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Psychopathology and resilience in relation to abuse in childhood among youth first referred to the psychiatrist

Povezanost psihopatologije i rezilijentnosti sa zlostavljanjem u detinjstvu kod mladih upućenih na prvi psihijatrijski pregled

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Abstract

Background/Aim. Child abuse may be related to adverse psychological outcomes in adult life. However, little is known about specific clinical, family and resilience profiles of adolescents that have experienced child abuse. The aim of this study was to investigate clinical symptoms, family functioning and resilience characteristics of adolescents with the experience of abuse, first referred to psychiatrists. **Methods.** The study included 84 young participants (mean age 14.90 ± 3.10, ranging from 11 to 18 years) as consecutive first referrals to the Clinic for Children and Youth of the Institute of Mental Health, Belgrade, Serbia. The sample consisted of two groups, based on the Child Abuse Matrices of Risks. The first group included adolescents with the experience of abuse in childhood (n = 38, 13 males, 25 females), whereas the second, control group, comprised of non-abused adolescents (n = 47, 20 males, 27 females). The presence of abuse was evaluated by the Child Abuse Matrices of Risks. The study used the following questionnaires: Youth Self-Report (YSR), Adolescent Resilience Attitudes Scale (ARAS), and Self-Report Family Inventory (SFI). **Results.** Significant differences were found only among females. According to YSR, the abused girls had significantly higher scores on the Delinquent Behavior scale and marginally higher scores on Anxious/Depressed and Social Problems scales. Analyses of the SFI showed significantly lower family functioning among the girls with the child abuse history for all scales except for the Directive Leadership. The abused girls also showed significantly lower scores on the Insight scale, and marginally lower Initiative scores at the ARAS. **Conclusions.** These findings may have practical application in the creation of specific preventive and treatment strategies, particularly focused on delinquent tendencies, as well as on enhancing resilience through providing positive environments within families, schools and communities.

Key words:
psychopathology; resilience, psychological; child abuse; adolescent psyhiatry.

Apstrakt

Uvod/Cilj. Zlostavljanje u detinjstvu može biti uzrok različitih psiholoških problema kod odraslih osoba. Malo se, međutim, zna o specifičnim kliničkim i porodičnim profilima, kao i karakteristikama rezilijentnosti adolescenata koji su doživeli zlostavljanje u detinjstvu. Cilj našeg rada bio je ispitivanje simptoma, porodičnog funkcionisanja i rezilijentnosti adolescenata sa iskustvom zlostavljanja u detinjstvu upućenih na psihijatrijski pregled. **Metode.** Uzorak se sastojao od 84 konsekutivno regrutovana mlada ispitanika (prosečne starosti 14,90 ± 3,10, u rasponu od 11 do 18 godina) upućena na prvi pregled u Kliniku za decu i omladinu Instituta za mentalno zdravlje u Beogradu, koji su na osnovu Matrice rizika za zlostavljanje i zanemarivanje dece bili podeljeni u dve grupe. Prvu grupu činili su adolescenti sa iskustvom zlostavljanja u detinjstvu (n = 38, 13 dečaka, 25 devojčica), a drugu, kontrolnu grupu, adolescenti bez iskustva zlostavljanja u detinjstvu (n = 47, 20 dečaka, 27 devojčica). U istraživanju su korišćeni sledeći upitnici: Upitnik za samoprocenu adolescenata (*Youth Self-Report* – YSR), Skala adolescentnih rezilijentnih stavova (*Adolescent Resilience Attitudes Scale* – ARAS) i Upitnik za porodicu, (*Self-Report Family Inventory* – SFI). **Rezultati.** Značajne razlike pronađene su kod adolescentkinja. Na upitniku YSR, zlostavljane adolescentkinje imale su značajno više skorove delinkventnog po-

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našanja i marginalno veće skorove anksioznosti/depresivnosti i socijalnih problema. Analize upitnika SFI pokazale su značajno lošije funkcionisanje kod zlostavljanih adolescentkinja u svim podskalama osim na podskali direktivnog vođstva. Na upitniku ARAS, zlostavljane adolescentkinje imale su značajno niže skorove na podskali uvida i marginalno niže skorove na podskali za inicijativu. **Zaključak.** Navedeni rezultati mogli bi imati praktičnu primenu pri planiranju specifičnih preventivnih strategija i tretmana koji se posebno fokusiraju na delinkventne tendencije kao i na jačanje rezilijentnosti obezbeđivanjem pozitivnog okruženja u okviru porodice, škole i zajednice.

