Are personality traits a good predictors of the type of watched pornography? Analysis of the relationship between personality traits and the preference of a chosen pornographic categories

▶ Rafał Gerymski[1]

[1] Institute of Psychology, Opole University

Summary

The aim of this work was the further exploration of the relationship between selected personality factors and the preference of a given type of pornography. Data from 136 respondents aged between 19 and 56 years was used for the analysis. Selected personality traits were examined using the TIPI-PL questionnaire. Subjects were presented with 25 categories of pornographic films and were asked to select the keywords they use to search for pornography on the Internet. Data exploration has shown that the viewers of pornographic films are characterized by a significantly higher level of extraversion and emotional stability in relation to people who do not use pornography. In addition, it was shown that openness to experience turned out to be a significant predictor of the preferences of pornographic categories such as „BDSM", „group sex" or „big penis". Further research should take into account other features of the human psyche that may be related to pornographic preferences and examine the attractiveness of a given type of pornography.

Keywords:
pornography, sexual preferences, big five, personality

Introduction

Pornography seems to be ubiquitous in pop culture and the surrounding reality. Its wide accessibility caused by the popularization of the Internet made it more reachable. Makaruk and Wójcik study shows that 67.3% of Polish respondents admit that they had contact with erotic content while using the Internet [1]. Franczyk, Cielecka and Tuszyńska-Bogucka state that 76.8% of respondents use online pornography [2]. These data indicate the prevalence of pornography in the everyday life of Poles, which consumption is constantly increasing [3].

This topic has been the subject of interest of Polish and foreign researchers for many years. Bogaert observed a positive relationship between the preference of aggressive pornography and the aggressive tendencies of men and the negative relationship

between that pornography and their level of intelligence [4]. Hald and Malamuth showed that viewing pornography by men with low agreeableness score increased their violence towards women [5]. In addition, researchers observed a relationship between frequency of viewing the pornography and aggression [5]. Another study showed the influence of violent and non-violent pornography on the level of aggression of the respondents [6]. What's more, Malamuth, Hald and Kross claim that there is a correlation between the frequency of watching pornography and sexual aggression [7]. The author's research shows that there is a connection between some Big Five personality traits, aggression and the preference of a given type of pornography [8]. In this study, sex differences were also observed. Women significantly more often preferred the category of group sex and BDSM (*bondage, discipline, domination and submission*). Men, however, significantly more often than women preferred the category of pornographic films with teenage actresses and amateurs. In addition, men significantly more often than women declared the use of erotic stimuli on the Internet. The physical aggression of the individual was positively related to the frequency of viewing pornography – the higher the frequency of viewing pornography, the higher the score on the scale *of physical aggression* was obtained by the respondents. The preference of BDSM and group sex categories was positively related to openness to the participants' experiences. There was no relationship between the preference of „hardcore" category and agreeableness, as well as the questionnaire level of aggression. Relationship between extraversion and the preference of categories associated with the actors race was impossible to verify on the level of basic statistical analysis, due to their low popularity. Sexual orientation did not seem to differentiate the results of the subjects.

These data only show the coexistence of selected variables. Due to the interesting relationships, they deserve further exploration in order to find significant and useful results from the research and practical point of view.

Objective

The aim of this work is to further explore empirical data of the relationship between the preference of pornographic categories and selected personality factors that were presented in the previous author's

work [8]. Further analysis is aimed at verifying Big Five personality traits as important predictors of the type of viewed pornography on the Internet.

Method

The study obtained the results of 136 subjects, between 19 and 56 years old ($M = 24.3$, $SD = 6.14$). 106 subjects has declared watching the pornography – 52 men ($M_m = 25.8$, $SD_m = 7.2$) and 57 women ($M_w = 22.9$, $SD_w = 4.5$).

