), and external means of control (others' reactions to person's behavior), that include positive or negative sanctions (Goode, 2015: 7; Lambert et al., 2012: 240; Tischler, n.d.: 158-159).

Cybercultural transgression

In the current research, cybercultural transgressions were categorized into two separate variables, including Transgressive Behaviors (i.e. Trolling and Flaming), and Transgressive Content Consumption (i.e. Pornography, Nonsuicidal Self-Injury Content, Violent Content and Sexting). They will be discussed briefly in the next paragraphs.

Trolling is a malicious, disinhibited, vituperative behavior that does not have an apparent instrumental purpose. An interactional action without account or responsibility, that is deceptive, destructive, or disruptive. It is intended to aggravate, annoy and disrupt online communication, through posting irrelevant and abusive, false or offensive comments to

lure other users into pointless and time-consuming discussions (Kumar et al., 2017: 947; Coles & West, 2016: 2; Kovic et al., 2016: 7; Griffiths, 2014: 85; Buckels et al., 2014: 1; Siersdorfer et al., 2014: 4; Whelan, 2013: 38). Trolling often merges with other online behaviors including flaming (Griffiths, 2014: 86), grieving, swearing, or personal attacks (Cheng et al., 2017: 2).

Flaming is also an uninhibited, antisocial behavior, and a kind of cyber verbal bullying. It is a rude, violent, and hostile emotional expression, that employs a wide range of online misbehaviors such as insult, profane, offensive language, ridicule, abuse, slander, personal attacks, and the spread of false information, malicious comments and sexual harassment (Lee & Jin, 2019: 2519; Hutchens et al., 2015: 1204; Cho & Kwon, 2015: 364). It is widely found in instant messaging, chat groups, public groups, forums, online video games, and emails (Hutchens et al., 2015: 1204; Kou & Nardi, 2013: 616).

In the cyberspace literature, consumption and dissemination of Pornography (Zaidan et al., 2014: 1459001-1), Nonsuicidal Self-Injury (NSSI) content (Moreno et al., 2016: 78), Violent content (Atchison, 2000: 89), and Sexting (Hayes & Dragiewicz, 2018), are considered as transgressive.

Online pornography use is that much prevalent worldwide that the Pornhub, one of the largest pornography websites, reported over 42 billion visits during 2019, averaging 115 million visits daily (Mestre-Bach et al., 2020: 181). Although watching sexually explicit material is physiologically experienced as pleasant, it does not come without risks. For instance, problematic pornography use can cause some addictionlike symptoms (e.g., loss of control and psychological strain) (Baranowski et al., 2019: 1274). Some studies suggested that growth in online pornographic trades correlates with increasing rates of sexual crime, including child pornography, sexual abuse, and family violence (Chen et al., 2015: 823).

Non-Suicidal Self-Injury (NSSI) refers to the deliberate damaging of one's body tissue for non-lethal reasons (Seko et al., 2015: 1334; Lewis & Baker, 2011: 390). NSSI content have proliferated on the Internet in recent years (Lewis et al., 2012). There is growing concern that some online NSSI content can induce risks including NSSI reinforcement, normalization, triggering NSSI urges, and acceptance or stigmatization of NSSI (Brown et al., 2018: 337; Lewis et al., 2012; Lewis & Baker, 2011: 390).

Violent content is another transgressive content online. Different research showed that violent content within violent video games

increase levels of aggression (Hollingdale & Greitemeyer, 2014), or exposure to radical violent online material is correlated with extremist online/ offline attitudes (Hassan et al., 2018: 71). Online mass media platforms can also have adverse effects on young viewers, for instance, instigating aggressive behavior, perpetuating (sex, race, age)-ism mentality, irresponsible sexual or alcohol consumption, and violence-related outcomes such as desensitization, the normalization of violence and inducing anxiety and fear (Solorio et al., 2021: 1). Moreover, the informal exchanging and (unsolicited) viewing of explicit real-world violent footage in an entirely uncensored way via online social networks are potentially highly problematic (Nicklin et al., 2020: 1).

Sexting, another cyber transgression, is the transmission of sexually explicit text messages, photos or videos, or (partially) nude photos or videos via any digital device or platform (Evans, 2021: 2; Marcotte et al., 2020: 1).