Ključne reči:
psihopatologija; rezilijentnost, psihološka; zlostavljanje dece; psihijatrija, adolescentna.

Introduction

Adolescent victims of any form of previous childhood abuse are at greater risk for developing mental health problems in comparison to young persons who have not been abused [1–6]. As a concept, resilience was introduced in the field of child abuse and neglect in order to encourage investigators to think in terms of protective, rather than risk factors. It has been suggested that a resilient person has the capacity to withstand, overcome or recover from a serious threat [7]. Resilience is also conceptualized as the strength of prosocial skills and emotional regulation [8]. According to Biscoe and Harris [9], being more resilient means having better insight or understanding of the events, independence from others, capacity for forming relationships, initiative to solve problems, more frequent use of humor, creativity and a finer sense of morality. Factors recognized as protective belong to personal, familial and social domains, and the effects of these factors depend on risk constellations and environmental conditions [10], implying the possibility for resilience to be a plastic phenomenon through developmental age, modeled through the interaction of an individual with various environmental experiences [11–13]. Therefore, it may be hypothesized that resilience could have a bidirectional relationship with adverse childhood, and that resilience disturbances in abused adolescents may be different from the decreased resilience in adolescents with non-abuse related psychopathology.

Resilience depends on the supportive family system [14], helping adolescents to successfully adapt to adversity. Overcoming adversities and being resilient are different depending on the presence or absence of consistent, loving, caring mentoring adults who are helping the adolescent to overcome this troublesome period of life. Stable warm relationship with an adult person was found to be a protective factor in development of dissociative pathology and other deleterious effects of childhood abuse such as transgenerational abuse cycle [15].

Previous studies that have investigated the effects of child abuse have shown that victims are in more risk for later psychopathology, including conduct disorder, antisocial personality disorder, aggression, poor self-esteem, cognitive problems, poor academic achievements, anxiety and depression, and suicidal behaviors, compared to non-abused individuals from general population [1, 5, 6, 16]. Other studies compared abused persons with psychological disturbances with more resilient, abused adolescents that did not develop psychiatric symptoms [17]. However, there are insufficient data about specific abuse-related clinical features in adolescent population of first-time psychiatric patients. Furthermore, there are not enough data on resilience and family factors among abused clinical adolescents compared to adolescent psychiatric patients with no abuse history. Such findings would be helpful in differentiating specific effects of child abuse from a wide range of general adolescent non-psychotic psychopathology unrelated to abuse, and give directions for planning specific preventive and therapeutic strategies. Therefore, our study was aimed at investigating clinical symptoms, resilience factors and family functioning in adolescents with the experience of abuse, at their first referral to psychiatric services.

Methods

The study sample consisted of 84 adolescents (33 males, 52 females, mean age 14.90 ± 3.10, ranging from 11 to 18 years) recruited as consecutive first referrals to the Clinic for Children and Youth of the Institute of Mental Health, Belgrade, Serbia, in the period 2006–2010. The first group of participants included adolescents with the experience of abuse in childhood (n = 38, 13 males, 25 females), whereas the second, control, group consisted of non-abused adolescents (n = 47, 20 males, 27 females).

The first, the group of abused adolescents was selected from the Unit for Mental Healthcare of Abused and Neglected Children and Adolescents. Abuse was confirmed according to the Child Abuse Matrices of Risks used in the National Child Abuse Protection Protocol [18]. Most referrals came from regional centers for social work, pediatric units, from the non-abusive family member or adolescents themselves. In the group of abused boys, 5 of them had been exposed to physical abuse, 3 to emotional abuse and 5 boys to both physical and emotional abuse. Six girls, from the total of 25, had been sexually abused, 10 emotionally abused, 3 physically abused and 6 girls had suffered both physical and emotional abuse. In almost all cases of physical and emotional abuse the perpetrators were the victim's father (most frequently in the cases of physical abuse) or mother (most frequently in the cases of emotional abuse). In fewer cases (almost exclusively cases of sexual abuse) perpetrators were the victim's brother or sister (in one case of physical abuse and in two cases of sexual abuse) or the victim's grandfather (one case of sexual abuse), cousin (one case of sexual abuse) or peers (two cases of sexual abuse). The second, non-abused group of adolescents included consecutive first referrals at the Outpatient Department for Children and Adolescents. About 42% of adolescents in the outpatient group were diag-

