Therapist's interpersonal style and therapy benefit as the determinants of personality self-reports in clients

Način ophođenja terapeuta prema klijentima i korist od psihoterapije kao odrednice samoprocene ličnosti klijenata

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Abstract

Background/Aim. In (counter)transference relationship therapist's interpersonal style, implying the perceived relation of therapist to a client (patient) in terms of control, autonomy, care and positive feedback, has been shown to be important. The aim of our study was to assess the relationship between therapist's interpersonal style and clients' personality self-reports. Within therapist's interpersonal style, preliminary validation of the Therapist's Interpersonal Style Scale has been conducted, which included double translation method, exploratory factor analysis, confirmatory factor analysis, as well as the reliability tests of the derived components. **Methods.** This research was conducted on a group of 206 clients, attending one of the four psychotherapy modalities: psychoanalysis, gestalt therapy, cognitive-behavioral and systemic family therapy. Beside Therapist's Interpersonal Style Scale, Big Five Questionnaire and Therapy Benefit Scale were administered, showing good internal consistency. **Results.** Principal component analysis of therapist's interpersonal style singled out two components Supportive Autonomy and Ignoring Control, explaining 42% of variance. Two-factor model of the therapist's styles was better fitted in confirmatory factor analysis than the original 4-factor model. Structural model showing indirect and direct effects of therapist's interpersonal styles on self-reports in clients indicates good fitness ($\chi^2_{(12)}$ = 8.932, p = 0.709; goodness-of-fit index = 0.989), with Ignoring Control having direct effect on Stability, Supportive Autonomy on Therapy Benefit, and Therapy Benefit on Plasticity. **Conclusion.** The results of this study indicate the importance of further research on therapist's interpersonal style, as well as further validation of the instrument that measures this construct. Besides, a client's perception that the therapy is being helpful could instigate more explorative and approach-oriented behavior, what indirectly might contribute to a client's stability.

Key words:
psychotherapy; physician-patient relations; personality; personality assessment; questionnaires.

Apstrakt

Uvod/Cilj. U (kontra)transfernom odnosu značajan je stil terapeuta, koji podrazumeva poimanje relacije klijenta sa terapeutom u smislu kontrole, autonomije, brige i pozitivne povratne informacije. Cilj našeg istraživanja bio je ispitivanje povezanosti interpersonalnog stila terapeuta i samoprocene ličnosti klijenta. U okviru načina ophođenja terapeuta prema klijentima sprovedeno je i prethodno vrednovanje skale načina ophođenja terapeuta prema klijentima koje je obuhvatilo metod dvostrukog prevoda, eksploratornu faktorsku analizu, konfirmatornu faktorsku analizu i ispitivanje pouzdanosti izdvojenih faktora. **Metode.** Istraživanje je rađeno na grupi od 206 klijenata, koji su bili na psihoterapiji primenom jednog od četiri psihoterapijska modaliteta: psihoanalize, geštalt terapije, kognitivno-bihverioralne i porodične sistemske terapije. Pored skale interpersonalnog stila terapeuta, primenjene su i skala procene za Velikih pet i skala percepcije koristi psihoterapije, sa zadovoljavajućom unutrašnjom stabilnošću. **Rezultati.** Analizom glavnih komponenti načina ophođenja terapeuta izdvojena su dva faktora, suportivna autonomija i ignorišuća kontrola, koji objašnjavaju 42% varijanse. Model načina ophođenja terapeuta sa dva faktora pokazao je bolje uklapanje u konfirmatornu faktorsku analizu od originalnog modela četiri faktora. Strukturalni model, koji prikazuje direktne i indirektne efekte načina ophođenja terapeuta na samoprocenu ličnosti klijenta pokazuje dobru podešenost ($\chi^2_{(12)}$ = 8,932, p = 0,709; *goodness-of-fit index* = 0,989), pri čemu ignorišuća kontrola direktno doprinosi stabilnosti, suportivna autonomija percepciji koristi terapije, a percepcija koristi terapije plastičnosti. **Zaključak.** Rezultati ove studije upućuju na značaj daljeg istraživanja načina ophođenja terapeuta prema klijentima i vrednovanja instrumenta kojim se meri ovaj odnos. Pored toga, osećaj klijenta da je terapija korisna mogao bi potaknuti više istraživačkog ponašanja i ponašanja orijentisanog na cilj, što bi indirektno moglo doprineti stabilnosti klijenta.

Ključne reči:
psihoterapija; lekar-bolesnik odnosi; ličnost; ličnost, procena; upitnici.