Transgression and Sociodemographic factors

The impact of sociodemographic factors on transgressions are emphasized by different theories of deviance and crime. From the Weberian perspective, “[s]ocial conflict, crime, and deviance emerge as a result of inequalities based on class, gender, race/ethnicity, religion, age, sexuality (and many other characteristics)” (Worthen, 2016: 38). In “social structure social learning” (SSSL) model, Akers introduced four key structural dimensions of social learning that affect criminal and conforming behaviors of individuals. One of them is Differential Location in the Social Structure, that is, sociodemographic characteristics of individuals– including class, gender, race and ethnicity, marital status, age– and social groups (Akers & Jennings, 2009: 109-110). Gender ratio problem also emphasizes that, always and everywhere, there are significant differences between males and females in the rate and seriousness of the committed crimes (Walsh & Beaver, 2009: 89).

Sampson and Laub’s Age-Graded Theory of Informal Social Control is another theory that correlates crime and delinquency with sociodemographic factors. The theory argues that due to the changes in social bonds throughout the lifespan, such as the reduction of the peers’ significance for adults, marriage, family formation, and career development, the peak of rapid growth in juvenile delinquency that happens between ages 16 and 20, starts to decline slowly (Worthen, 2016: 54-55; Walsh & Beaver, 2009: 91). Agnew’s General Strain Theory (GST) states that certain strains are conducive to crime. It can be applied

to explain group differences (“age, class, race, community, and societal differences”) (Agnew, 2009: 172, 178). For example, the experience of serious strains, emotionally and behaviorally, is gendered, hence their impacts on various forms of deviance are different for females and males (Kaufman, 2009).

In cyberspace literature, gender, age, number of years using computers and the Internet, digital literacy, technical skills, and self-perceived level of internet competence are recognized as factors contributing to online crimes/ misconducts (Nevin, 2015: 46-51). Previous research has demonstrated considerable gender differences in online pornography use, attitudes toward both sexual and violent content, Internet addiction, flaming/cyberaggression, hacking, cyberstalking, and digital piracy. Men are more likely to commit them (Nicklin et al., 2020: 2; Baranowski et al., 2019: 1274; Nevin, 2015: 46). Also, a negative correlation is recognized between age and frequency of engaging in cybercrimes, and cyber aggressions (Nevin, 2015, p. 47), and young users are more likely to be malicious than old users (Kumar, 2017: 24).

Method

A group comparison research design was adopted here. First, the extracted variables from literature were validated by four experts. Then, in the instrumentation process, the designed closed-ended items of each variable scale went through validity and reliability assessment by 10 experts, and 6 participants. The link of the final questionnaire, made with Google Forms, was administered to users via Instagram and Telegram Apps.

Data collection and Sample

The sample was consisted of 989 participants from Iranian social media users (n= 67,602,731 as of March 31, 2020; Internetworldstats, 2020). According to Walliman (2011: 96), due to the largeness of population, and infeasibility of probability sampling, “Convenience Non-Probability Sampling” method was adopted.

Instrument and Measures

The final questionnaire was consisted of 12 multiple answer questions about sociodemographic characteristics and media use, 5 close-ended items for the variable Low Self-Control (LSC), and 6, and 5 closed-ended items for examining Transgressive Behaviors (TB), and Transgressive Content Consumption (TCC), respectively. Closed-ended items were

5-point Likert-type scale with response options of Extremely=5; Very=4; Moderately=3; Slightly=2; Not at all=1. After post hoc reliability assessment, two items (adapted from Nakhaie et al., 2000) retained for the variable LSC, and three, and five items retained measuring TB, and TCC, respectively.

Results

After conducting factor analysis, and Cronbach's Alpha, according to Sullivan and Artino (2013), and Taveira, Hipólito and Jesus (2014: 274), Likert-type items were grouped through calculating a mean score for the scale items, employing IBM SPSS Statistics 22. As Ladd (2011) mentioned, the mean scores were treated as "approximately interval data".