nosed as having mixed emotional and conduct disorder, 13% with conduct disorder, 35% with depression, and 10% with adjustment disorders. Exluded from the study were adolescents with schizophrenia, schizoaffective and affective psychosis, mental retardation and pervasive developmental disorders. Adolescents from the second group had no experience of abuse according to the Child Abuse Matrices of Risks used in the National Child Abuse Protection Protocol [18].

All study assessment was conducted during psychiatrists evaluation through clinical interviews with adolescents, as well as with the parents.

The two groups were not different in gender or age ($p > 0.05$).

The study was approved by the Ethical Committee of the Institute of Mental Health.

The participating adolescents were further assessed by self-report instruments that were previously adjusted for Serbian population by bidirectional translations and semantic, technical and conceptual analysis: 1) Youth Self–Report (YSR) is a measure of various behavioral and emotional problems in adolescents aged 11–18 years [19]. The questionnaire consists of 112 items and results in 8 syndrome scales (withdrawal, somatic complaints, anxiety/depression, social problems, thought problems, attention problems, delinquent behavior, aggressive behavior, and self-destructive/identity problems), as well as the overall externalizing and internalizing score. Items and scores are gender specific (for example, there is a self-destructive/identity problems scale in YSR only for boys); 2) Adolescent Resilience Attitudes Scale (ARAS) is a self report instrument intended to measure the resilience of adolescents [9]. This 67 items questionnaire includes seven resilience factors: Independence, Insight, Relationships, Initiative, Creativity, Humor and Morality as well as General Resilience defined as persistence in overcoming troubles and belief that troubles can be resolved; 3) Self-Report Family Inventory (SFI) is a 36 items questionnaire intended to assess family functioning [20]. It includes the following factors: Family Health, Conflict, Cohesion, Directive Leadership, Expressiveness. Lower scores represent greater competence on all SFI scales.

Data were separately statistically examined for genders, according to the considerable gender differences in YSR scale definitions. Descriptive data were presented through means and standard deviations for both study groups. Differences were analyzed by the means of multivariate analysis of variance for all the scales of the explored variables, and further on by univariate analysis of variance, if the differences were significant.

Results

The means and standard deviations of the YSR subscale scores for the abused and non-abused clinical groups of boy- and girls are presented in Table 1.

The findings of separate multivariate analyses of variances for boys and girls showed statistically significant differences between the abused and non-abused girls (but not between the abused and non-abused boys) in the clinical population with respect to their mean scores on the Youth Self-Report scales (for girls: Wilks' $\Lambda = 0.69$, $F (8; 42) = 2.42$, $p = 0.03$, multivariate $\eta 2 = 0.32$; for boys: Wilks' $\Lambda = 0.84$, $F < 1$). Therefore, the univariate analyses of variances for each scale of YSR were conducted as follow-up tests only for girls. These analyses showed a significant difference between the means of the abused and non-abused girls on the Delinquent Behavior scale ($F (1; 49) = 4.46$, $MSe = 16.01$, $p = 0.04$, $\eta 2 = 0.08$), with higher values for the abused group, whereas the differences on the Anxious/Depressed and Social Problems scales were marginally significant (Anxious/Depressed scale: $F (1; 49) = 3.82$, $MSe = 59.23$, $p = 0.06$, $\eta 2 = 0.07$; Social Problems scale: $F(1;49) = 3.23$, $MSe = 6.84$, $p = 0.07$, $\eta 2 = 0.06$), with higher scores for the abused females (differences marked in Table 1).