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Introduction

Self-determination theory (SDT) [1], the theory of basic psychological needs promotes autonomy as a sense of volition and psychological freedom [2], what is of quintessential significance for client satisfaction in the process of psychotherapy. Clients have differential motivations for therapy that is susceptible to change depending on external factors such as therapist's interpersonal style (TIS) [3]. Therapist's style can be self-determination oriented when promoting support, involvement and information, or controlling, when manifested as the opposite. Recent studies have come to interesting discovery that it is not the visible and superficial trademarks of a therapist, such as sociodemographic variables, professional experience or sex, the level of training and type of orientation that contribute to therapeutic outcome [4, 5] as expected, what directs researchers to pay more attention to therapist-client matching [4]. The therapist-client communication varies from autonomy to paternalism [6]. The more perceived coercion increases, the more positive evaluation of therapeutic relationship decreases [7]. Clients reported being more intrinsically motivated when therapist provided the opportunity for them to make a decision, expressed sincere care, provided constructive feedback or did not exert pressure for specific activities, and more amotivation was evident, when therapists were controlling [3]. In a meta-analysis of the pooled data on interaction styles, including control and negotiation as option, caring interaction style (e.g. sensitive, friendly, relaxed and open) had a moderate and positive correlation with satisfaction with consultation [6]. Personal therapeutic attributes that turned out to positively impact therapeutic alliance include an array of characteristics such as conveying a sense of being trustworthy, affirming, interested, alerted, affiliative type behavior as helping and protecting, coherent communication style, and attunement to patient [8]. As addition, active, engaging and extraverted therapists produced faster symptom reduction in short-term therapy, but also non-intrusive therapists generated better outcome in long-term therapy within the range of 3 years of follow-up [9]. In a research of the client-oriented existential therapy failure, the main factors of negative outcome were the lack of therapeutic attunement and inflexibility [10]. In another research in the domain of different psychoanalytic orientation, technical adherence and directivity was shown in the therapists with hostile and controlling introjects. These kinds of therapists were most likely to monitor their own behavior as control for potential external disapproval of their skills [11]. But not all researches argue against control in therapy. Taking into account cultural framework, Chinese clients perceive directive therapist's style to be the most effective, finding concrete homework to be more useful than only talking to therapist. Leading conversation guided by the therapist was also considered to be appropriate and the rest focused on therapist-client match, where therapists were regarded as someone who needed to know how to click with others [12]. The question whether clients benefit from directive counseling is yet to be addressed, since controlling does not necessarily subsume coercion.

It most often relates to a structure, especially if promoted in a rather autonomy-supportive manner [2]. When expressed as a support, recommendation is likely to be experienced as informational, leaving the client to make a decision for him/herself [13]. Whether it is autonomy or control in therapy that matters, therapist-client matching has been stressed out on numerous occasions. A study shows that clients who were matched with their preferred treatments had a 58% chance of outcome improvement, so it is recommendable to include client preferences into treatment [14].

Even though every therapy has its own effectiveness criteria, the measure of client satisfaction was introduced as the part of the broader scope approach to assess the quality of service and some of previous client satisfaction measures encompassed subscale ranging from relevance (fitting the service with the problem), impact (effect of services on the problem) and gratification (effect of service on client's self-efficacy) [15].

Aside from attending therapy and therapist's characteristics, the great deal of research indicates personality dispositions to best predict personal wellbeing. The findings of positive contribution of personality are very consistent [16, 17]. As stated by Steel et al. [18], personality and wellbeing have much stronger correlation than previously recognized. Studies consistently show extraversion to have a positive and neuroticism to have a negative influence on wellbeing with spillover effect on the overall wellbeing. Findings reveal genetic dispositions in personality and long-lasting influence of personality has been shown in longitudinal studies [19–22]. Basic personality traits are described through the Big Five dimensions, replicable independently of culture: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. Albeit there is a certain amount of published papers contending these traits are structurally organized into two higher-order factors, usually labeled stability (neuroticism, that is emotional stability, agreeableness and conscientiousness) and plasticity (extraversion and openness to experience) [23] with underlying biological substrates, Ashton et al. [24] argue this could just be a methodological artifact, representing two or more blends of the Big Five factors.

Scholarly attention has been paid so far to the therapeutic matching and alliance itself, but it appears that the quality of the alliance is more the result of therapist's actions or characteristics playing the most important role in achieving beneficial outcome, since only the variability within therapist and not the client was significantly predictive of outcome, as the recent study shows [25]. Furthermore, it is also still unknown what clients think is important for psychotherapy [12]. In view of previous finding advising not to interpret heritability of personality as the impossibility to change [19], this research included personality as the outcome variable; especially since the traits organized as higher-order factors named stability and plasticity may represent socially desirable self-presentation behavior [24]. Since the personality as described could be the protective or impairing factor to the wellbeing by itself, it was interesting to examine whether these features are at least to a certain degree susceptible to be determined by the exerted therapist's style.

Therapist's style has previously been operationalized as the four-scale construct [3] (including support of autonomy, control, care, and support of competence) pertaining to interpersonal behaviors with the function of motivational antecedents. This scale was originally adapted from Pelletier et al. [26] where it was first administered to capture motivational antecedents in sports. It was shown that autonomy supportive behaviors providing opportunities for choice foster intrinsic motivation, while the coach's behaviors manifesting the lack of care for the athlete undermine self-determined motivation [26]. Applied to the psychotherapy context, the same pattern of results occurred showing the perception of the therapists as providing opportunity to make decisions, carrying for clients, giving constructive feedback, or not putting pressure on clients to be related to self-determined motivation toward therapy [3]. No previous studies to our knowledge considered contribution of TIS to personality self-reports. Therefore, the general aim of this study was to assess the contribution of therapist-relevant variables, TIS specifically, to the Big Five personality self-report in clients. In light of what is known of interpersonal style in general, we were interested to examine the direct and indirect effect of extracted therapist's styles on personality self-report. Indirect effect was assessed through therapy benefit. The latter was invoked as the mediator into the model, as the measure of satisfaction with therapy, since interpersonal style is usually regarded as motivational antecedent and therapy satisfaction as motivational consequence [3].

However, since TIS was previously measured by *ad hoc* constructed scale (TIS) for the purpose of motivation for therapy scale validation, without previous history of a thorough psychometric validation *per se*, the first and foremost purpose of this study was to preliminary validate this scale into Bosnia and Herzegovina (BH) languages. We were first interested in the translation of scale from the original English into BH languages, then to conduct the double translation procedure, which was followed by exploratory and confirmatory analyses of TIS structure, as well as the reliability testing of the extracted factors.