Table 1. Descriptive Statistics Table

Variable	Frequency		Measures of Central Tendency			Measures of Dispersion				
	Valid	Missing	Mode	Median	Mean	Range	Interquartile Range	Std. Deviation	Skewness*	Kurtosis*
LSC	989	0	2.00	2.00	2.08	4.00	1.00	0.89	1.00	0.95
TB	989	0	1.00	1.33	1.49	4.00	0.67	0.62	1.80	4.12
TCC	989	0	1.00	1.20	1.32	3.00	0.40	0.43	2.03	5.63

* The standard errors of skewness and kurtosis were 0.078 and 0.155 respectively

According to Ghasemi and Zahediasl (2012), the normality of variables was assessed both visually and through normality tests. Boxplot visualization (Hanneman et al., 2013: 154), histogram, skewness and kurtosis calculation (Cain et al., 2017; Hanneman, et al., 2013: 165), and also Shapiro-Wilk, and K-S (Kolmogorov-Smirnov) tests (Ghasemi & Zahediasl, 2012; Razali & Wah, 2011: 21) were employed to test normality. The results demonstrated that the distribution of the variables' mean scores were not normal.

Gender

The participants were 490 females, and 499 males. Index of qualitative variation (IQV), as a measure of dispersion or variability for nominal and ordinal variables (Hanneman et al., 2013: 118), was equal to 0.9999, which according to Frankfort-Nachmias and Leon-Guerrero (2009: 138-

139) showed that the cases in the distribution are almost distributed evenly across the categories of gender.

As data of outcome variables were not normally distributed, nonparametric tests were employed to test group differences across these variables. According to Kim (2017), Nahm (2016), and Marshall and Boggis (2016: 10), for two independent groups, and interval or ratio dependent variables, Mann-Whitney U Test (significant level= 0.01), was conducted. The results showed differences in LSC, TB, and TCC across Gender. Males (Mean Rank (MR)= 536.60) in comparison to females (MR= 452.64) had somewhat lower Self-Control, and committed more TB (MR= 552.69) than females (MR= 436.25). Males (MR= 589.15) significantly consumed more transgressive content than females (MR=399.12).

Effect sizes were calculated by using mean values and standard deviations for gender groups, in G*Power 3.1.9.2 software (Faul et al., 2009). Post hoc power analysis for two-tailed *t* tests (Means: Wilcoxon-Mann-Whitney test) was conducted. The effect sizes for LSC, TB, and TCC were 0.2691914 (Medium), 0.3612 (Large), and 0.6291287 (Large), respectively, and their corresponding achieved power, with an error probability level of 0.01 were 0.9397936, 0.9984830, and > .999. Hence, the test was powerful enough to detect the achieved effect sizes significantly.

Age

Forty-five percent of participants were in the age range of 25-34 years old (Mode and Median). As the data were "grouped interval data", estimated mean (not the true value) equal to 30.48, was calculated according to Hanneman, et al., (2013, pp. 99, 101). Open-ended categories of Over 65 and Under 18 were eliminated from the calculation of estimated mean, and range (Range= 45 years), due to unspecified midpoint, and minimum and maximum values. Their low cumulative percentage (4.9%) makes them neglectable. IQV for age was equal to 0.8126.

According to Kim (2017), Nahm (2016), and Marshall and Boggis (2016, p. 10), for more than two independent groups, and for interval or ratio dependent variables, Kruskal-Wallis H Test (One-way ANOVA (K Samples)) was employed. Chi-square for LSC, TB, and TCC were 61.066, 47.429, and 19.090 respectively (df= 6). The results showed differences in LSC, TB, and TCC across age groups (significant level= 0.01). The mean ranks showed an almost constant decline in LSC, TB, and TCC from younger to older ages, except for 2 participants of the Over 65 years old category in all three variables, and 45-54 years old category in LSC variable.