The means and standard deviations of the ARAS subscale scores for the abused and non-abused clinical groups of boys and girls are presented in Table 2. The findings of multivariate analyses of variances with the subscales of Adoles-

Table 1

Means (and standard deviations) of the Youth Self-Report (YSR) syndrome subscale scores for the abused and non-abused boys and girls, with the difference significance presented for girls

Scale	Boys		Girls		
	abused (n = 13)	non-abused clinical (n = 20)	abused (n = 24)	non-abused clinical (n = 27)	UAV sig.:
Withdrawn	4.00 (2.65)	3.80 (2.50)	5.08 (3.51)	5.00 (2.60)	/
Somatic complains	4.15 (4.00)	3.20 (2.98)	4.71 (3.20)	4.81 (3.01)	/
Anxious/ Depressed	10.15 (8.01)	8.70 (6.04)	14.63 (9.06)	10.41 (6.25)	‡
Social problems	4.15 (2.27)	3.58 (2.49)	4.88 (2.61)	3.56 (2.62)	‡
Thought problems	2.15 (2.44)	2.00 (2.08)	3.79 (3.41)	2.93 (3.16)	/
Attention problems	6.92 (5.04)	7.00 (3.08)	8.71 (4.54)	7.30 (3.78)	/
Delinquent behavior	4.31 (4.52)	5.00 (4.26)	6.00 (4.40)	3.63 (3.61)	*
Aggressive behavior	10.00 (6.90)	9.20 (6.91)	11.29 (6.91)	9.89 (5.98)	/
Self-destructive/Identity problems†	4.62 (4.54)	4.00 (4.53)			/
Internalizing	17.62 (12.61)	15.20 (9.55)	23.25 (13.60)	19.37 (8.69)	/
Externalizing	14.31 (10.93)	14.20 (10.28)	17.29 (10.77)	15.29 (10.00)	/

UAV sig. – Difference significance after univariate analysis of variance (conducted only for girls because the preceding multivariate analysis of variance was non-significant in boys); * – Statistically significant ($p \leq 0.05$); ‡ – Marginally significant ($p \leq 0.07$); / – Not significant ($p \geq 0.07$). †Note: There is a self-destructive/identity problems scale in YSR only for boys.

cent Resilience Attitudes Scale as dependent variables, conducted separately for boys and girls, showed significant differences on these subscales between the abused and non-abused adolescents but only in the group of girls (for girls: Wilks' $\Lambda = 0.73$, $F(7;43) = 2.32$, $p = 0.04$, multivariate $\eta 2 = 0.27$; for boys: Wilks' $\Lambda = 0.81$, $F < 1$).

Follow-up tests (univariate analyses of variances for each subscale) were conducted only for the girls. The findings of univariate analyses of variances showed a significant mean difference between the abused and non-abused girls on the Insight subscale of the ARAS, with lower scores among the abused girls, and a respective difference on the Initiative subscale (lower in abused girls) approaching the significance (Insight subscale: $F(1; 49) = 7.92$, $MSe = 138.16$, $p = 0.007$, $\eta 2 = 0.14$; Initiative subscale: $F(1;49) = 3.45$, $MSe = 78.35$, $p = 0.07$, $\eta 2 = 0.07$) (differences marked in Table 2).

Table 2

Means (and standard deviations) of the Adolescent Resilience Attitudes Scale (ARAS) subscale scores for the abused and non-abused boys and girls, with the difference significance presented for girls

Scale	Boys		Girls		
	abused (n = 12)	non-abused clinical (n = 20)	abused (n = 26)	non-abused clinical (n = 26)	UAV sig.:
Insight	61.19 (13.48)	64.00 (13.02)	59.09 (10.96)	68.35 (12.47)	*
Independence	66.48 (12.44)	70.78 (12.43)	57.42 (12.00)	62.39 (9.02)	/
Relationships	69.50 (4.98)	66.50 (10.15)	67.20 (8.93)	67.85 (11.22)	/
Initiative	64.00 (10.23)	67.90 (13.74)	62.32 (6.87)	66.92 (10.40)	‡
Creativity and humor	60.00 (7.72)	60.70 (10.12)	59.68 (9.79)	60.54 (10.50)	/
Morality	67.78 (11.20)	67.08 (8.29)	67.67 (7.58)	68.27 (9.75)	/
General resilience	72.22 (9.92)	73.33 (14.13)	66.49 (13.74)	70.51 (13.84)	/

UAV sig. – Difference significance after univariate analysis of variance (conducted only for girls because the preceding multivariate analysis of variance was non-significant in boys) ; * – Statistically significant ($p \leq 0.05$); ‡ - Marginally significant ($p \leq 0.07$); / – Not significant ($p > 0.07$).