In previous research [26], it was recommended that the degree to which parents and coaches adhere to supporting the children and spending time with them should facilitate self-determination in children. We are not certain whether the patterns of behaviors pertaining to coach or parents (specifically the ones including spending time or providing permanent feedback) are totally applicable to the patterns of the therapist's behavior, especially since many therapy schools have different rationale as to how to approach a client. For this reason, and being aware that the 4-factor structure has not been confirmed yet, we did not make any definite assumptions regarding the preset number of factors to be extracted. But we did expect that if autonomy/support prone styles were extracted, these should have positive, and controlling prone styles, also in case of exploratory extraction, should have negative contribution to therapy benefit and personality self-report, the latter defined by two presumably [24] secondary factor loaded personality variables Stability and Plasticity.

Methods

The study sample included 206 clients (154 females, 47 males, 3 participants did not specify their gender; mean age 33.99 ± 10.17), attending 4 psychotherapy schools: psychoanalysis (n = 28), gestalt therapy (n = 76), cognitive-behavioral therapy (n = 75) and systemic family therapy (n = 27). Most of clients had university degree (n = 109), following high school diploma (n = 84), year degree (n = 12) and only one participant completed primary school. As for employment status, 82 clients had full-time job, 57 were unemployed, 23 had part-time employment, 21 fixed term employment, 7 were retired and 16 did not provide information about their employment. With respect to marital status, 89 clients lived in formal marriage or with a partner, 84 were never married, 25 were divorced and 1 widowed. The rest 7 did not provide information in reference to their marital status. Beside therapy in which 140 clients were enrolled without taking medication, 65 clients also had joint medication treatment and one left out the information about medication intake.

In order to assess TIS and personality traits, two self-report measures were administered: The Adapted Therapist's Interpersonal Style Scale and the Big Five Questionnaire [27].

The first instrument was adapted for the purpose of this research. The fundament upon which the adaptation was made was the original TIS scale [3]. The scale was originally constructed in English and is made of 4 subscales, consisting of 3 items each, aimed to assess 4 different types of interpersonal styles. The 12 items forming 4 subscales, originally adapted from Pelletier et al. [26], include Support of Autonomy (e.g. "My therapist provides me with opportunity to take personal decisions"), Control (e.g. "My therapist pressures me to do what he/she wants."), Care and Support of Competence. The answers are given on a Likert type scale ranging from 1 to 7. TIS Scale was originally adapted, although not psychometrically validated, from the similar scale administered in sports domain, the Coach's Interpersonal Style (CIS) [26]. The latter consisted also of four scales: Autonomy Supportive Climate (e.g. "My coach accepts that mistakes I make are part of a learning process."), Caring (e.g. My coach cares about me."), Providing Structure (e.g. When my coach asks me to do something, he or she gives me a rationale for doing it."), and Competence Feedback (e.g. "The feedback I receive from my coach is constructive in helping me make improvements."). Sample items in both scales are very similar, except that the "coach" was switched by the "therapist" to accommodate more to the therapist's style.

The adapted TIS scale was first translated from English into BH languages by two psychologists in clinical domain. Then back translation process was conducted in which bilingual English/BH language(s) speaking psychologist independently translated the BH version of the scale back to English. This translation was again thoroughly checked by English professor. The back translation process was followed by double translation procedure. It included sending the back translation version of the instrument to the author of the original scale [3] for further confirmation about the equivalence of the original and the translated items. After the check of double translation it turns out that 7 items were identical in meaning as in the original TIS, while

the rest 5 items were slightly or considerably changed, and different in meaning comparing to the original TIS. Analyzing the rest 5 items by its content, it was noticeable that changes were made in a more control and problem-solving direction, since our study was more focused on autonomy or control manifesting therapist's behavior in general. So we did not further consider our instrument we called the Adapted TIS Style Scale to be the equivalent to the original TIS, but we conducted a psychometric validation on our version of the instrument to establish whether it is in its own right applicable in other analyses. This process we discuss more in the Discussion section and the adapted version of the instrument is given in the Appendix. In this research, two factors pertaining to therapist's styles into which all items were aggregated, were singled out, what is explained in more detail in the Results section. The factors showed, though not perfect, acceptable reliability of the subscales: Control (Cronbach's alpha 0.63) and Autonomy (Cronbach's alpha 0.78).

The Big Five Questionnaire consists of 50 adjective items on a 5-point Likert scale forming 5 subscales intended to capture the Big Five personality traits: emotional stability (inverted Neuroticism), extraversion, intellect (openness to experience), pleasantness (agreeableness) and conscientiousness. The subscale reliabilities in this research were very good ranging from 0.82 to 0.87.

Therapy Benefit Scale consists of 3 very simple questions measuring the satisfaction with therapy: "To what extent is the therapeutic treatment you are currently involved in important for you?", "How much do you consider therapy helps you?", and "To what extent are you satisfied with the therapy you are involved in?" All questions were responded on a 4-point Likert scale adding up to a total score of therapy benefit. Principal component analysis revealed all items to load on one factor, enabling to add individual responses to a common score. Besides, reliability of this measure, in spite of containing only 3 items, was very good (Cronbach's alpha 0.79).

All data were collected on a voluntary basis, respecting the anonymity of clients. Clients gave consent to participate in the study and could withdraw from research at any point. They were already enrolled to therapy for a substantial time to be able to evaluate their perception of the relationship with the therapist. Prior to the questionnaire distribution, the therapists of the four above mentioned therapy schools were contacted to recruit interested clients into the research. The questionnaires sealed in envelopes were mailed to different locations in BH. Clients were given the questionnaires they opened on the site, filled it in the waiting-room with no suggestions from the therapist, sealed the filled forms again, and handed it to the therapist whereupon they were returned to the researcher.

