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Server connection versus marital disconnection: An investigation of the effect of internet addiction on couple burnout in Iran

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ABSTRACT

The internet has become ubiquitous in many people's lives to an extent that necessitates the investigation of its impact on marital relationships. There has been a lack of such studies in the Iranian context and the present study investigated the relationship between internet addiction and couple burnout. A total of 377 married individuals participated in an online survey comprising demographic information, the Internet Addiction Test (IAT), and the Couple Burnout Measure (CBM). Partial least squares –structure equation modeling (PLS-SEM) was used to assess the relationships in the proposed research model. Structural equation modeling showed a significant effect of sub-components of internet addiction (lack of control; social withdrawal and emotional conflict; time management problems; and concealing problematic behavior) on emotional burnout. In addition, lack of control and time management problems showed significant and positive effect on somatic burnout. However, the relationships between internet addiction components and psychological burnout were not demonstrated as hypothesized. Given the explained relationships between factors comprising internet addiction and couple burnout, couple therapists need to be made more aware of the risks of internet overuse upon marital relationships and to encourage couples to optimize the internet use to prevent negative outcomes (in particular emotional burnout) among couples.

1. Introduction

The internet has become an integral part of many people's lives [1]. The analytical agency "*We Are Social*" (2020) reported that the number of internet users in the world had reached 4.57 billion people by April 2020, an increase of 7% in the same period last year [2]. Although the internet has brought countless conveniences and positive impacts in people's lives (such as facilitating access to information, entertainment purposes, enabling research, and receiving mental health treatment), it can also lead to negative impacts such as internet addiction (IA) and difficulties in psychological, social, work and family life, because of excessive, out of control, and unintended uses [3]. For many scholars, internet use is viewed as a double edged sword [4–6]. As more people use the internet, the number of individuals becoming addicted to internet is also likely to increase.

Although not officially recognized, IA is a contemporary disorder brought about by many factors [7,8]. While IA is rarely observed among most individuals, being engaged in online activities through internet-based media such as online games and social networks can lead to addictive behaviors for a small minority of users [9]. The daily lives of individuals addicted to the internet are dominated by their need to be online. In extreme cases, users feel they have no control over their presence online, and IA may develop [10]. Subsequently, IA leads to negative consequences for the affected individuals and their families, including intimate relationships [11,12]. In the case of couples' relationships, where spouses need to engage face-to-face, IA diminishes the role of individuals in marital life and reduces couples' attention to each other which is a serious problem, and can have a devastating effect on marital relations [13].

Recently, researchers have examined the negative impacts of problematic internet use on family relationships and marital conflicts [14–17]. Hertlein and Twist [14] noted the increased reliance on the internet could change how family members interact with each other compared to previous generations. They argued that problematic

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internet use may lead to the creation of divisions and separations between individuals and foster a sense of disconnection and marital dissatisfaction. In a study in the United Kingdom, it was reported that approximately one-third of divorces in the country were related to the social networking platform Facebook. Facebook intrusion was found to increase relationship dissatisfaction through experiences with cognitive jealousy and surveillance behaviors [18].

Iran (where the present study was carried out) is ranked 16th among the top 20 countries with highest number of internet users in 2020 [19]. In Iran, approximately 68 million individuals are internet users (60.42% of population), which represents a 27% increase since 2000. The growth in internet use in Iran over the past 20 years is ranked fourth in the world after Bangladesh, Nigeria, and Vietnam [19].

There has also been a rapid increase in marital dissatisfaction and problems among Iranian couples [20,21]. There are known (and unknown) factors that cause marital conflict, dissolution and divorce in Iranian society especially in comparison to two decades ago [22,23]. In previous Iranian studies, the role of virtual social networks as one of the main factors in increasing marital dissatisfaction and divorce has been well reported [13,24]. Virtual social networks can transform cultural, social, and personal lives, values, and attitudes [25]. According to Iranian literature, the influence of virtual social networks has had a significant positive impact on how people view marriage, extramarital relationships, and the propensity for infidelity in relationships [26,27].

Burnout has become a frequent topic of research since the mid 1970s, but has mostly focused on career burnout. Since the 1990s, a few studies have examined relationship burnout, in particular marital relationships [28]. As conceptualized by Pines [29]; couple burnout, like career burnout, has been referred to a painful state of physical, emotional, and mental exhaustion that occurs when people realize that despite all their efforts in having romantic love and giving meaning to their lives, their intimate relationship does not and will not meet their expectations.