Table 3

Means (and standard deviations) of the Self-Report Family Inventory (SFI) subscale scores for the abused and non-abused boys and girls, with the difference significance presented for girls

Scale	Boys		Girls		
	abused (n = 12)	non-abused clinical (n = 18)	abused (n = 23)	non-abused clinical (n = 27)	UAV:
Family health	55.25 (14.67)	45.67 (13.73)	63.26 (15.87)	49.78 (15.75)	*
Conflict	33.75 (6.20)	27.11 (8.82)	36.43 (10.97)	29.07 (8.48)	*
Cohesion	14.83 (4.43)	12.83 (4.74)	16.91 (4.75)	13.96 (4.39)	*
Directive leadership	8.25 (2.99)	8.06 (2.46)	7.74 (3.02)	8.93 (2.79)	/
Expressiveness	15.33 (4.46)	11.11 (5.54)	17.83 (6.65)	12.00 (5.30)	*

UAV sig. – Difference significance after univariate analysis of variance (conducted only for girls because the preceding multivariate analysis of variance was non-significant in boys); * – Statistically significant ($p \leq 0.05$); / – Not significant ($p \geq 0.07$).

The means and standard deviations of the SFI subscale scores for the clinical groups of the abused and non-abused girls are shown in Table 3.

As in previously presented analyses the mean differences between the abused and non-abused boys with respect to the results on the Self-Report Family Inventory did not reach significance (Wilks' $\Lambda = 0.82$, $F(5; 24) = 1.06$, $p = 0.40$). However, there were significant differences between the abused and non-abused females with respect to their mean scores on the Self-Report Family Inventory (Wilks' $\Lambda = 0.76$, $F(5; 44) = 2.74$, $p = 0.03$, multivariate $\eta 2 = 0.24$). Follow-up univariate analyses of variances showed that abused and non-abused girls were significantly different with respect to the mean scores on all of the subscales of SFI except for the Directive Leadership (Family Health: $F(1; 48) = 9.04$, $MSe = 249.86$, $p = 0.004$, $\eta 2 = 0.16$; Conflict: $F(1; 48) = 7.15$, $MSe = 94.12$, $p = 0.01$, $\eta 2 = 0.13$; Cohesion : $F(1;48) = 5.20$, $MSe = 20.77$, $p = 0.03$, $\eta 2 = 0.10$; Expressiveness: $F(1;48) = 11.88$, $MSe = 35.49$, $p = 0.001$, $\eta 2 = 0.20$), with higher scores in abused girls (differences marked in Table 3).

Discussion

Child and adolescent abuse is a major risk factor for a variety of behavior problems and psychiatric disorders in youth [1] as well as for detrimental physical and psychological problems in adulthood [21]. It is shown that abused persons have a variety of psychopathological symptoms compared to non-abused persons from the general population [16]. In our study, the abused adolescents had clinical specificities in comparison to non-abused ones only among females, reporting significantly more frequent delinquent behavior, and marginally more symptoms of anxiety, depression and social problems. These specificities are in accordance with other findings associating child abuse with depressive symptoms, anxiety, and antisocial behavior [16]. This can be explained by the fact that adolescents with a history of early abuse interact with their friends in a less intimate fashion compared to non-abused adolescents [1, 22], and are more likely to exhibit delinquent behavior [23]. One of the proposed mechanisms is identification with the aggressor [24] that could explain why victims are more prone to aggressive behavior [25] and at higher risk for intergenerational transmission of abuse [26]. The girls

growing up in abusive families develop a kind of "self-preservational" behavior as an act of escape from abusive home-life (delinquency and truancy). They engage in violence in response to their own victimization whereas boys engage in aggressive acts because of other reasons (such as peer pressure) [27]. Our findings might contribute to understanding of the general relationship between abuse and antisocial features, emphasizing it as a potentially pathognomonic dimension of abuse-related psychopathology, not only in comparison to the general population, but also in comparison to non-abused adolescents with psychological disturbances.