Data were analyzed using Principal Component Analysis (PCA) to derive components of the therapist's interpersonal style. The components derived in exploratory factor analysis (EFA) were also fitted for confirmation in subsequent confirmatory factor analysis (CFA). Correlational analysis was engaged to examine whether therapist's styles have any relations to personality self-report measures. Finally, structural equation modeling was conducted to shed further light on the direct and indirect effects of therapist's styles on personality self-report as mediated through therapy benefit, as well as to examine secondary factor loadings personality model. Descriptive analyses are also provided in the following section. To obtain the analyses, two statistical software packages were used: IBM SPSS Statistics for Windows, Version 19.00 and IBM SPSS Amos, Version 19.00.

Results

To assess how many components would be suitable to be extracted in order to best explain the variance of the interpersonal therapist's styles, PCA was conducted (Table 1).

Table 1
Principal Component Analysis (PCA) Pattern Matrix of the items

Items	Supportive Autonomy	Ignoring Control	h^2
3. My therapist gives me the feedback about the way I make a progress.*	**0.87**	0.18	0.69
1. The feedback I receive from my therapist is constructive in helping me make improvements.	**0.86**		0.72
8. My therapist consults me before (s)he decides how to address my problems.*	**0.80**	0.10	0.59
11. My therapist provides me with lots of opportunities to take personal decisions in what I do.	**0.55**	-0.12	0.37
2. When I ask my therapist to help me solve a problem, he or she asks me what I think before giving me his or her opinion.	**0.48**	-0.19	0.33
10. I feel that my therapist doesn't care how much I improve through therapy.	**-0.20**		0.05
7. My therapist pressures me to do what he or she wants.	0.11	**0.76**	0.53
4. My therapist is trying to impose her/his ideas on me.*		**0.66**	0.44
6. I feel that my therapist is indifferent towards me.	-0.12	**0.61**	0.44
12. My therapist leaves me with little choice about the ways in which my problems could be resolved.*	-0.10	**0.55**	0.35
5. The feedback I get from my therapist is basically useless criticism.	-0.31	**0.44**	0.38
9. My therapist is being harsh to me.*		**0.44**	0.18

Note: The items written in boldface are changed and adapted in translation from English to BH languages, so due to a change, they are left in the translated form. Other items are written as in the original Therapist's Interpersonal Style.

Firstly, we tried to conduct PCA with 4 preset factors, as in the original TIS Scale to examine whether 4 subscales can be singled out. By applying first the default orthogonal rotation, since there were no similar previously published results upon which to build our analysis, it was evident from the values in component transformation matrix that in fact 4 factors were intercorrelated. The 4-factor solution is by the predetermined extraction rationale the solution that best corresponds to the Kaiser-Guttmann's criterion [28] for extraction. However, this solution was not substantiated in structure matrix where only two items saturated component in some cases. The same pattern of results occurred independently from the type of rotation. But, the general criteria in analysis for extraction were fulfilled [28] including Kaiser-Meyer-Olkin (KMO) = 0.731 and Bartlett's Test of Sphericity $\chi^2_{(66)}$ = 570.75, $p < 0.001$, indicating that manifest items are correlated to a certain degree to be able to capture a latent component, but not as singular as not to be discernable as distinct entities.

Another criterion for extraction is shown in Figure 1. Cattell's Scree test shows that 2 distinct components probably best explain the latent structure of the therapist's interpersonal style with eigenvalue far exceeding 1. Even though on the basis of visual inspection it is visible that 4 components could be extracted, what corresponds to the Kaiser-Guttmann's extraction criterion as well, it is also visible that the last 2 factors exceeding 1 on the ordinate explain the variance far less than the first 2. Besides, the point of infexion happens on the third component, what makes this component a surplus [28], which is usually not retained in analysis. This is the reason why we actually chose to explore the latent structure of the therapist's style if we suppose 2 intercorrelated components for extraction applying direct oblimin rotation on the components.
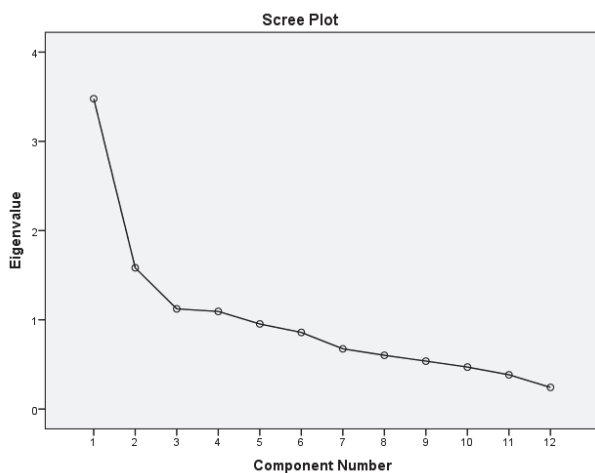

Fig. 1 – Cattell's Scree Test for component extraction.

After preliminary check for the appropriate number, 2 components have been extracted, accounting for 42.17% of variance. The first component labeled Supportive Autonomy explained 28.98% and the second labeled Ignoring Control explained 13.19% of variance. Both components had acceptable reliabilities as outlined in instrument description, even though ignoring control had a bit lower Cronbach's alpha

reliability value of 0.63. It is stated in the literature that reliability as low as 0.61 could be acceptable when conducting exploratory studies [29], so this component was further retained in the analysis. Reliability analysis was also conducted on the original four subscales, but internal consistency of the 2 derived components outperformed original scales which had the reliabilities ranging from 0.71 for the support of competence to 0.33 for care, which was the least value. Unlike the original TIS having four subscales, in this research all items were aggregated into two plausible components relating to the conglomerate of the four therapist's styles from the original scale. These were labeled Supportive Autonomy, since the items originally belonging to support of competence and support of autonomy all saturated one component. Ignoring Control was labeled upon the conglomeration of the items originally pertaining to the lack of care and control, which in this exploratory analysis all saturated the second extracted component. Supportive autonomy could be described as giving useful feedback, support for independent decision-making, and consultation prior to expressing own opinion. On the contrary, ignoring control is not captured as giving directive instructions and maintaining structure, but more like negative controlling of client and being ignoring and non-empathetic.