Several studies have examined the factors affecting couple burnout. These studies have focused mainly on socio-economic factors (e.g., gender, level of education, marriage duration, and number of children) [30–33]. For instance, studies show that women most likely to suffer from couple burnout [30,31,33,34]. According to the literature, the type of marriage shows a significant relationship with couple burnout. For example, in Turkey, Hortacsu [35] and Pamuk and Durmus [31] found that individuals who had family-initiated marriages had more conflict and less satisfaction in their marital relationships compared to who get married of their own free will. However, little attention has been paid to IA as a factor that may cause couple burnout.

Based on the literature, couple burnout is one of the main factors that adversely affect the couples' marital life quality [36]. Pines [29] noted that "while marital problems are as old as the institutional of marriage, burnout is a modern phenomenon" (p. 2). Given widespread internet use

among Iranians, and the rapid increase in marital problems and divorces in recent years in Iran, there may be a relationship between IA and couple burnout (CB). In addition, the relationship between IA and CB has not been investigated in previous studies. Therefore, the purpose of the present study was to address this research gap and empirically investigate the association between internet addiction and couple burnout, an area that has never previously been examined. The study contributes to the existing literature by proposing a new conceptual model (Fig. 1) which will aid researchers who are working in this area of research.

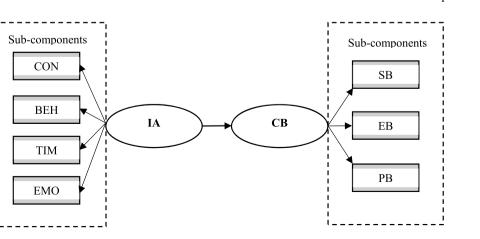
1.1. Theoretical hypothesis

The idea of problematic internet use affecting marriage is largely supported by displacement theory [37] which posits that overuse of the internet prevents individuals from participating in real-life social interactions and results in deleterious effects on intimate interpersonal relationships. This theory suggests that spending too much time on internet can challenge individual's intimate interactions and spousal relationships [37–39]. Being engaged in excessive internet use during conversations or shared time with one's romantic partner could lead to lower levels of satisfaction in intimate relationships [40].

Young [41] argued that individuals who are totally preoccupied with the internet are unable to control their use, and jeopardize their employment and relationships. Research on IA has demonstrated that uncontrolled use of the internet can lead to negative consequences for couple relationships, and marital conflict [41,42]. Previous studies have demonstrated that cybersex or pornography as an expression of internet addiction can be a contributing factor to couples' separation and divorce [43]. In addition, cybersex users who have uncontrolled use of the internet for sexual activities have reported sexual aversion and dissatisfaction with their spouses [42] and a decline in their desire for sexual intercourse [44,45]. While appropriate sexual activity is the benchmark of physical and mental health in a healthy marriage [46], couple burnout may result from the lack of sexual relationship. The results of some studies suggest that failure to meet each of the needs of couples (sexual, emotional, and psychological) can cause the loss of the meaning of marriage and the occurrence of couple burnout and consequently instability of marriage [47]. Based on the aforementioned literature, the following hypotheses (H_s) were tested:

H1. Lack of control in internet use will be positively associated with somatic burnout.

H2. Lack of control in internet use will be positively associated with emotional burnout.



H3. Lack of control in internet use will be positively associated with

Fig. 1. Conceptual model. NOTE: IA (internet addiction): CON (lack of control), EMO (social withdrawal and emotional conflict), TIM (time management problems), BEH (concealing problematic behavior); CB (couple burnout): SB (somatic burnout), EB (emotional burnout), and PB (psychological burnout).

psychological burnout.

According to Lomanowska and Guitton [48], while online activities and social networking can increase individual's social capital [49], increased online connectivity, does not necessarily translate to an increase in interpersonal emotional interactions [50]. This has been described by Turkle [51] as the condition of being 'alone together' meaning that "partners may be physically together, but not fully present for each other" [40]. Internet addicts spend less time with their family, and slowly withdraw from their normal routines and neglect social connections with their families, friends, and communities [52]. Therefore, increased online connection and internet use (which can potentially lead to social withdrawal and emotional conflicts) can facilitate a negative impact on couple intimacy and marital relationships. Therefore, the following hypotheses were tested:

H4. Social withdrawal and emotional conflict will be positively associated with somatic burnout.

