

MODERATION EFFECT OF SOCIAL MEDIA ADDICTION BETWEEN PARENTAL NEGLECT AND CONDUCT PROBLEMS AMONG ADOLESCENTS: AN EMPIRICAL INVESTIGATION

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ABSTRACT

Parental disregard is a powerful interpreter of adolescents' behavioral problems. In Pakistan, all students utilize social media platforms for educational, entertainment, and informational purposes, which in turn has detrimental impact on adolescents' physical as well as psychological health. Hence it is important to study the consequences of social media addiction, which is becoming a global health issue. However, research findings have looked at and found erratic correlations with the relationship believed to exist between parental neglect and teenage conduct disorder. Aim of current study is to shed more light on this idea by determining if adolescent social media addictive use moderates the link between parental neglect and behavioral issues. Multidimensional Parent Neglect Scale (MBNS; Straus et al., 1999), Social Media Addiction Scale (SMAS; Karadag et al., 2015) and Conduct Problems Scale (CPS; Goodman et al., 2010) were used to collect data from 370 adolescent students by using purposive sampling technique. Findings revealed that social media addiction moderated the relation between parental neglect and conduct disorder among social media addict adolescents. Significant gender differences were also revealed on social media addiction and conduct problems. These findings offer information for systematically analyzing the role of social media addiction and the link between behavior issues and parental neglect. The findings of this study suggest that parenting techniques, characteristics of social media addiction, and their negative consequences on adolescents' behavior should be given more attention.

Keywords: Parental neglect; Social media addiction; Adolescents conduct problems

INTRODUCTION

Conduct disorder is a common illness and its pervasiveness is increasing day by day. Parental incompetency in child rearing practices such as self-control, rapid blaming, malleable code of conduct and especially inadequate handling refers to parental neglect, which is very common nowadays. It might seem that parental neglect leads to conduct disorder, but is this always the case? Does parental neglect lead to social media addiction? Is social media responsible for adolescent conduct problems? An important question raised for clinical psychologists is how they can overcome conduct disorder among adolescents. The present study investigates the association between parental neglect and conduct problems and whether this relationship may be moderated by social media addiction.

Parental neglect is a significant problem in Pakistan that contributes to many issues, including behavioral issues in teenagers. According to the parental report, 42.30% were found to have conduct problems (Hussein, 2010). Parental disregard is associated with maladaptive conduct among adolescents (Kim & Chun, 2018; Tingting & Pu, 2017).

Four domains of children's functioning are covered by the structural model of child neglect: two measure externalizing issues, one each for social issues and impacting behaviors. The relationships between the models of teenage expectations and functioning that were discovered are in

line with earlier studies, which indicate that parental neglect of their kids may be a contributing factor to internalizing, externalizing, and social problems (Dubowitz et al., 2005). During childhood and adolescence, parents and children form the strongest bonds (Woo, 2013). Negligence therefore has been known as a robust factor in young people's dysfunctional growth. Unhealthy social relationships and disorderly actions among kids are the consequence of parental neglect (Jonson-Reid et al., 2012).

Observable behavior problems occur mainly because of parental neglect, which appears almost at the start of 10 years of age and specifies a link between violent actions and conduct disorder (Lahey & Waldman, 2012). Parental neglect attitudes lead adolescents towards misbehavior (Liu, 2016). Mobile phone dependence was not directly impacted by perceived parental neglect, according to recent research from Korea (Lim & You, 2018). Parents' protective roles can stop children from engaging in risky behaviors like smoking, using illegal substances, drinking alcohol, and engaging in hazardous sexual behaviors (Kim et al., 2015).

The chaotic environment in the classroom is due to the behavioral problems of children, which in turn affect the learning process of all the students (Alkaabi et al., 2017; Gok, 2016). Externalizing behavioral problems such as low grades, poor bonding with peer group, disruptive actions, and hyperactivity are high among adolescents who are from broken families as compared to adolescents who are from unbroken families (Jogdand & Naik as cited in Joseph, Sinha & D'Souza, 2021). Behavioral difficulties are the result of certain parental training practices, including laxness, low communication, insufficient sustenance, and low warmth (Loeber et al., 2000). Redundancy, separation, apprehension, melancholy, destructive actions, and drug dependence are the complications associated with conduct disorder.