Table 2. Mean Ranks for Age Groups

Ranks	Age (y/o)	N	MR
LSC	Under 18	46	648.36
	18-24	245	577.66
	25-34	445	481.31
	35-44	183	413.26
	45-54	52	433.99
	55-64	16	313.72
	Over 65	2	403.75
	Total	989	
TB	Under 18	46	628.55
	18-24	245	561.43
	25-34	445	486.49
	35-44	183	424.81
	45-54	52	420.65
	55-64	16	348.88
	Over 65	2	703.75
	Total	989	
TCC	Under 18	46	599.75
	18-24	245	529.8
	25-34	445	492.07
	35-44	183	452.15
	45-54	52	447.21
	55-64	16	404.75
	Over 65	2	359.25
	Total	989	

Relationship Status

Almost half of the participants (51.5%) were single, and 37.4%, and 11.1% were married, and in a relationship, respectively (Mode= Single). IQV was equal to 0.8739. The Kruskal-Wallis H Test was employed and results demonstrated differences among single, in a relationship, and married participants, in terms of LSC, TB, and TCC (significant level= 0.01). Chi-square for LSC, TB, and TCC were 24.343, 44.889, and 17.610 respectively (df= 2). Participants who were in a premarital relationship (LSC MR= 559.89; TB MR= 553.51; TCC MR= 540.00), and after them, in the second rank, single participants (LSC MR= 520.80; TB MR= 536.97; TCC MR= 519.06), had lower Self-Control, higher TB, and higher TCC than married participants (LSC MR= 440.21; TB MR= 419.87; TCC MR= 448.52).

Parental Status

Major part of the participants (72.4%) had no children. IQV was equal to 0.7993. The results of Mann-Whitney U Test showed differences in LSC,

TB, and TCC, between people with and without children (significant level= 0.01). Participants without children (LSC MR= 514.62; TB MR=526.58; TCC MR= 512.10), had lower Self-Control, higher TB, and higher TCC than people with children (LSC MR= 443.55; TB MR= 412.18; TCC MR= 450.16).

Educational Status

Major part of the participants (76.2%) had some kind of university education (Mode= Bachelor's). IQV was equal to 0.9047. The Kruskal-Wallis H Test showed differences in LSC, TB, and TCC across Educational Status (significant level= 0.01). Chi-square for LSC, TB, and TCC were 39.438, 20.696, and 17.003 respectively (df= 5). The mean ranks showed a constant decline in LSC, from lower to higher degrees of educational attainment, and also an almost constant decline in TB, except for Master's Degree holders/ students, which are ranked higher in TB than Bachelor's holders/ students.

There was a constant decline in TCC, from Below High School Diploma to Associates' Degree holders/ students. But the downward trend became reversed, and the TCC increased from Bachelor's holders/ students to Doctorate and Higher.

Table 3. Mean Ranks for Educational Status

Ranks	Educational Status	N	MR
LSC	Below High school Diploma	65	589.42
	High school Diploma	170	566.16
	Associate's Degree	70	564.97
	Bachelor's Degree	372	485.76
	Master's Degree	244	437.91
	Doctorate and Higher	68	410.21
	Total	989	
TB	Below High school Diploma	65	596.75
	High school Diploma	170	535.47
	Associate's Degree	70	531.31
	Bachelor's Degree	372	463.05
	Master's Degree	244	489.68
	Doctorate and Higher	68	453.07
	Total	989	
TCC	Below High School Diploma	65	585.63
	High school Diploma	170	529.58
	Associate's Degree	70	525.14
	Bachelor's Degree	372	460.89
	Master's Degree	244	485.74
	Doctorate and Higher	68	510.7
	Total	989	

Occupational Status

The variable is a bimodal variable (according to Hanneman, et al, 2013, pp. 99, 101), and the Mean is equal to both Student & Non-Governmental Job. IQV for Occupation was equal to 0.9067. Percentage of missing data was 1.3%, and according to Kang (2013), due to large enough sample, and the satisfaction of the assumption of missing completely at random (MCAR), the listwise deletion or complete case (or available case) analysis method was employed to deal with the missing data.

The Kruskal-Wallis H Test showed differences in LSC, TB, and TCC across Occupation (significant level= 0.01). Chi-square for LSC, TB, and TCC were 25.943, 28.034, and 32.637 respectively (df= 7). Housewives, Retired, and people with Government Job had the lowest ranks in all three variables. Student housewives had the lowest self-control, a mediocre rank in TB, and a low TCC. Students, Student & Employed, Unemployed, and Non-Governmental Job holders, had almost close mean ranks to each other, with Student & Employed almost at the top of the list.