The clinical differences found in females in our study may be closely related to the abuse and with the general family dysfunction found among girls. The ones with the experience of abuse had predictably lower family functioning in terms of being less competent (healthy) with more severe conflicts, lower cohesion and with less emotional expressiveness. These findings support previous findings that abused children experience their families as more conflicted and less cohesive. Poor social support may lead to juvenile delinquency [28] and adolescents with high resilient capabilities have more cohesive families, they rely more on immediate family support and have more positive concepts of themselves and their families [29]. Some authors agree that poor parenting skills, parental stress, poor interaction between parents and adolescents, poverty, young parents, parental criminal behaviour or mental health problems and low parental education are connected with more psychological disturbances in their children or adolescents [30]. Similar factors such as young motherhood, lack of positive involvement, low empathy, unstable home environment have been related to abused adolescents [31]. On the other hand, family factors such as stable environment and supportive relationships among family members appear to be linked with resilience [29].

Despite the severe risks, factors of resilience help adolescents thrive and have the ability to successfully adapt to adversity [32, 33]. Regarding the fact that synapses are constantly remodeled following significant experience in a permanently renewed manner [34], resilience factors may be closely, bidirectionally related to the child abuse. Therefore, we hypothesized that resilience disturbances in abused adolescents may be different from the disturbed resilience in adolescents with psychopathology unrelated to abuse. Our findings support this assumption, showing that abused girls had significantly lower insight – the ability to sense, know and understand, and marginally lower initiative, the capacity for problem solving with goal directed behavior. This is in accordance with the assumption that insight and initiative may relate closely to the phenomenon of personal control, previously hypothesized as the key factor of well-being and resilience following childhood abuse [21]. There may be a reciprocity of the level of insight to the tendency to dissociation that is found to be an important consequence of child abuse [35], with the role of protecting the ego-function by decreasing experience of active involvement in the adverse situation. Thus, lower insight may be patognomonic of abuse-related vulnerability in comparison with the vulnerability of non-abused adolescents.

Among male adolescents, we found no differences in any of the examined variables. This may be related to the smaller number of the abused boys which may underestimate the significance of differences that, on some scales, were found to be similar to the female subsample but without statistical confirmation. Another explanation could be related to differences in male and female vulnerability to psychopathology. For various biological and social reasons, males are more prone to disturbances before birth, to accidents or violence victimization, and have a shorter average lifespan than females [36]. They are also more likely than females to have pervasive developmental disorders [37]. This specific gender vulnerability may result in males having stronger adverse reaction to different kinds of negative stimuli that produce psychopathology, related or not related to child abuse.

There are some limitations of this study. All types of abuse were aggregated in analyses, because of the small frequencies of various abuse forms. Furthermore, analyses in a smaller sample of males may have resulted in significance underestimation. Even though age of study participants may be of particular relevance when it comes to resilience and effects of abuse and neglect, due to the very small sizes of specific age groups in this study it was not possible to differentiate the effects of abuse and/or neglect between them and determine if any statistically significant differences exist. In addition, part of the assessment was based on psychiatrists' evaluation through clinical interviews with adolescents, as well as with the parents who, in cases of child abuse could have reported less reliable information and cooperation, emphasizing the need for multi-informant reports about the adolescent behavior in different settings.

Future research should include multi-informant studies with larger sample for both genders and for different types of child abuse, which could give the possibility to examine these factors as covariates in multivariate analyses. Furthermore, future studies could bypass the age limitation by using larger samples or by focusing on specific age groups. Also, analyses could engage additional factors, such as interests and enjoyment in school, including the out-of-family relations with peers and other important persons, as well as non-abusive traumatic events.

Conclusion

Our results show a specific clinical, family and resilience profile for abused adolescent females at their first referral to psychiatric service, compared to their non-abused, first referred peers of the same gender, whereas such specificity was not found among males. These findings may have practical implications in terms of greater focusing on delinquent tendencies among young victims of child abuse (especially females), while the resilience could be enhanced by encouraging the creation of positive environments within families, schools and communities.

The assessment of risk, protection and resilience may help in planning early intervention strategies aimed at pre-

venting abuse and neglect and its adverse outcomes such as behavioral and emotional problems. Early intervention programs that successfully target a number of specific risk and protective factors may contribute to prevention of multiple problems, increasing the chance for better outcomes for every adolescent victim of abuse and neglect.

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