According to the DSM-IV, media addiction comes under the umbrella of addictive actions. It is a mental problem associated with excessive use of technology. Social media sites include Google, Twitter, YouTube, LinkedIn, Instagram, Facebook, Pinterest, Tumblr, Vine, Snapchat, and Reddit (Newman, 2016). Individuals who spend 8.5 to 21.5 hours per week on drugs are labeled as addicted individuals (Yang & Tung, 2007). Applications that enable users to communicate and interact with one another are referred to as social media. (Kaplan & Haenlein as cited in Oleskeviciene & Sliogeriene, 2020).

Ko et al., (2009), Lam et al., (2009), Milani et al., (2009) and Park et al., (2008) found that in South Korea, Taiwan, Italy and China 10.7–36.7% prevalence of internet addiction among teenagers. In 2017, Banyai et al. reported that twenty-four percent of teenagers remain continually connected. Shahjahan stated in 2014 that the overall impact of social media is adverse on youths. A study conducted in the UAE, revealed association between excessive media use and poor class performance of students. A study conducted in Turkey on university students showed similar findings; the negative impact of digital technologies on students' education and habits was revealed. These statistics show that media addiction, which is currently a worldwide health issue, cannot be disregarded.

Internet addiction refers to a pattern of unnecessary practice which acts as a rescue from natural stressors, causing panic due to low use and betraying others in the matter of time of use (Savci & Aysan, 2017). Evolving patterns of communication are the outcomes of media addiction, which is independent of space and time and occurs freely in an indirect, setting (Ogel, 2014). Neuroticism is related to excessive use of this technology. It has been found that parental neglect is related to media addiction (Liu, 2016; Niaz et al., 2005). Anxiety, dishonesty in significant relations and other numerous troubling scenarios, are the outcome of media addiction (Haand & Shuwang, 2020; Jaoude et al., 2020).

Because this latest technology is readily accepted by youth, Valkenburg and Peter (2011) reported that youngsters seem to be more susceptible to the adverse effects of such electronic sources. Schneider et al. (2012) observed the effect of social media on behavior and reported that adolescents have more severe conduct problems. According to researches, persons who spend a lot of time in computer-generated environments tend to have more behaviour issues. (Brown & Bobkowski, 2011; Brunborg et al., 2014; Kahraman et al., 2017).

Each student in Pakistan has exposure to social media. Social media use for enjoyment has a negative impact on students' wellbeing (Karasu & Arkan, 2016; Khalid, 2017). Internet compulsion alienates adolescents from their natural settings (Van Den Eijnden et al., 2016; Bian & Leung, 2014). Conduct, social, occupational, and learning difficulties among individuals are due to excessive and pathological media use (Al-Menayes, 2015; Griffiths & Szabo, 2014; Rosen, 2017).

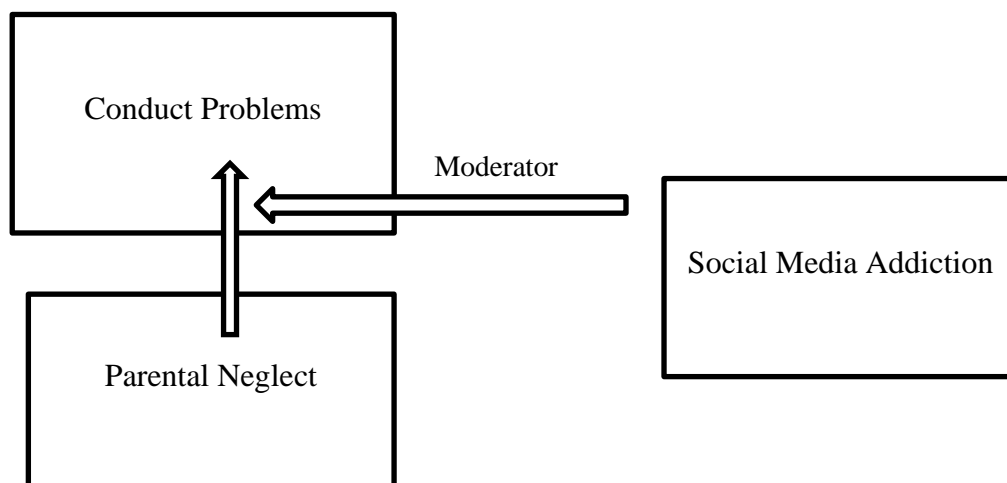
The percentage of people who use the internet has increased by 20% over the past ten years, especially among teenagers. According to research (Devotta, 2018), teens spend about 9 hours each day on social media, which means that nearly half of their valuable life is wasted. Extreme social communication practices adversely affect individual, societal, and career living. As a result, it is becoming more important to examine the prevalence of social media compulsive behavior.