Table 4. Mean Ranks for Occupation

Ranks	N	MR	
LSC	Government Job	144	433.98
	Non-Governmental Job	227	458.92
	Student	255	458.85
	Student & Employed	46	491.75
	Student & Housewife	7	510.36
	Unemployed	89	463.55
	Retired	21	342
	Housewife	93	334.38
	Total	882	
TB	Government Job	144	410.05
	Non-Governmental Job	227	454.74
	Student	255	480.33
	Student & Employed	46	470.07
	Student & Housewife	7	414.71
	Unemployed	89	453.45
	Retired	21	401
	Housewife	93	337.01
	Total	882	
TCC	Government Job	144	440.04
	Non-Governmental Job	227	464.36
	Student	255	454.74
	Student & Employed	46	485.01
	Student & Housewife	7	336.57
	Unemployed	89	477.52
	Retired	21	380.57
	Housewife	93	317.33
	Total	882	

Participants holding a Part-time job, and a Full-time job provided 9.9%, and 9.3% of all responses. Missing data and Not applicable category comprised 80.8% of all responses. IQV for Employment Type was equal to 0.4931. The Mann-Whitney U Test showed no differences in LSC, TB, and TCC across Full time and Part Time Employment (significant level= 0.01). Post hoc power analysis for two-tailed *t* tests (Means: Wilcoxon-Mann-Whitney test) was conducted. The effect sizes for LSC, TB, and TCC were 0.7877092 (Large), 0.8195050 (Large), and 0.9634849 (Large), respectively, and their corresponding achieved power, with an error probability level of 0.01 were 0.9959642, 0.9978814, and 0.9999319. Hence, the test was powerful enough to detect that there was no relationship between the type of employment and the abovementioned variables.

Household Income level

Participants in Upper Middle-Income, and Lower Middle-Income categories, almost split equally, comprised 84.1% of all participants. Low-Income, and High-Income participants were 12.4%, and 3.5%, respectively. This variable is a bimodal variable, and the Mean is equal to both Lower Middle-Income & Upper Middle-Income. IQV was equal to 0.8397.

The results of Kruskal-Wallis H Test showed differences in LSC, and TCC across different Household Income Levels (significant level= 0.01). But there was no relationship between the Household Income Level and TB. Chi-square for LSC, TB, and TCC were 12.396, 9.383, and 12.701 respectively (df= 3). High-Income (MR= 620.04), and Low-Income people (MR= 543.29) reported lower Self-Control, and Low-Income (MR= 563.64), and High-Income (MR= 560.60) people almost similarly ranked high in TCC. Lower-Middle Income (LSC MR= 486.31; TCC MR= 491.82), and Upper-Middle Income people (LSC MR= 478.78; TCC MR= 472.12) ranked in the middle in both LSC, and TCC.

Residence Location

The major part of the participants (68.1%) lives in Province Capitals, and 24.2% live in Other Cities of provinces (Mode= Province Capital). Rural Area habitants, and participants living abroad comprised 3.0%, and 4.4% of participants respectively. Missing data was 0.3% of all cases. IQV was equal to 0.5936. The Kruskal-Wallis H Test showed no differences in LSC, TB, and TCC across different Residence Location (significant level= 0.01). Chi-square for LSC, TB, and TCC were 5.316, 3.149, and 9.569 respectively (df= 3).

Family Structure Experiences

Family structure experiences were consisted of two items, i.e., Strainful Experiences in Family, and Living Alone. Strainful Experiences in Family

were as follows: Divorce (7.1%); Parents' Divorce (4.8%); Parents' Death (8.3%); Having Step-Parents (1.3%); and None (79.1%). Due to the disposition of some participants in more than one category, and consequently the total percent value greater than 100%, the IQV= 0.4587 was calculated by the formula mentioned in Hanneman, Kposowa and Riddle (2013: 118). The majority of participants (87.4%) did not live alone (Mode= Not Living Alone). IQV was equal to 0.4405.

The Kruskal-Wallis H Test showed no differences in LSC, TB, and TCC across different Strainful Experiences in Family (significant level= 0.01). Chi-square for LSC, TB, and TCC were 7.980, 8.025, and 5.242 respectively (df= 5). The Mann-Whitney U Test also showed no differences (significant level= 0.01), in LSC, TB, and TCC between people who live alone, and those who do not.