H5. Social withdrawal and emotional conflict will be positively associated with emotional burnout.

H6. Social withdrawal and emotional conflict will be positively associated with psychological burnout.

It has also been reported that specific types of online activity when engaged in excessively (e.g., online gaming, online gambling, online sexual preoccupations, use of chat rooms, and instant messaging) can negatively affect marital relationships [40]. Ahlstrom et al. [53] found that 70% of gamers reported that spending too much time gaming online negatively affected their marriage. There are also findings showing that some individuals who use the internet excessively are engaged in online relationship or extramarital affairs [54]. Such individuals spent excessive amounts of time on the internet attempting to maintain online relationships which led to difficulties and problems in their marital relationships in real life [55].

In a study examining the relationship between social network use and family cohesion, Porjebeli et al. [56] reported a significant and inverse relationship between the hours spent on virtual network use and family cohesion. As individuals spend more time online, the time invested in intimate relation decreases [57]. Some studies have shown that spending long hours on internet can increase the risk of physical and mental dependency on internet as well as problems with emotional interactions [58]. Late night use of the internet can cause sleep deprivation and fatigue [59], which can adversely affect couple relationships and can result in sleep difficulties [60] such as decreased sleep duration and poor sleep quality, as well as marital problems [61]. Therefore, the following hypotheses in relation to the effects of time spent on internet on couple burnout were tested:

H7. Time management problems on the internet will be positively associated with somatic burnout.

H8. Time management problems on the internet will be positively associated with emotional burnout.

H9. Time management problems on the internet will be positively associated with psychological burnout.

According to Young [61], internet addicts mask the nature of their online activities and conceal the extent and nature of their online involvement and behavior. Among couples, those spouses engaging in cyber affairs or online sexual practices have a higher stake in concealing the truth and telling lies. In such cases, those engaging in online infidelity will lie to hide their extramarital relationships, which often triggers marital challenges including broken intimacy and issues concerning trust [62]. Therefore, the following hypotheses were tested:

H10. Concealing problematic behavior will be positively associated with somatic burnout.

H11. Concealing problematic behavior will be positively associated with emotional burnout.

H12. Concealing problematic behavior will be positively associated with psychological burnout.

2. Method

2.1. Participants

A total of 377 married individuals living in Iran participated in the study comprising 134 males (35.5%) and 243 females (64.5%). In relation to level of education, 62 of the participants reported having diploma or below (15.3%), 168 were university graduates (41.5%) and 175 were university postgraduates (43.2%). The average age of the participants was 35.7 years (SD = 9.32).

2.2. Measures

Demographic questionnaire: Questions were asked to determine the gender, age, education level, length of time married, age difference with spouse, type of marriage, and number of children.

Couple Burnout Measure (CBM): The CBM was developed by Pines [63] and assesses the burnout level of individuals in a couple relationship (i.e., dating, engaged, married, civil partnership, etc.). It comprises 21 items measuring the frequency of experiencing the symptoms of burnout in marriage/intimate relationship. These symptoms are categorized into three categories: somatic burnout [SB] (e.g., "I feel tiredness", "I feel sleeping problems"), emotional burnout [EB] (e.g., "I feel disappointment"), and psychological burnout [PB] (e. g., "I feel worthlessness", "I feel anger towards my spouse"). Items are rated on a seven-point Likert-type scale 1 (not experienced the situation at all) to 7 (experienced the situation frequently). The Persian CBM has shown adequate psychometric properties among Iranian populations (Cronbach's alpha = 0.86; [64,65]. The Cronbach's alpha in the present study was very good (0.81).

Internet Addiction Test (IAT)- - Internet addiction was assessed using the 20item Internet Addiction Test [54]. Items (e.g., "How often do you find that you stay on-line longer than you intended?", "How often do you try to hide how long you've been on-line?", "How often do you prefer the excitement of the internet to intimacy with your partner?" are rated on a five Likert-type scale from 20 to 100. A score of 20–49 indicates no IA; a score of 50–79 indicates mild IA, and a score of 80–100 indicates severe IA. The Persian IAT has shown excellent psychometric properties among Iranian people (Cronbach's alpha = 0.917; [66]. The Cronbach's alpha in the present study was excellent (0.92). In order to design the structural model, the factor structure for the IAT proposed by Samaha et al. [67] was applied in present study. They reported four subscales lack of control (CON), social withdrawal and emotional conflict (EMO), time management problems (TIM), and concealing problematic behavior (BEH).