None of the studies have tried to uncover the moderation effect of social media addiction in this link. Present research aims to cover this gap by testing social media addiction as a moderator in relation between parental neglect and adolescent conduct problems. Whether social media addiction strengthens or weakens the relationship between parental neglect and conduct problems among adolescents little is known. Literature for all study variables was analyzed in the study.

A review of the literature found a connection between conduct disorder and social media addiction as well as between parental neglect and behavioral issues. The current study assessed parental neglect in terms of the basic requirements of a child. Addiction to social media is increasingly prevalent among teenagers today. Children suffer negative effects as a result of their parents' media obsession. Instead of parental bonding, social media bonding is more preferable and is fascinated by our current generation. Therefore, it is essential to emphasize parents' protective roles in order to lower the likelihood of both conduct issues and media addiction. The primary goal of the current study was to investigate the connections between parental neglect, social media use and conduct problems among teenagers. Hypotheses were developed to test the direct effect of a moderating variable that is based on the model which states that social media addiction will act as a positive moderator in the relationship between parental neglect and behavioral problems. Next hypothesis was developed in accordance with the literature review that social media addiction will be high in female adolescents whereas conduct problems will be high in male adolescents.

Figure 1 Conceptual Model of the Current Study

The hypothesized conceptual framework of the current study is given below:



Note. Social media addiction (moderator) plays a moderating role between the relationship of parental neglect (independent variable) and conduct problems (dependent variable).

METHOD

Participants and Procedure

Social media addicts made up 186 of the sample, while non-addicts made up 184. Among addicts 97 girls (52.15 %), boys 89(47.85 %) with age range 11-19 years ($M = 15.8$, $SD = 1.29$). Table 1 provides all of the sample's demographic information.

This study employed a descriptive research design. Quantitative measurements were more appropriate because of the wide and expressive research phenomena. All participants gave their informed consent in accordance with the guidelines of the ethics committee. All participants gave their consent and remained anonymous throughout.

Purposive sampling technique was adopted. The study included adolescents between the ages of 11 and 19 who could read, used social media, and displayed behavioural issues. A sample of teenagers was chosen from several cities in Punjab and Khyber Pakhtunkhwa (Rawalpindi, Havelian, Abbottabad, Mansehra, Shinkiyari). The coordinators of the respective schools were personally approached by the researcher and briefed about the purpose of the research. Students were approached in classrooms with the help of coordinators and teachers. Students with behavioral issues and who used media devices—including cell phones, computers, laptops, and tablets—were asked to complete the questionnaires. An informed consent form, a demographic sheet and three questionnaires (PNS, SMAS, and CPS) were distributed among the adolescents. All ethical standards in accordance with the (APA, 2010) were met. Overall, 370 adolescent forms were chosen for study, of which 186 had a social media addiction and 184 did not.

Table No. 1 Sample Distribution Table

Demographics	N	Percentage
Age (11 - 19 years)	370	100
Social Media Addicts	186	50.3
Non-Social Media Addicts	184	49.7
Gender		
Male addicts	89	47.85
Female addicts	97	52.15
Socio economic status		
Low	134	72
Middle	32	17.2
High	19	10.21
Institution		
Government	32	17.2
Average Fee Structure	135	72.58
High Fee Structure	19	10.21
Mother Education		
Uneducated	45	24.19
Average Education	132	70.96
High Education	9	4.83
Father Education		
Uneducated	31	16.66
Average Education	133	71.50
High Education	22	11.82

(N = 370)

Measures

Multidimensional Parent Neglect Scale

It is comprised of 8 items. Answers range from 1 (strongly disagree) to 4 (strongly agree) on a four-point scale. Neglect Scale has a high level of reliability .89 as well as constructs validity. The total score for MNPS involves reverse scoring of item 1, 5 and 7. Mean for 8 items is calculated such that high score indicates high parental neglect.