Media Use

Media use variable was consisted of Internet Usage (Years), and Daily Internet Usage (Hours):

Internet Usage (Years)

Internet Usage's (Years) Mode and Median= 5 to 9 years; Estimated Mean= 9.52 years (17 was considered as the midpoint of 15 years and more category); Range= 19 years (20 years was considered as maximum value). IQV was equal to 0.9201. The Kruskal-Wallis H Test showed differences in LSC, and TB, across Internet Usage categories (significant level= 0.01). Chi-square for LSC, TB, and TCC were 19.301, 14.750, and 1.830, respectively (df= 4). The results showed no differences in TCC across Internet Usage categories, and an almost constant decline in LSC, and TB from lower years to higher years of Internet usage, except for people who used Internet for less than 1 year, who ranked close to the end of the list, before the category of 15 Years and More.

Table 5. Mean Ranks for Internet Usage (Years)

Ranks	Internet usage (Y)	N	MR
LSC	Less than 1 Year	8	448.5
	1 to 4 years	168	536.66
	5 to 9 years	344	527.07
	10 to 14 years	262	475.18
	15 years and more	207	434.77
	Total	989	
TB	Less than 1 Year	8	450.81
	1 to 4 years	168	551.61
	5 to 9 years	344	506.8
	10 to 14 years	262	481.64
	15 years and more	207	448.07
	Total	989	

Daily Internet Usage (Hours)

Daily Internet Usage's (Hours) Mode and Median= 2 to 4 hours; Estimated Mean= 3.87 hours (7 was considered as the midpoint of More than 6 hours category); Range= 7 hours (8 was considered as the maximum value). IQV was equal to 0.9565. The Kruskal-Wallis H Test showed differences in LSC, and TCC across Daily Internet Usage categories (significant level= 0.01). Chi-square for LSC, TB, and TCC were 22.316, 11.246, and 25.140, respectively (df= 4). The results showed no differences in TB's distribution across Daily Internet Usage categories, and a constant increase in LSC, and TCC from lower to higher daily Internet usage.

Table 6. Mean ranks for daily internet usage (hrs.)

Ranks	Daily internet usage (hrs.)	N	MR
LSC	Less than 1 hour	59	357.47
	1 to 2 hours	206	474.45
	2 to 4 hours	310	487.97
	4 to 6 hours	174	520.89
	More than 6 hours	240	536.76
	Total	989	
TCC	Less than 1 hour	59	357.17
	1 to 2 hours	206	457.11
	2 to 4 hours	310	504.06
	4 to 6 hours	174	518.32
	More than 6 hours	240	532.79
	Total	989	

Discussion

The Main Purpose of the current research is to examine the effects of sociodemographic factors and social media use habits of Iranian social media users on their self-control, cybercultural transgressive behaviors, and transgressive content consumption. The 989 participants are almost equally split by gender, around half of them are in the age range of 25-34, and half are single. The participants, who mostly live in province capitals, are majorly non-parents, middle income, somehow university-educated, and around one third are students. Most participants have used Internet for more than 5 years, and less than half are heavy Internet consumers.

Generally, the research results are consistent with the theories on the relationship between sociodemographic factors and transgressions, including the Weberian perspective (Worthen, 2016: 38), Akers' social structure social learning (SSSL) model (Akers & Jennings, 2009), gender ratio problem (Walsh & Beaver, 2009), and Sampson and Laub's Age-Graded Theory of Informal Social Control (Worthen, 2016; Walsh & Beaver, 2009).

The results show that males in comparison to females have somewhat lower self-control, and commit more TB. Males significantly consume more transgressive content than females. These results are consistent with findings mentioned in Nicklin, Swain and Lloyd (2020), Baranowski, Vogl and Stark (2019), and Nevin (2015), and also consistent with the “gender ratio problem” (i.e., males also commit crime more than females) (Walsh & Beaver, 2009: 89).

The findings also show an almost constant decline in LSC, TB, and TCC from younger to older ages. The results are almost consistent with the Age-Graded Theory of Informal Social Control (Worthen, 2016: 54-55), Kumar’s (2017) findings, and what Nevin (2015) have also mentioned.