The respondents filled out the questionnaires using the Internet. They were presented with a *Short Personality Inventory* TIPI-PL (low, but acceptable reliability: *Cronbach's alpha = .60, McDonald's omega = .62*). The questionnaire includes 5 scales: *extraversion, agreeableness, conscientiousness, emotional stability* and an *openness to experience* [9]. Scale which measures openness to experience is the least reliable one. Additionally, the respondents were asked to fill the *Buss-Perry Aggression Questionnaire* BPAQ (*Cronbach's alpha = .89, McDonald's omega = .89*). The BPAQ questionnaire measures the following constructs: *physical aggression, verbal aggression, anger, hostility* and *aggression in general* [10]. In the test battery there was also the author's questionnaire examining the frequency of the usage and preferences of online pornography. The frequency of pornography usage was measured using a five-point scale, which contained the following responses: *i've never watched pornography; sporadically, once a year; at least once a month; at least once a week; every day*. The tool contained 25 categories of pornographic films: „amateurs", „Asian", „BDSM", „big breasts", „big butt", „big penis", „gays", „hardcore", „hentai", „female ejaculation", „chubby women", „transsexual women", „Latinas", „lesbians", „stepmother", „small breasts", „milf", „Ebony", „teenagers", „anal sex", „interracial sex", „oral sex", „stepsister", „group sex", „ejaculation" . They were selected on the basis of Paul's [11] study and PornHub infographics [12]. The subjects were asked to indicate the categories they use to search for pornography on the Internet. Only 8 out of 25 categories were selected by approximately 30 people surveyed: „amateurs", „BDSM", „hardcore", „lesbian", „teenagers", „anal sex", „oral sex" and "group sex". Subjects were also asked about their sexual orientation. They could declare the following orientations: heterosexual, bisexual, homosexual and asexual.

Further statistical analysis of the data has been divided into four stages:

- Stage 1: search for personality differences between viewers and non-viewers of the pornography,
- Stage 2: cluster analysis for the 8 most popular categories, in order to verify the existence of personality differences between individual clusters,
- Stage 3: inclusion of all 25 pornographic films categories and verification of their relationship with selected personality factors using bootstrapping methods,
- Stage 4: creating a combined pornography categories preference indicator in order to investigate whether the wider spectrum of pornographic category preferences differentiates the subjects.
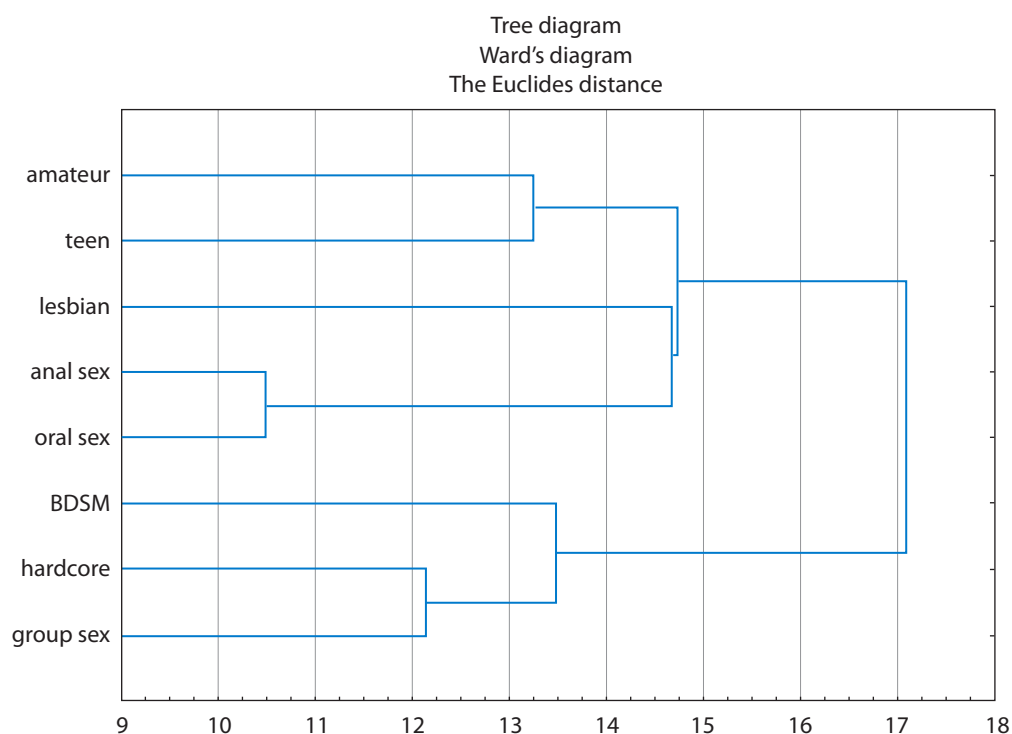
Results

The Mann-Whitney's U test showed that the viewers of pornographic films are characterized by a significantly higher level of extraversion ($U = 363$, $p < .01$, $rg = .25$) and emotional stability ($U = 716$, $p < .05$; $rg = .49$) in relation to people not using pornography.