Social Media Addiction Scale

It is a self-rating tool to measure severity of maladaptive social media use. There are a total of 10 items on this scale. It is a 5-point Likert scale ranging from 1 to 5 to indicate how well each item described them. A rating of 1 denotes "Never," a rating of 2 "Rarely," a rating of 3 "Sometimes," a rating of 4 "Usually," and a rating of 5 denotes "Always." The sum of the scores for each item determines the final score. A higher score denotes a greater level of addiction to social media. Cronbach's alpha was found to be strong .82 (Karadag et al., 2015). Additionally, the SMAS internal consistency analysis for the current study revealed strong reliability coefficient ($= .78$)

Conduct Problem Scale

There are five items total, and each is rated on three points (0 = untrue, 1 = little bit true, and 2 = certainly true). Item number 2 should be reverse scored. The sum score range from zero to ten. High scores show a high likelihood of behavioral issues (Goodman et al., 2010). Alpha reliability

coefficient of the scale is .7. All of the scales employed have been demonstrated to be both psychometrically sound and conceptually valid.

Statistical Analyses

Relevant statistical analyses were run on data by using SPSS 26.0. Descriptive statistics was carried out for all study variables. Relationship between the variables was measured by Pearson Product Moment Correlation Coefficient was used to assess relationship among study variables. Hierarchical regression analysis was run in order to test the moderation effect in accordance with Model 1. According to predicted hypothesis and the model, the moderator (SMA) was assumed to affect the relationship between PN and CP.

RESULTS

In the present study data of 370 adolescent students was analyzed (184 = Non- social media addicts, 186 = Social media addicts). Alpha reliability coefficient for PNS was .83, for CPS was .62 and SMAS was .78 which revealed scales were reliable.

Table No. 2 Intercorrelations among Study Variables (N=370)

Variable	I	II	III	<i>M</i>	<i>SD</i>
I.PN	-	.43**	.27**	22.38	5.45
II.SMA	-	-	.35**	33.66	6.28
III.CP	-	-	-	3.74	1.76

Note. PN = parental neglect; SMA = social media addiction; CP = conduct problems; *M* = mean; *SD* = standard deviation.

Results in table 2 showed parental neglect had statistically significant and positive relationship with social media addiction as well as conduct problems. Significant positive relationship was also revealed between social media addiction and conduct problems.

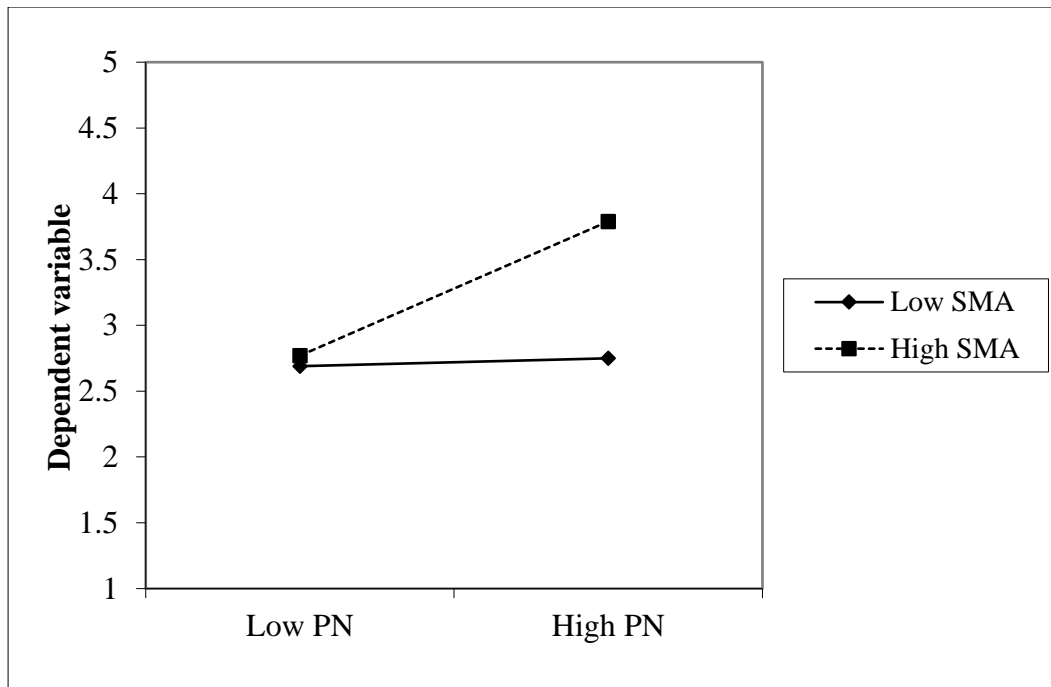
Table No. 3 Hierarchical Regression Analysis predicting CP from PN and SMA