To ascertain these results more thoroughly, we decided to further conduct confirmatory factor analysis. This analysis required *post hoc* updates to the original model outlined in Figure 2.
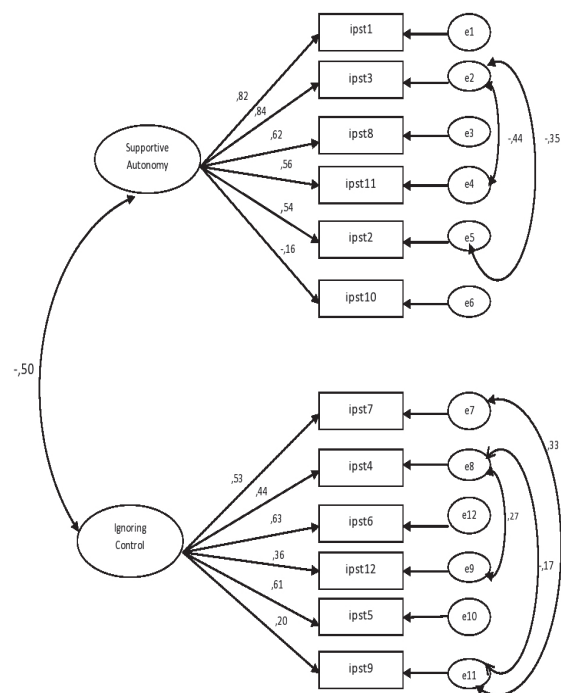

Fig. 2 – Confirmatory model of the Adapted Therapist's Interpersonal Style Scale.

This model was tested for fitting with maximum likelihood method comparing to the 4-factor model as would be in the original scale. The parameters showed, even though the

2-factor model is not fitted on chi-square level $\chi^2_{(48)} = 89.85$, $p < 0.001$ (the significant p means a difference between the observed and default theoretical model) according to which the null hypothesis was rejected, it well outperformed the original model on other parameters. It is also worth noting that χ^2/df was 1.87. The Goodness-of-fit index [30], measuring the fit between the observed and hypothesized covariance matrix (acceptable cut-off over 0.90) for the 2-factor model had a value of 0.935, while other parameters including comparative fit index (CFI), what is recommendable to check [31] and root mean square error of approximation (RMSEA) [32] had the values of 0.923, and 0.065 (PCLOSE = 0.112), respectively, approaching the recommended cut-offs. RMSEA less than 0.05 is usually taken as the indicator of the good model fit [32], which is here almost the case, very closely approaching the desired value. Some of other parameters such as the normed fit index (NFI) [33] = 0.853 argue for the necessary improvement of this model, but considering this analysis to be preliminary and sensitivity of the NFI to the sample size [31], these parameters are not negligible. Unlike the 2-factor model, the 4-factor model showed less favorable parameters as follows: $\chi^2_{(47)} = 121.46$, $p < 0.001$ with much larger χ^2/df ratio 2.58. In the 4-factor model the null hypothesis was also rejected, and the rest of parameters had values farther from acceptable comparing to the posed 2-factor model including: GFI = 0.916, CFI = 0.864, RMSEA = 0.088 the closeness of-fit statistic [(the closeness of-fit statistics PCLOSE) = 0.001), and NFI was even smaller 0.802. What is more interesting, *post hoc* analysis showed that the 4-factor model could be better fitted if we supposed the regression weight on the item 5 ("The feedback I get from my therapist is basically useless criticism".) from Control to be unconstrained, what implies that the item originally belonging to Care has a probable secondary loading on Control, as well. This correlation was pretty high (0.46) for the secondary loading, and was significant ($p < 0.01$). With this modification, the 4-factor model also reached its fitting maximum.

Turning back to the 2-factor model, all estimates were significant, and it also turned out for the extracted components to be inter-correlated ($r = -0.50$, $p < 0.001$), so these components were further retained in other analyses that considered the contribution of interpersonal therapist's styles to personality self-reports.

In the forthcoming analyses, first the correlation of all variables included in structural equation model is shown in Table 2.

In this analysis, the relationship between relevant therapy variables (such as therapist's styles and therapy benefit) and personality self-evaluations was of the greatest interest. As can be observed, the correlations between therapist's styles and therapy benefit are patterned in a predictive way. Supportive autonomy is positively and ignoring control negatively correlated with therapy benefit (Spearman's $rho_{(205)} = 0.50$; Spearman's $rho_{(205)} = -0.39$, respectively, both significant at $p < 0.01$). The correlation between therapist's styles also shows inverse pattern, the more perceived supportive autonomy is expressed, the less perceived ignoring control and *vice versa* (Spearman's $rho_{(206)} = -.44$, $p < 0.01$). Although correlations between personality self-evaluations and therapist's styles are fair, but significant, it is visible that supportive autonomy is almost not at all related to personality, but ignoring control shows fair, and significant correlations to all personality self-reports, Spearman's rho ranging from -0.13 to -0.39. Neuroticism correlates positively with Ignoring Control, Spearman's rho = 0.26 ($p < 0.01$). To obtain the correlations, Spearman's rho as the robust method was engaged for precaution, since few distributions showed a certain asymmetry, especially therapy variables supportive autonomy and therapy benefit being negatively asymmetrical.