Agglomerative cluster analysis using the Ward's method allowed to isolate three main clusters:
1. „amateurs" and "teenagers",
2. „anal sex", „oral sex", „lesbians",
3. "BDSM", "hardcore", "group sex".

Figure 1. Results of the agglomerative cluster analysis using the Ward's method

These results are supported by data obtained by k-means cluster analysis.

Table 1. Clusters obtained by k-means cluster analysis

	Cluster	Distance
„amateurs"	1	.63
„BDSM"	3	.74
„hardcore"	3	.67
„lesbians"	2	.80
„teenagers"	1	.63
„anal sex"	2	.67
„oral sex"	2	.62
„group sex"	3	.71

The ANOVA analysis showed statistically significant differences between clusters in terms of agreeableness ($F = 3.67$, $p < .05$, $\omega^2 = .19$). Fisher's LSD post-hoc and planned comparisons proved that people belonging to cluster 1 ("amateurs", "teenagers") showed a significantly lower agreeableness in relation to other clusters.

For the purposes of analyzes with the bootstrapping method, the number of samples 5000 [13] was declared with a confidence interval of 95%, using the BCa method (*bias-corrected and accelerated*) [14]. The "Ebony" category was not taken into analysis, as none of the study participants declared the preference of this category. The table below presents the results of

Are personality traits a good predictors of the type of watched pornography? Analysis of the relationship...

13

correlation analysis with the bootstrap method of these categories, which showed a significant relationship with one of the Big Five personality traits.

The analysis of confidence intervals [15] indicated:

- significant positive correlation between openness to experience and the preference of the "big penis" category,
- a significant negative correlation between extraversion and the preference of the "hentai" category,
- a significant negative correlation between agreeableness and the preference of the "chubby women" category,
- a significant negative correlation between openness to experience and the preference of the "chubby women" category,
- a significant negative correlation between extraversion and the preference of the "transsexual women" category,

Table 2. The results of correlation analysis using the bootstrap method

	Extraversion		*Agreeableness*		*Conscientiousness*		*Emotional stability*		*Openness to experience*	
	Confidence Intervals (CI)									
	lower	**upper**	**lower**	**upper**	**lower**	**upper**	**lower**	**upper**	**lower**	**upper**
„big penis"	–.23	.04	–.22	.14	–.22	.12	–.33	.07	.01	.30
„hentai"	–.33	–.01	–.10	.28	–.24	.07	–.30	.10	–.11	.26
„chubby women"	–.11	.23	–.31	–.07	–.19	.13	–.07	.21	–.34	–.08
„transsexual women"	–.27	–.05	–.29	–.05	–.13	.08	–.27	.07	–.17	.03

- a significant negative relationship between agreeableness and the preference of "transsexual women".

Based on the correlation analysis supported by the bootstrap method, it was decided to include the "big penis", "hentai", "chubby women" and "transsexual women" categories in further analysis, thus increasing the number of analyzed categories of pornographic films from 8 to 12.

Then a regression analysis with the bootstrap method was performed to verify which selected personality traits are significant predictors of viewing a given type of pornography. Standardization of the analyzed data was performed to obtain a standardized β coefficient for regression analysis with the bootstrap method.

It has been shown that openness to experience is an important predictor of the preference of "BDSM" category ($\beta = .29$, CI = .11 to .48), "big penis" ($\beta = .16$; CI = .03 to .30), "chubby women" ($\beta = -.20$; CI = –.45 to –.04) and "group sex" ($\beta = .19$; CI = .02 to .35). Extraversion proved to be a statistically insignificant predictor of the "hentai" category ($\beta = -.16$, CI = –.36 to .01), however, an important predictor of "transsexual women" ($\beta = -.10$; CI = –.27 to –.02) and "oral sex" ($\beta = -.20$; CI = –.41 to –.30) categories. In addition, agreeableness was a predictor for the "chubby women" category ($\beta = -.19$, CI = –.41

to –.03) and "transgender women" ($\beta = -.18$; CI = –.46 to –.02). Openness to experience and agreeableness explained in total only 10% of the variance of the preference of "chubby women" category. Extraversion and agreeableness explained 5% of the variance of the preference of "transsexual women" category.