Predictor	ΔR^2	<i>B</i>
Step I	.07***	
Parental Neglect		.27***
Step II	.06***	
Parental Neglect		.15*
Social Media Addiction		.28***
Step III	.05***	
Parental Neglect		.09*
Social Media Addiction		.23***
PNS * SMA		.24***
Total R^2	.18	

Note. *** $p < .001$.

Table 3 depicted statistically significant positive relationship between PN and CP $\{\beta = .27***, t = 5.43, p = .001\}$ where PN explained 7.4% change in the CP $\{\Delta R^2 = .074, \Delta F(1, 368) = 29.52, p = .001\}$. In the second step SMA also predicted CP $\{\beta = .28, t = 5.20, p = .001\}$ and described further change of 6.4% in CP $\{\Delta R^2 = .064, \Delta F(2, 367) = 27.05, p = .001\}$. Lastly in the third step the interaction term for PN*SMA significantly predicted conduct problems positively $\{\beta = .24, t = 4.78, p = .001\}$ and described further change of 5.1% in it $\{\Delta R^2 = .051, \Delta F(3, 366) = 22.87, p = .001\}$. As a whole 18.9% change occurred in conduct problems.

Figure 2 Moderation Effect of SMA between PN and CP



As shown in figure 1 there exist statistically significant positive relationship between independent variable (PN) and dependent variable (CP). Social media addiction (Moderator) and conduct problems (CP) are significantly and positively associated. Social media addiction act as a moderator in the relationship between parental neglect and conduct problems. It revealed that individuals who scored high on social media addiction scale (SMA) will have strong positive relationship between parental neglect and conduct problems. Parental neglect, social media addiction and their interaction caused 18.9% of total change among adolescents exhibiting conduct problems.

Table No. 4 t scores of Male and Female Adolescents on Parental Neglect, Social Media Addiction and Conduct Problems(N = 186)

Variable	Male Adolesc. (89)		Female Adolesc. (97)		<i>t</i> (184)	<i>p</i>	95% CI		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
PN	25.69	2.26	24.66	2.63	2.76	.01	.29	1.77	.42
SMA	33.93	6.17	33.14	4.55	3.48	.001	1.21	4.37	.15
CP	5.44	1.56	4.15	1.60	5.53	.001	.83	1.74	.82

Note. *M* = mean; *SD* = standard deviation; PN = parental neglect; SMA = social media addiction; CP = conduct problem; CI = confidence interval; *LL* = lower limit; *UL* = upper limit.

Table 4 revealed statistically significant gender differences on parental neglect, social media addiction and conduct problems. Results showed PN was higher among male adolescents ($M = 25.69$, $SD = 2.26$) as compared to female adolescents ($M = 24.66$, $SD = 2.63$). Social media addiction was also high among male adolescents ($M = 33.93$, $SD = 6.17$) as compared to female adolescents ($M = 33.14$, $SD = 4.55$) and male adolescents also scored high on CP ($M = 5.44$, $SD = 1.56$) as compared to female adolescents ($M = 4.15$, $SD = 1.60$).

DISCUSSION

It might be expected that those with higher levels of parental neglect have more conduct problems. Prior investigation has not always revealed this to be the case. In order to report this important matter, it was hypothesized that the possibility of a relationship between parental neglect and adolescent conduct disorder is moderated by social media addiction. It was shown that social media addiction was a significant moderator of the association between parental neglect and conduct problems among adolescents.