To examine the predictability of the relationship between therapist's styles and personality, further regression analyses were conducted, not reported in this research, but they shed further light on potential directionality of the contribution, revealing that it were the therapist's styles, and not the reverse, that contributed to personality self-report. This finding led to setting the structural model to assess the direct and indirect effects of therapist's styles on personality self-report. As outlined earlier, the model was set which included therapist's styles as exogenous variables, therapy benefit as the mediator and personality factors as endogenous variables. The model was also set to be fitted for secondary factor loadings for stability and plasticity, instead of presuming higher-order factor structure. The hypothesized model with the standardized coefficients of the effects is presented in Figure 3.

Table 2

Correlations among the extracted therapist's interpersonal styles, therapy benefit and personality self-evaluations

Scale	1	2	3	4	5	6	7	8
1. Supportive Autonomy	1							
2. Ignoring Control	-0.44**	1						
3. Therapy Benefit	0.50**	-0.39**	1					
4. Neuroticism	-0.10	0.26**	-0.13	1				
5. Extraversion	0.13	-0.14*	0.21**	-0.33**	1			
6. Intellect/Openness to Experience	0.14*	-0.14*	0.17*	-0.35**	0.59**	1		
7. Pleasentness/Agreeableness	0.12	-0.13†	0.12	-0.26**	0.19**	0.29**	1	
8. Conscientiousness	0.06	-0.19**	0.10	-0.26**	0.25**	0.39**	0.52**	1
Mean ± standard deviation	29.69 ± 4.77	8.38 ± 3.53	6.87 ± 1.51	32.79 ± 6.94	34.56 ± 8.19	35.46 ± 7.59	42.81 ± 5.56	39.95 ± 6.59

**statistically significant ($p \leq 0.01$); *statistically significant ($p \leq 0.05$); † marginally significant ($p = 0.059$; $p \leq 0.06$).
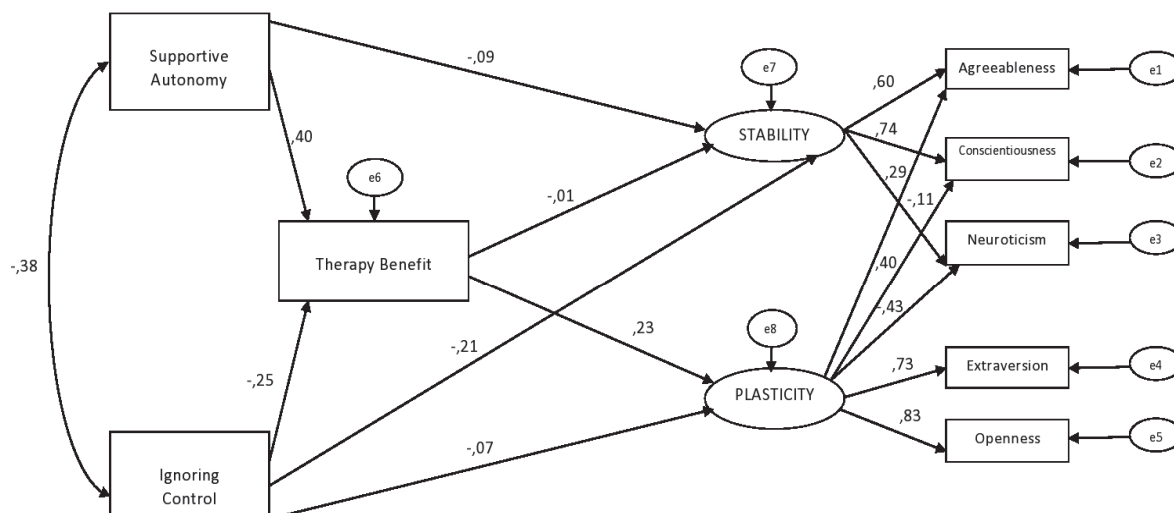
Fig. 3 – The hypothesized structural model of the Therapist's Interpersonal Style effects on personality self-report.

The maximum likelihood model was very well fitted with the following parameters: $\chi^2_{(12)} = 8.93$, $p = 0.709$; GFI = 0.989, RMSEA = 0.00 (the insignificant p here means no difference between the observed and default theoretical model, indicating good fitness of the model). The model provides some direct and indirect effects of TISs to be observed. Supportive autonomy is moderately positively related to therapy benefit ($r = 0.40$, $p < 0.01$) and ignoring control is fairly negatively related to therapy benefit ($r = -0.25$, $p < 0.01$). Supportive autonomy and ignoring control show moderate inverse correlation as two opposite therapist's styles ($r = -0.38$, $p < 0.01$). The interesting finding is that supportive autonomy has no any significant direct effect on either stability (agreeableness, conscientiousness and neuroticism) or plasticity (extraversion and openness), all values approaching 0. On the contrary, ignoring control, though not having direct effect on plasticity, has a direct marginally significant effect on stability ($r = -0.21$, $p = 0.073$). Also indicating of the secondary factor loading in the measurement model is that much of the variance pertaining to stability (agreeableness, conscientiousness and neuroticism) can be explained by Plasticity as the latent variable. As hypothesized, and contrary to the higher-order model, agreeableness and conscientiousness are also explained by plasticity ($r = 0.40$, $r = 0.29$ respectively), independent from being set to regress on stability. And neuroticism is more explained by plasticity ($r = -0.43$), than by stability (-0.11) that was preset in the model. When we analyze standardized indirect effects in more detail, for both supportive autonomy and ignoring control on personality self-reports, mediated by therapy benefit, these effects are very low tending to be zero. Even though therapy benefit has a significant direct contribution to plasticity ($r = 0.23$, $p < 0.01$), the indirect effect both therapist's styles have, mediated by the perception of therapy benefit, is very low. As for the total effects of therapist's styles, the total contribution of ignoring control to plasticity, comparing to supportive autonomy approaching 0, is larger and has the value of -0.13. The total effect of ignoring control on stability (almost completely attributable to direct effect) is also twice as high as for supportive autonomy. Additional important finding, which is in line with the previous assertion that therapist's styles could have contribution to self-presentation in personality, is also a lower total effect on the sole personality traits than on their blends (stability and plasticity), but again, that effect is a bit larger for ignoring control than for supportive autonomy and in range of -0.11, -0.16 and -0.21 for openness, agreeableness and conscientiousness, respectively. All autonomy effects approach 0.