The results demonstrate that participants who are in a premarital relationship, or are single have lower self-control, higher TB, and higher TCC than married people. It may depict a religio-cultural characteristic of the Iranian society. As engaging in premarital sex is a religious taboo, and is also criminalized by Iranian Islamic Penal Code (2013) (Articles 221-241), it can be inferred that participants who disclosed that they engaged in premarital sex, were less conservative, and already religio-culturally transgressing (allegedly) dominant (although loosened) social norms. Due to cultural sensitivity of the issue, it is not clear to the researchers, if participants who claimed that they were single, were actually single, or some of them also engaged in premarital relationships, but as there are formally and culturally only two categories of single and married, they preferred to comply with this cultural duality.

Consistent with Akers’ Differential Location in the Social Structure (Akers & Jennings, 2009), the results show that parental status, occupational status, income level, and educational attainment level influence the person’s LSC, TB, and TCC. Higher educated participants have reported a higher self-control, and lower TB, but after a downward trend in TCC from Below High School Diploma to Associates’ Degree holders/ students, there has been an increase in TCC from Bachelor’s holders/ students to Doctorate and Higher. It can be the result of higher computer/ Internet self-efficacy, higher levels of search skills, more access to computers, and maybe even more English/ foreign language knowledge, that help them to reach the transgressive content easier, and also to break through government filtering.

The results also show that although the years of Internet usage does have an inverse impact on LSC, and TB, but it does not affect the TCC. People with more years of Internet usage experience, are more likely to learn netiquette through online socialization process, and are more likely to be subject to social control. Hence, through years of Internet use,

they learn to comply with cyber normative and communal principles. The findings also demonstrate that participants who spend more hours online, reported lower self-control, and higher TCC, but Daily Internet Usage does not affect the TB. More hours of spending time online may lead to more consumption of transgressive content. As Purba and Istiana (2019), and Lyngs et al. (2019), and also Meraji Oskuie et al. (2022) show, LSC can contribute to the media addiction, problematic use of digital devices, and also TB, and TCC.

Overall, Full Time/ Part Time Employment, Residence Location, living alone/ not alone, and the family Strainful Experiences examined in this study, do not influence the LSC, TB, and TCC. As the General Strain Theory (GST) states, certain strains are conducive to crime and deviance (Agnew, 2009). The results show that none of the strainful experiences examined here were cybercultural transgression conducive.

The results of the current research are limited to the characteristics of Iranian users. Hence, it is recommended for further study to examine the impacts of sociodemographic factors, and social media use habits on cyber transgressions in different cultural contexts. As the current research could not recognize the strains that can contribute to cyber transgression, it is also recommended that the cybercultural transgression conducive strains be examined.

Conclusion

The effects of sociodemographic factors and social media use habits of Iranian social media users on their self-control, cybercultural Transgressive Behaviors, and Transgressive Content Consumption are examined in the current study that has contributed to the literature by recognizing the impacts of gender, age, relationship status, parental, educational, and occupational status, and household income level on the outcome variables.

Altogether, it can be inferred from the results that individuals (especially women) who are older, married, have children, are middle-income, university educated, non-student, have more years of Internet use experience, and less daily internet use, and have a job (also retired individuals and housewives) are less likely than others to commit online transgressive behaviors, or consume transgressive content. The findings of this study can be employed to devise new policies and initiatives to socially control the cybercultural transgressions, without applying coercion, especially in countries like Iran in which there are tendencies to govern the cyberspace with a top-down approach by utilizing strict rules and regulations.

Iran has a unique cultural sphere. It is an amalgamation of religious values (that are dominantly Islamic), Iranian pre-Islamic traditions, and western values and life style. It is going through a transitional era that is accelerated by social media. The society is disclosing its covert layers that have gotten a chance to be manifested through social media. This drastic disclosure is considered by the Iranian government and a part of the society as transgressive, in a negative manner. For sure, cybercultural transgressions are not always as harmful as the types that are examined in the current study. Indeed, there are some other kinds of (cyber) cultural transgressions that can revive a society through generating new values, norms, and beliefs that develop the society further.

Ethical considerations

The authors have completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc.

Conflicts of interests

The authors declare that there is no conflict of interests.

Data availability

The dataset generated and analyzed during the current study is available from the corresponding author on reasonable request.

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