2.3. Procedure

Given the internet-based nature of the study, an online survey was distributed to a convenience sample on various social media platforms (i.e., *Facebook, Telegram* and *WhatsApp*) across 19 provinces in Iran to obtain the most heterogeneous sample possible. The survey period lasted for eight weeks. The inclusion criteria for participants were being aged at least 18 years, volunteering to participate, and being married for at least two years. Participants completed the survey anonymously after reading the purpose of the research and providing their informed consent.

Sample size was calculated based on the 'ten times rule' for partial least squares-structure equation modeling (PLS-SEM) which means the sample size should be at least ten times greater than the number of items used in the scale [68]. In addition, referring to previous studies indicating a sample threshold of as few as 100 participants for PLS-SEM [69], the sample size of 377 in the present study was more than

adequate to test the proposed model. The present study was carried out with the approval of the research team's university Ethics Review Board.

2.4. Data analysis

First, descriptive statistics were conducted to examine data distributions. Second, the relationship among all variables utilizing PLS-SEM analysis were tested. PLS is a prediction-oriented approach to SEM, primarily used for exploratory research, but also appropriate for confirmatory research [70]. PLS-SEM enables simultaneous assessment of the measurement model and the structural model. PLS-SEM considers the model's predictive capabilities, typically using the coefficient of determination (R^2 value), which evaluates the model's in-sample predictive power [69]. Descriptive statistics were conducted using SPSS version 20.0. The hypotheses were tested using WarpPLS version 7.0 [71].

3. Results

Of the 377 participants in the study, 106 of the participants reported that they had chosen their own spouse (28.1%), 78 reported that their spouse was chosen by their families (20.7%), and 139 reported they were married based on joint personal and family preferences (36.9%). The mean score for total couple burnout was 72 on the CBM and 37.5 for internet addiction on the IAT (Table 1). Subscale scores for both the CBM and IAT are also shown in Table 1.

3.1. Model assessment using PLS-SEM

To assess the hypothesized model, PLS followed a two-step process encompassing the assessment of the measurement model and assessment of the structural model. An assessment of the measurement model is concerned with the validity and reliability evaluation of the latent variables (LVs) applied in the model, while in the assessment of the structural model, the relationships between LVs are subject to evaluation [69].

3.1.1. Assessment of the measurement model

The present study investigated seven reflective LVs, namely, lack of control (CON), social withdrawal and emotional conflict (EMO), time management problems (TIM), concealing problematic behavior (BEH), somatic burnout (SB), emotional burnout (EB), and psychological burnout (PB). To assess construct reliability (or internal consistency), indicator reliability and composite reliability (CR) as a more suitable coefficient for PLS-SEM [69] were checked. Table 2 shows that the CR for each of the latent variables in the measurement model were greater than 0.79. For indicator reliability, items with the loadings higher than 0.7 are acceptable. Therefore, the results show that the measurement model has indicator reliability, internal consistency, and acceptable reliability.

According to Hair et al. [69], the validity assessment of the reflective

Table 1

The average total score of couple burnout, internet addiction, and their subcomponents in studied couples.

Scale/Sub-components	Mean	SD	Min - Max
Couple burnout	72.05	19.08	30–117
Somatic burnout (SB)	27.21	7.563	7–43
Emotional burnout (EB)	30.52	8.986	7–45
Psychological burnout (PB)	34.47	5.984	14-46
Internet Addiction	37.58	11.52	20-73
Lack of control (CON)	16.42	4.061	5-25
Social withdrawal and emotional conflict	19.93	6.087	7–33
(EMO)	16.62	4.079	6–25
Time management problems (TIM)	10.31	3.169	3–15
Concealing problematic behavior (BEH)			

Table 2

Resul	ts	of	the	assessment	of	measurement	mod	lel.
Resul	ts	of	the	assessment	of	measurement	mod	lei.