Discussion

Therapeutic relationship and coercion are both important in clinical practice and have driven a lot of attention in the clinical literature [7]. According to some findings [8], alliance is a pan-theoretical construct impacting psychotherapy independently from therapeutic approach. Even though not dealing with alliance by itself, we were interested to examine whether there were some important characteristics of the very therapist that could contribute to the way clients described themselves. Considering the fact that researches such as this are not that common, which is the probable reason for lacking the adequate instruments to measure some concepts, the administration of the Adapted TIS Scale was a pretty challenge. In exploratory factor analysis (PCA) two compo-

nents we called supportive autonomy and ignoring control were derived in which all items, previously belonging to 4 components, were aggregated. Two components extracted in this research had also far better reliabilities than four original subscales, which is also the reason why they were retained in further analysis. Even more so, CFA showed the 2-factor model outperformed the 4-factor model. However, there are a few limitations of the procedure used that should be emphasized. Firstly, some items of the original TIS scale were changed and administered with the changes in translation that were more inclining to what authors considered to be therapeutic language. For instance, item 4 was completely changed corresponding more to the controlling style. Since the original TIS has not to our knowledge been validated before, we are not certain whether 4 factors are confirmed in the first place in other studies, or whether the results would have been different, had we not made changes in the translation process. Furthermore, the fitting indexes for both models show both could be more improved. This is also one of the reasons why the content of the items should be regarded with more care in future studies. We consider our exploratory analysis to be preliminary and certainly, further replications that could contribute to the validation process are advised. Secondly, since there is no explicit theoretical background as for the number of TISs, confirmatory factor analysis is definitely not the method of choice for this confirmation. Being aware of this limitation and considering that our 2-factor model underwent subsequent *post-hoc* modifications introducing covariances between error terms (Figure 2), this confirmatory analysis is in its essence another case of exploration, and not confirmation to be more precise. To be able to fully conduct the process of the validation of TIS scale, some other validity check such as convergent or predictive, which were not specifically considered in this study, should also be introduced in future research. Since interpersonal styles are not only applicable to therapists, as we are aware they were also mentioned in a scale relating to coaches, and probably could be adapted to various domains, more research is needed on how many interpersonal styles are mentioned in other scientific resources and whether all styles could be applied generally, or to only certain domains. Under this rationale the transferability issue of styles studied in coaches to other domains should also be addressed in the future.

Considering the rest of our findings, the unambiguous result was that supportive autonomy had a direct contribution to the perception of therapy benefit, but what happens next and how it affects other outcome variables is yet to be assessed. Contrary to our hypothesis, supportive autonomy did not have any effect on personality variables. Such a result actually coincides with findings that it was the therapist's characteristics that contributed more to the alliance itself than to the outcome, even though some studies report the positive impact of autonomy continued to persist in abstinence behavior long after the treatment was over [13]. We know that behaving in autonomy-supportive manner will not provide any side-effects, but do we know what autonomy essentially is? SDT makes a distinction between autonomy and independence, for autonomy supports a volitional treatment-

adherence, while independence implies independent decision-making. In the case of the latter, the opposite would be a total dependence on counselor's direct advices. According to the authors [2], the opposite of autonomy is heteronomy, encompassing free will to adhere whether behavioral changes are induced by internal or external influences. But in this research, we came up with the correlational analysis of -0.38 ($p < 0.01$) between supportive autonomy and ignoring control, implying this is probably not unipolar, but bipolar construct. Other studies also identify autonomy with coercion absence [7]. Since therapeutic alliance is very often given supremacy in the research, the unique contribution of the therapist or the client has often been concealed. But if autonomy as bipolar construct holds truth, then it could be presumed that support is self-understanding in any therapy benefit, but it is probably the active absence of coercion or control what has the impact on the outcome variables. In this research, the reduction of ignoring control, independently from therapy benefit, had positive contribution to stability. We presume that many clients enrolled in therapy with predominant anxiety and depression problems come instable by default, since both of these states are characterized by perceived lack of control to influence external circumstances or one's life. Directive orders without any consultation with a client or treating the client with neglect and lack of care might not be different from the outer therapeutic conditions. Stability also referred to as social propriety or socialization seems to reflect reverted neuroticism, but is also a broader construct for encompassing other two traits [23]. In this model the score of neuroticism, instead of emotional stability, was left purposely, for most of the problems clients come to therapy with, include some sort of neurotic symptoms, so it was important to keep neuroticism as the outcome variable. In other research [34], stability negatively predicted externalizing behavior (correlation -0.71), including aggression, vandalism, drug abuse, opposition and hyperactivity. Considering the results obtained in this research it could be surmised that the lack of control and restraint coming from the therapist could contribute positively to the reduction of behaviors such as aggression and substance abuse, what should be investigated in further research. But one has to keep in mind precaution by not precluding the possibility that it is just the self-presentation restrained ignoring control contributes to and certainly not the change in the trait neuroticism. One has to be aware that this study does not argue for changing the personality as the outcome variable, especially for it being the input variable in many other cases, but rather that might have contribution to the way clients present themselves in the self-report. Other factor that can account for this assumption is the instrument used to assess personality. The Big Five Questionnaire was administered, consisting of adjectives as personality descriptors derived from lexical studies. When self-evaluating on adjectives that are, according to lexical hypothesis, the words that are most important for capturing the individual differences, and as such, the most frequent words in the vocabulary of many cultures, it is well possible that these words are good representatives of the well-behaved expressions, such as being "stable" or "flexible". As the other authors [24] also ar-