An analysis of a combined pornography categories preferences indicator showed that the greater spectrum of pornographic category preferences is positively related to the frequency of pornography usage ($r = .70$, $p < .05$), physical aggression ($r = .22$, $p < .05$) as well as openness to experience ($r = .20$, $p < .05$). All three factors turned out to be significant predictors of a wider spectrum of preferences ($F = 26.7$, $p < .05$). Frequency ($\beta = .54$, t = 7.69, $p < .05$) explained 31% of the variance of the results, while physical aggression ($\beta = .17$, t = 2.44, $p < .05$) and openness to experience ($\beta = .14$, t = 2.08, $p < .05$) only 7% in total.

Sexual orientation proved to be a factor differentiating the spectrum of sexual category preferences ($F = 3.38$, $p < .05$, $\omega^2 = .13$). Fisher's LSD post-hoc and planned comparisons showed that bisexual people had a significantly larger range of preferences of pornographic films than heterosexual and homosexual people. There were no significant differences between heterosexual and homosexual people.

Discussion

The aim of this work was a further exploration of the empirical data regarding the relationship between the viewed pornography and selected personality traits, acquired for the needs of a previous author's work [8]. Further exploration of the relationship of selected personality traits with the preference of a given type of pornography allowed to show new, interesting relationships. New data has been provided, which can be used as a guide for further research in the field of pornography studies.

The presented empirical data show that viewers of pornography are characterized by higher levels of extraversion and emotional stability, compared to non-viewers. This can be conditioned by the boldness of extroverts and the sense of security of emotionally stable people [16]. They probably feel confident when revealing information about their intimate life. It is possible that extroverts and emotionally stable people are more likely to answer questions about their intimate life and are not ashamed to explore the sphere of pornographic films. The form of data collection could have a large impact on the observed results. The subjects could have greater certainty about their anonymity, due to conducting the research using the Internet. Extroverts have a higher threshold of sensory activity [16]. Pornography usage could be a response to the need for frequent stimulation. Extroverts often seek sensations [16, 17]. Probably the realization of the need for stimulation positively affects the well-being of the individual, which could lead to reaching for pornographic stimuli. The characteristics of the stimuli obtained from viewing pornography should be further verified. It's worth verifying whether the main argument for watching pornography by extroverts is reaching orgasm, reducing negative emotions or maybe some other form of gratification. People who are emotionally stable might often use pornography because of their high control of their own instincts [9, 18]. They are able to better inhibit their desires [16], thus probably use erotic stimuli much safer. They probably have no fear of delving into the sphere of eroticism, because emotionally stable people are usually not shy [9, 18]. This information would allow us to overthrow the view of pornography and as a pathological phenomenon, because they indicate the positive and socially desirable traits – extraversion and emotional stability.

Analyzes provided information that people gathered around the categories of "amateurs" and "teenagers" were less agreeable in relation to the other respondents. It is possible that these people are in opposition to other, more unusual categories of pornographic films. It is possible that they prefer only those categories, that are within their daily reach. There is a chance that they reach only for stimuli that are available to them realistically in their subjective perception. This could be due to the greater criticality and skepticism of less agreeable people [17]. The relationship between "teenagers" and "amateurs" categories with the cult of youth would be worth analyzing. It would verify whether less agreeable people prefer younger partners. Preference of younger partners could be reflected in the preference of this type of pornography. In addition, low agreeableness is associated with anti-social behavior [19]. It is worth verifying whether sex scenes with very young people or amateurs may be a form of manifestation of such behaviors and views. We do not know whether the category of "teenagers" is not dominated by much older male actors and very young female actresses. A large age difference between the actors or the viewers and the actors could affect the preference of these categories by less agreeable people. It should be checked what is the exact characteristics of these categories – eg. if the actress in the role of "teenagers" really belong to this age group, or they just play such role.