Items	Construct type	Loading	CR	AVE	Full collinearity VIFs
Lack of o	control (CON)				
CON2	Reflective	.730	0.799	0.569	1.574
CON4		.768			
CON5		.765			
Social w	ithdrawal and em	otional conf	lict (EMO)	
EMO1	Reflective	.732	0.847	0.525	2.075
EMO2		.779			
EMO4		.705			
EMO5		.711			
EMO7		.693			
Time ma	nagement probler	ns (TIM)			
TIM1	Reflective	.715	0.834	0.502	1.828
TIM2		.724			
TIM3		.648			
TIM4		.668			
TIM5		.779			
Conceali	ng problematic be		H)		
BEH1	Reflective	.822	0.835	0.629	1.868
BEH2		.854			
BEH3		.693			
Somatic	burnout (SB)				
SB3	Reflective	.710	0.798	0.569	1.397
SB4		.815			
SB6		.735			
	al burnout (EB)				
EB2	Reflective	.664	0.873	0.534	1.882
EB3		.742			
EB4		.760			
EB5		.819			
EB6		.680			
EB7		.710			
•	gical burnout (PB				
PB1	Reflective	.791	0.814	0.594	1.684
PB2		.807			
PB3		.711			

measurement model considers both convergent and discriminant validity. AVEs higher than 0.5 indicates that each of the constructs have acceptable convergent validity, demonstrating that on average, the construct explains more than half of the variance of its indicators [69]. Discriminant validity refers to the extent to which a construct is unique and captures a distinct phenomenon rather than other constructs in the model [69]. To establish discriminant validity of the measurement model HTMT ratio was evaluated. The result of HTMT ratio in Table 3 shows that HTMT_{0.90} for all LVs are below 0.9, indicating acceptable discriminant validity for the proposed model.

3.1.2. Assessment of the structural model

To assess the structural model and proposed hypothesis, two criteria including the value of the R^2 coefficients for endogenous constructs as well as the significance of the path coefficients for testing each hypothesis should be evaluated and reported. Based on behavioral research standards, the R^2 value of 0.2 is generally considered high [69]. In the present study, the value of R^2 for EB, and PB were 0.12 and 0.13,

Table 3	
D	T T T

Discriminant validity	Using	HTMT0.90	Criterion.
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	CON	EMO	TIM	BEH	SB	EB	РВ
CON							
EMO	0.779						
TIM	0.732	0.793					
BEH	0.694	0.849	0.772				
SB	0.424	0.306	0.329	0.223			
EB	0.302	0.338	0.338	0.389	0.693		
РВ	0.400	0.415	0.352	0.424	0.607	0.833	

NOTE: CON (lack of control), EMO (social withdrawal and emotional conflict), TIM (time management problems), BEH (concealing problematic behavior), SB (somatic burnout), EB (emotional burnout), and PB (psychological burnout). respectively, therefore showing relatively acceptable R^2 values. However, the value of R^2 for SB was 0.09, indicating a relatively weak value. R^2 values in the present study indicate that IA explains some of the variance for the couple burnout. The EB R^2 value of 0.12 shows that CON, EMO, TIM, and BEH were relatively good predictors of EB.

Table 4 and Fig. 2 show the results of hypothesis testing and path coefficients. Table 4 shows that the effect of CON on SB and EB was positive and significant. Therefore, the results of the study supported both H_1 and H_2 . The relationship between CON and PB was hypothesized to be positive, but the results suggest that it was negative. Therefore, despite having *p*-values lower than 0.05, the corresponding hypotheses cannot be supported. Therefore, the present study did not support H_3 .

The effect of BEH on SB was non-significant (H₄), while the *p*-value of the relationship between BEH with EB and PB were less than 0.05 (and therefore significant). The findings of the present study supported the hypothesized causal relationships for H₅. However, the relationship between BEH and PB was hypothesized to be negative, but the results indicated a positive effect (H₆). The effect of TIM on the three subscales of couple burnout, the effects for TIM on SB and EB (H₇ and H₈) were supported, whereas the results did not support H₉.

The effects of EMO on EB were found to be positive and significant, whereas the effect of EMO on SB was non-significant (H_{10}). Therefore, findings of the present study supported the hypothesized causal relationships for H_{11} . The relationship between EMO and PB was hypothesized to be positive, but the results suggest that it was negative. Therefore, despite having *p*-values lower than 0.05, the corresponding hypotheses cannot be supported. Therefore, the study did not support H_{12} .