In the present study parental neglect, social media addiction and conduct problems were positively associated with each other (see table 2). Previous research has given support to these findings, which state neglectful parenting leads to adverse outcomes (Jonson-Reid et al., 2012).

Positive link between parenting practices (neglected) and maladaptive social media use was supported by prior findings (Andangsari et al., 2013; Lee et al., 2019; Woo, 2013). Harsh parenting techniques significantly enhance attitudes toward media addiction (Kim & Chun, 2018). Social media addiction was also found to be significantly correlated with conduct problems. Adolescents who spend more time on social media are more prone to adverse effects on their behavior (Contreras, 2016; Jaoude et al., 2020), which gives support to our findings.

Many researchers have found adverse consequences of parental neglect, such as hostility and violent actions (Lahey & Waldman, 2012). Complications associated with conduct disorder include redundancy, separation, apprehension, melancholy, destructive actions, and drug dependence (Levy, 2019; Ogel, 2014). It was observed that without social media addiction, it may be related to fewer behavioral problems. On the other hand, in the context of social media addiction, the emergence of behavioral problems would seem to increase. It is evident that the interaction effects are robust; with the result that social media addiction controls the association between parental neglect and conduct disorder. The social media addiction variable is essential in giving the explanation for the earlier discrepant outcomes and opens up new paths for research.

Future studies concerning the negative impact of social media addiction would be valuable. Prior studies report that adolescents who spend more time on social media are more prone to facing adverse effects on their behavior (Contreras, 2016; Jaoude et al., 2020; Strickland, 2014). That is, the more social media addicted a person is, the more they will exhibit behavioral problems as opposed to adolescents who are not media addicts and use social media for educational and informative purposes. Additionally, the internet also offers a source to help youths with mental health issues (Monroe, 2019).

Significant gender differences were found on both the social media addiction scale as well as the conduct problems scale, as shown in table 4. However, additional analysis revealed statistically significant gender differences on the parental neglect scale. Previous studies have demonstrated gender differences with respect to social media addiction (Alnjadat et al., 2019) that are in accordance with our results. However, some studies report excessive social media use is high in females as compared to males (Griffiths, 2013; Abi-Jaoude et al., 2020). Also, some previous studies reported non-significant gender differences in social media addiction (Lin et al., 2009; Wu et al., 2016). According to the current study, male adolescents have a higher rate of social media addiction than female adolescents. Boys were found to be more involved in conduct problems as compared to girls (Storvoll & Wichstrom, 2003).

Limitations and Suggestions

The current study is the first to examine the relationship between social media addiction, parental neglect, and conduct disorder among adolescents. Yet, there are certain limitations to address.

First, participants belonged to a particular province of Pakistan; therefore, the generalizability of our research findings to other provinces of Pakistan and other countries may be questioned. To acknowledge variations among other cultures prevailing in Pakistan, future research should be conducted with a large sample from different provinces of Pakistan.

Second, self-reported questionnaires were used for data collection, which, as mentioned earlier, may be affected by socially desirable answers. Further research should repeat the current findings by controlling this limitation. It would also be useful to measure conduct disorder using more objective behavioral techniques where possible.

Third, longitudinal studies are needed to help find the cause and effect relationships between these variables. It is assumed that there is a relationship in which parental neglect leads to conduct problems, but it may be that it is through the environment or peer group influence that one learns to have more conduct problems, or that there is no causal relationship between parental neglect and conduct disorder and both are outcomes of the excessive use of social media devices.

It is further suggested that if parents' media use was examined, it would have provided better insight into the study.

Implications

Protective role can be played by both parents as well as teachers. First time limit can be set according to the age of child or an adolescent for media use. Second they should regularly monitor their children. Third interventions must involve refining parent child bond to enhance healthy functioning of family instead of direct restriction on media use. Special attention should also be paid to balance child basic needs to lessen negative consequences.

CONCLUSION

It is concluded that results of the study seem to offer an answer to what has become an inexplicable query in the literature about parental neglect concerning the inconsistency between studies testing for association between parental neglect and adolescents behavioral problems.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflicts of interest.

Disclaimer The views expressed in this article are the authors' own.

Ethics Approval Ethical standards in all steps of the research were followed.

Consent for Participation Informed consent was obtained from all participants who were included in the study.

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