gue, it is possible that so-called higher-order factors (here secondary loaded factors) in fact represent moralistic bias rather than substantive dimensions of personality. Anyway, this finding is important since it shows that the lack of coercion and control by the therapist could stabilize a client in the well-behaved and socialized manner. Therapy Benefit contributing to plasticity, the latter, also referred to as dynamism or personal growth [23] was positively correlated with externalizing behavior (correlation $r = 0.75$) in other research [34], which denotes not only instability and lack of restraint, but also exploratory and approach-oriented behavior. Therefore, therapy benefit could have a direct effect on taking responsibility for own actions and incite client on more exploration in his/her life. Other important finding in this study was the better confirmation of the personality model with blended variables, instead of the higher-order factors. Another model including higher-order factors was also tested (but not reported in this study), and was outperformed by the blended-variables personality model. The result is in accordance with another study testing only the confirmation of the latent factors as the higher-order *vs* blended variables *vs* orthogonal factors [24], where the model presuming orthogonal factors was exceeded by the higher-order model, but the latter was exceeded by the blended variables model in three samples from Ontario, Oregon and Alberta. Other studies arguing for stability and plasticity as the higher-order factors do not provide unambiguous results for the theoretical regression of the factors onto higher-order factors (e.g. in a study [23] using also adjective personality markers, the two higher-order factors model fitted the data well, but openness/intellect did not load significantly on it). Such a result authors ascribe to the variation in markers descriptions. In our study of the blended variable model, where stability and plasticity are the blends of the Big Five factors, it is shown, that agreeableness, conscientiousness and neuroticism, besides loading on stability, substantially loaded on plasticity, as well. Neuroticism was better regressed onto plasticity ($r = -0.43$, $p < 0.01$), than stability, but this in fact may be due to plasticity feature encompassing some behaviors indicating instability. More studies in this domain considering personality models independently from exogenous variables, what this study actually has not specifically dealt with, could be useful.

This study has a few limitations that should be overcome in future research. Since this is the first study to bring therapist's styles into relation to personality, as well as to confirm the blended variable personality model, the study would be recommendable to replicate on a bit larger sample. Although the confirmation of personality model can be replicated in general population, therapist's styles assessment requires participants to be therapy-involved and that is why this study is unique in terms of the sample engaged. But further caution is advised when engaging clients involved in therapy process. What was not controlled for in this study and could have contributed to the ways questionnaires were fulfilled or the ways client perceived his/her therapist is the level of therapist's education. Some therapists in this study were able to do their own practice without supervision, while the others were in the process of doing the practice under supervision. In this research the level of therapist's education was not considered as the variable, but should be taken in regard in researches where therapists are in fact the subject of evaluation by client. This could even more objectify the evaluation independently given by client. Considering that psychotherapy in BH is still under intensive development, more researches that should follow the practice in counseling and psychotherapy should be welcomed. Another shortcoming is that we did not have pretest data for personality self-evaluation before the therapy process started, so it cannot be with certainty argued that therapy actually changed something in clients' personality traits. But this model gives general pattern as for the potential paths that should be given attention when demonstrating certain interpersonal styles. Correlational analyses showed significant results that did not hold in the direct paths of the model. This implies taking in account some other variables that were not included into this model. This research did not measure variables such as client wellbeing directly, but it would be interesting to examine whether personality or therapist's styles have better unique or common contribution to personal wellbeing. Instead of measuring personality as the disposition to behave, future studies should consider more concrete behaviors for the outcome variables. Personality inventories containing statements instead of one-word trait markers should be used in future research, since the latter can be more susceptible to self-presentation.

Conclusion

This study shows the underlying structure of therapist's styles could be best accounted for by the two preliminary extracted opposite styles labeled supportive autonomy and ignoring control, also confirmed in preliminary confirmatory analysis. Further analysis shows ignoring control and no supportive autonomy was correlated to personality self-evaluations on 5 personality traits. The more elaborate model gives further insight into the relationship, showing a few important relations: therapy benefit is predicted positively by supportive autonomy and negatively by ignoring control. Therapy benefit directly contributes to the account of plasticity, and ignoring control has a direct marginal effect on stability. Personality traits explained by stability also had secondary factor loadings on plasticity. Supportive autonomy has no direct or indirect effect either on stability or plasticity. This shows that Supportive autonomy is necessary but not enough condition for improvement in terms of manifesting more stable or exploring behavior. It is important to be careful when demonstrating directivity, especially if it leaves possibility to be blurred by control without support. A client's perception that the therapy is being helpful could instigate more explorative and approach-oriented behavior, what indirectly might contribute to client stability.

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Appendix

The Adapted Therapist's Interpersonal Style Scale (ATIS)

1-------------2-------------3-------------4-------------5-------------6------------7

Never   Often   Always

1. The feedback I receive from my therapist is constructive in helping me make improvements.
2. When I ask my therapist to help me solve a problem, he or she asks me what I think before giving me his or her opinion.
3. My therapist gives me the feedback about the way I make a progress.
4. My therapist is trying to impose her/his ideas on me.
5. The feedback I get from my therapist is basically useless criticism.
6. I feel that my therapist is indifferent towards me.
7. My therapist pressures me to do what he or she wants.
8. My therapist consults me before (s)he decides how to address my problems.
9. My therapist is being harsh to me.
10. I feel that my therapist doesn't care how much I improve through therapy.
11. My therapist provides me with lots of opportunities to take personal decisions in what I do.
12. My therapist leaves me with little choice about the ways in which my problems could be resolved.