The relationship of openness to experiences and preference of the "BDSM" and "group sex" category observed in the previous work has been confirmed [8]. We can say that this personality trait is an important predictor of viewing the "BDSM", "group sex" and "big penis" categories. People open to experiences are unconventional and curious about the world [9, 18]. It is possible that these people are heading towards categories which go beyond the canon of the classic sex. This would allow them to satisfy their hunger for new information by exploring sophisticated categories that do not necessarily have to be available to them in their daily lives. People who are open to new experiences are rebellious and nonconformist [17], so it is likely that they are not ashamed of the preference of sophisticated categories and seek to explore atypical spheres of their sexuality. People with low openness to experiences searched for pornography with "chubby women", thus most likely trying to escape from the unrealistic standards of female beauty presented in some pornographic films. Low openness

to experience may indicate conservatism , preference of traditional and socially recognized values [9, 18]. People who are not very open to new experiences may not enjoy watching pornographic films in which there are actors with unnatural proportions. It is possible that other categories of pornographic films are not attractive to them, due to the small reflection of this types of pornographic scenes in their daily lives. It is worth verifying whether people with low openness to experiences do prefer partners who are less slim in their everyday life. This could explain the lack of exploration of other unknown spheres and lack of searching for new experiences – those behaviours are characteristic of low openness to experience [16]. It is worth verifying these relationships using a more reliable tool for measuring openness to experiences, eg. one of the scales of the NEO-FFI questionnaire [18].

Extraversion turned out to be the second important predictor of watching certain types of pornography. Introverts preferred the category of "transsexual women" and "oral sex". It should be verified whether the scenes of oral sex are characterized by a lower intensity of dialogues in relation to other categories of pornographic films. This could be attractive for people with low extraversion that that are considered to be less sociable and less talkative [9, 16, 18]. It would be interesting to examine using the qualitative research the relationship between introversion and the occurrence of oral fixation, which is the axiom of Freud's theory [20]. Fixation at the level of the oral phase can lead to drawing a particular pleasure from oral sex [20], which could explain the attractiveness of this category among introverts.

The preference of the category of "transsexual women" by people with low extraversion may result from the similarity of these people to the actors playing a role in this type of films. This may be demonstrated by the fact that transsexual people show a higher level of introversion [21]. Introverts prefer loneliness and are distanced in social contacts [9, 18], which may lead to the preference of pornographic films with actors characterized by similar traits. However, it is possible that this relationship is the result of an uncontrolled mediating variable. Extraversion explained a very small percentage of the variance of the preference of this category. This result requires further exploration.

The frequency of pornography usage turned out to be the best predictor of a wide range of preferences. The relationship between the frequency of usage and physical aggression of the individual has been confirmed once again [5, 8], however, it is weak. A broad spectrum of preferences can be explained by the fact that with a frequent exposure of a given type of stimulus, the individual may search for variety. A frequent exposure of the same stimuli would probably lead to a decrease in its attractiveness. People frequently watching pornography may seek newer experiences in a wide range of categories, in order to maintain positive consequences coming from viewing the pornography. It is worth investigating whether this broad spectrum of preferences of pornographic categories contains a lot of aggressive stimuli. A large amount of aggression in pornography could model person's behavior, leading to the increase of aggression as a trait. Probably frequent exposure of aggressive behavior in pornography would increase the chance of consolidating these patterns in the daily functioning of the individual.

Based on the previous data analysis, it was claimed that sexual orientation did not differentiate the results of the subjects [8]. Further exploration of the results showed that bisexual people preferred a larger number of pornographic categories, which seems to be corresponding with the characteristics of these people. Broad spectrum of preferences seems to be natural for bisexual people, due to the larger group of their potential partners. The preference of both women and men can provide potentially more attractive stimuli for bisexual people. This variable deserves more attention in future studies of pornography, as it is an important dimension of human sexuality. It was shown that its relationship with the studied variables does not have to be obvious and significant on the basis of basic analyzes.

Conclusions

1. In-depth statistical analysis of data on the relationship between selected personality factors and pornographic preferences seems to undermine the role of selected Big Five personality factors as a good predictors of viewed pornography. Only some of the factors turned out to be significant – extraversion, emotional stability and openness to experience. It is worth focusing on other personality traits than Big Five's, in order to better understand the mechanism of viewing and preferences of pornography. Exploration of potential variables should begin among correlates of personality traits. The relationship between self-esteem, life satisfaction, quality of life, shyness, altruism, empathy, psychoticism or intelligence with

the preference of a given type of pornography could be worth verifying.