4. Discussion

Although the internet is beneficial in the life of most individuals, for those who experience problematic internet use and internet addiction (IA), it adversely affects their physical health, family life, educational/ occupational performance, quality of life and/or mental health. It may also be harmful to an individual's social development because online time displaces time they would spend interacting with family and friends.

The purpose of the present study was to examine the effect of IA on couple burnout because it has received little attention in couple burnout research and the family literature in the Iranian context. Most specifically, in order to fill this gap, the present study investigated the association between each of the four factors in the Internet Addiction Test (IAT) and three factors comprising the Couple Burnout Measurement (CBM). Recent studies have reported negative associations between IA and both life satisfaction and marital satisfaction [14,17,72,73]. Consistent with the findings of these earlier studies, the present study showed the significant emotional burnout caused by IA (H₂, H₅, H₈, and H₁₁). These findings confirmed that IA positively affected emotional burnout among couples. In contrast, the present study showed

Table 4	
Results of hypothesis	testing.

	Hypothesis	Path coefficient	p-value	Effect size	Supported
\mathbf{H}_1	$\text{CON} \rightarrow \text{SB}$	0.188	< 0.001	0.051	Yes
H_2	$\text{CON} \rightarrow \text{EB}$	0.095	0.030	0.023	Yes
H_3	$\text{CON} \rightarrow \text{PB}$	-0.148	0.002	0.041	No
H_4	$\text{BEH} \rightarrow \text{SB}$	0.051	0.159	0.011	No
H_5	$\text{BEH} \rightarrow \text{EB}$	0.085	0.045	0.024	Yes
H_6	$BEH \rightarrow PB$	-0.114	0.012	0.034	No
H_7	$TIM \rightarrow SB$	0.112	0.013	0.027	Yes
H_8	$\text{TIM} \rightarrow \text{EB}$	0.082	0.050	0.022	Yes
H_9	$\text{TIM} \rightarrow \text{PB}$	-0.014	0.391	0.003	No
H_{10}	$\rm EMO \rightarrow SB$	-0.001	0.492	0.000	No
H_{11}	$\rm EMO \rightarrow \rm EB$	0.164	< 0.001	0.049	Yes
\mathbf{H}_{12}	$\text{EMO} \rightarrow \text{PB}$	-0.159	< 0.001	0.047	No

contradictory findings with respect to the significant effect of IA on psychological burnout (H_3 , H_6 , and H_{12}). It was found that there was a significant relationship between internet addiction and psychological burnout.

One interesting potential explanation for the negative impact of IA on psychological burnout might be attributed to "escapism" and "controllability", conceptualized as beliefs concerning the usefulness of the internet as a cognitive control and self-regulation tool. Escapism refers to the belief that the internet can help individuals distract themselves from negative thoughts and feelings, while controllability involves beliefs about attention regulation and thought control (i.e., individuals perceiving the internet as a means of achieving mental control by enhancing their problem-solving abilities) [74]. Brand et al. [75] argue that specific internet applications (e.g., online gaming and gambling) can be used to distract individuals from their life problems and to avoid negative feelings such as loneliness or social isolation. In line with this theoretical argument, Moidfar and Habibpour Gatabi (2011) found that individuals in Iran tend to use internet in order to evade the life-related problems. They also believe that they receive some sort of power and respect while using internet [76]. Previous studies suggest that individuals may be using the internet as a surrogate for happiness [77]. To elaborate on the negative relationship between IA and psychological outcomes, Griffiths [9] argued that individuals' use of internet is highly associated with its perception as a coping style and a way of compensating some deficiencies, such as low self-esteem. Consequently, individuals derive great satisfaction from the internet because it makes them feel better through assuming a different personality and social identity [78,79].

Overall, the association between IA and somatic burnout hypothesized in the present study were only partially supported. More specifically, lack of control and time management problems in internet use had positive effects on somatic burnout (H_1 and H_7), whereas social withdrawal, emotional conflict, and concealing problematic behaviors did not show significant effects (H_4 and H_{10}). In other words, H_4 and H_{10} were not supported, whereas H_1 and H_7 were.

In line with previous studies, the present study showed that lack of control and time management problems in using internet affected the married people and displaced them somatically and physically from the spouse and marital interactions [42,55]. The aforementioned findings are in line with the theory of displacement proposed by Kraut et al. [37], who argued that the internet negatively affects social interactions and interpersonal relationships with close others when used excessively [37, 80–83]. The findings reported in present study can be regarded as evidence for displacement theory, demonstrating that married individuals who are addicted to the internet choose internet use over their marital relationships. It is the displacement that takes away such individuals from their real life and results in couple burnout. For example, the present study showed that an individual's overuse of the internet appears to positively affect their emotional and somatic burnout in their marital relationships.

4.1. Limitations and strengths

The present study has both limitations and strengths that should be taken into account when interpreting the findings. There are three main limitations to the present study. First, the study used convenience sampling with a modest sample size, which limits the generalizability of the results to all couples in Iran. Second, all the data were self-report which are subject to established methodological biases. Finally, the study shows that IA can cause couple burnout. However, couple burnout in turn might lead to IA among couples. Further longitudinal research with larger sample sizes is needed to determine both causal directions in the context of the Iranian couples in order to develop a more integrated model of relationships between IA and couple burnout.

The results of the present study also have several strengths. There has been no research examining CBM in association with internet addiction.

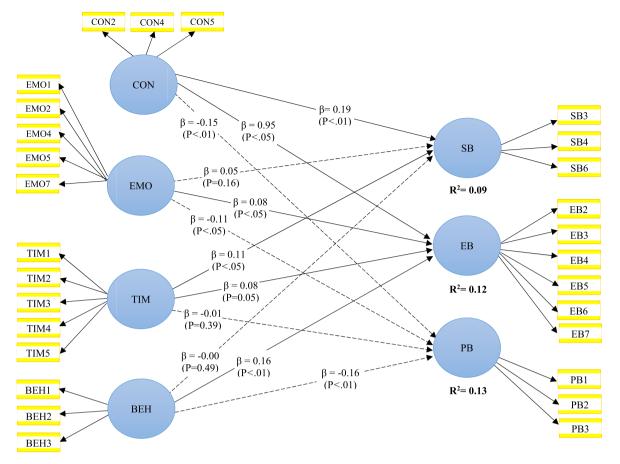


Fig. 2. Structural equation model for the association of internet addiction components with couple burnout components.

The present study contributed to the Iranian literature on how CBM relates to internet addiction. In addition, considering the hypothesized relationship between IA and psychological burnout, the present study clarified some issues related to the mixed findings in the existing literature. The present study examined the influences of internet addiction on psychological outcomes and provides the basis for researchers to generate hypotheses and develop more precise conceptual models over time in order to understand variation among couples' burnout and their addiction to the internet.

5. Conclusion

The present study is the first to explore the proposed model describing the association between IA factors (lack of control, social withdrawal and emotional conflict, time management problems, and concealing problematic behavior) with couple burnout factors (somatic burnout, emotional burnout, and psychological burnout) among Iranian couples. The study provided novel insight that warrants further studies regarding the relationship between IA and couple burnout. While these results using the IAT provide valuable data concerning evaluation of its impact on couple burnout in the Iranian context, further research on IA in association with couple burnout in various settings in other countries and cultures is essential to confirm the findings reported here. Given the explained relationships between factors comprising internet addiction and couple burnout, couples therapists need to be made more aware of the risks of internet overuse upon marital relationships and encourage couples to optimize the internet use to prevent negative outcomes (in particular emotional burnout) among couples. Further research is needed to understand more about those who are at risk of internet addiction in Iran. In addition, it is important to identify the impact of intervening variables (e.g., workload, having hobbies, and having children) on the relationship between IA and couple burnout.

Author credit role statement

Reyhaneh Bagheri: Visualization, Investigation, Methodology, Writing- Original draft preparation, Software. **Shahla Ostovar**: Conceptualization, Investigation, Methodology, Writing- Original draft preparation. **Mark D Griffiths**: Supervision, Data curation, Writing-Reviewing and Editing. **Intan Hashimah Mohd Hashim**: Conceptualization, Supervision, Validation, Methodology.

Data availability

Data will be made available on request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.techsoc.2022.102163.

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