2. It would also be worth examining the attractiveness of a given type of pornography and combining it with factors mentioned above. It is likely that the evaluation of the attractiveness of the categories would not be the same as their preference, which would be interesting from the perspective of the cult of ugliness (turpism). It is possible that the respondents will rate the category as attractive, but they will not watch it themselves. It would also allow to examine the relationship between the subjective attractiveness and the preference of the given pornographic films.

Bibliography:

1. Makaruk K, Wójcik S. EU NET ADB – Badania nadużywania internetu przez młodzież w Polsce i Europie. 2012. Obtained from http://www.saferinternet.pl/pobierz.php?i = 3&hash = 5fbc

2. Franczyk K, Cielecka E, Tuszyńska-Bogucka W. Porn on Desktop. Procedia-Social and Behavioral Sciences 2014; 140: 192–196.

3. Price J, Patterson R, Regnerus M, Walley J. How much more XXX is Generation X consuming? Evidence of changing attitudes and behaviors related to pornography since 1973. The Journal of Sex Research 2016; 53(1): 12–20.

4. Bogaert AF. Personality, individual differences, and preferences for the sexual media. Archives of sexual behavior 2001; 30(1): 29–53.

5. Hald GM, Malamuth NM. Experimental effects of exposure to pornography: The moderating effect of personality and mediating effect of sexual arousal. Archives of sexual behavior 2015; 44(1): 99–109.

6. Malamuth NM, Ceniti J. Repeated exposure to violent and nonviolent pornography: Likelihood of raping ratings and laboratory aggression against women. Aggressive Behavior 1986; 12(2): 129–137.

7. Malamuth NM, Hald GM, Koss M. Pornography, individual differences in risk and men's acceptance of violence against women in a representative sample. Sex Roles 2012; 66(7–8): 427–439.

8. Gerymski R. Związek agresji, wybranych czynników osobowościowych oraz preferencji kategorii filmów pornograficznych. Psychoseksuologia 2018; 4 (in print).

9. Sorokowska A, Słowińska A, Zbieg A, Sorokowski P. Polska adaptacja testu Ten Item Personality Inventory (TIPI) – TIPI-PL – wersja standardowa i internetowa. WrocLab, Wrocław 2014; 4–35.

10. Aranowska E, Rytel J. Struktura czynnikowa kwestionariusza agresji Bussa i Perry'ego (BPQA) w populacji polskiej. Studia Psychologica 2012; 12: 135–151.

11. Paul B. Predicting Internet pornography use and arousal: The role of individualdifference variables. Journal of Sex Research 2009; 46(4): 344–357.

12. Pornhub's 2015 Year in Review. 2016. Obtained from http://www.pornhub.com/insights/pornhub-2015-year-in-review

13. Preacher KJ, Hayes AF. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behavior research methods 2008; 40(3): 879–891.

14. MacKinnon DP, Lockwood CM, Williams J. Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate behavioral research* 2004; 39(1): 99–128.

15. DiCiccio TJ, Efron B. Bootstrap confidence intervals. Statistical science 1996; 11(3): 189–228.

16. Oleś PK. Wprowadzenie do psychologii osobowości. Wydawnictwo Naukowe Scholar, Warszawa 2003; 129–165.

17. McCrae RR, Costa PT. Osobowość dorosłego człowieka: perspektywa teorii pięcioczynnikowej. Wydawnictwo Wam, Kraków 2005; 66–72.

18. Zawadzki B, Strelau J, Szczepaniak P, Śliwińska M. Inwentarz osobowości NEO-FFI Costy i McCrae. Podręcznik do polskiej adaptacji. Pracownia Testów Psychologicznych PTP, Warszawa 1998; 15–17.

19. Wilkowski BM, Robinson MD, Meier BP. Agreeableness and the prolonged spatial processing of antisocial and prosocial information. Journal of Research in Personality 2006; 40(6): 1152–1168.

20. Freud S. Trzu rozprawy z teorii seksualnej. W: De Bosses CH. O kulcie fetyszów. Wydawnictwo Instytutu Filozofii i Socjologii PAN, Warszawa 1992; 128–131.

21. Buhrich N. Psychological adjustment in transvestism and transsexualism. Behaviour research and therapy 1981; 19(5): 407–411.