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Sex and country related specificity of readiness for aggression among adolescents

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Introduction

Psychological literature presents aggressive behavior as an interpersonal activity due to its formal features, in other words: classification to one of the three manifestation forms: physical, verbal, or indirect aggression (Bjorkqvist, 1994; Bjorkqvist et al., 1992). From this point of view various correlatives, circumstances of occurrence and changes in the intensity of certain aggression forms can be established. However, the same formal aggressive behavior might be caused by other factors, and the shown attitude does not allow explaining the nature, dynamics and conditions of interpersonal aggression. It would be the same as examining the symptoms only, forgetting about the causes. When treating an illness, for example, one of its symptoms is a high temperature; however, fever is also a symptom of numerous other illnesses or sicknesses. Treating the fever only is the same as treating a symptom. Nevertheless, it is an illness that should be treated instead. Aggression works likewise: its different acts (hitting, insulting others, gossiping) are only the symptoms that might be caused by the same factor (the same intrapsychic mechanism). However, a situation where the

same act of aggression is caused by different psychological mechanisms might also occur. The fact that the same looking activity may be regulated by numerous mechanisms means that when explaining aggressive behavior the nature of those mechanisms must be concerned.

In the proposed system willingness to aggression is responsible for aggressive behavior. It is widely accepted that readiness for aggression is a constellation of various phenomena and intrapsychic processes responsible for the aggressive behavior regulation (Frączek, 2008, 2010). According to theoretical analysis (Frączek, 2002, 2008, 2010) and empirical examinations (Frączek, Konopka, Smulczyk, 2008), there are three basic classes of readiness for interpersonal aggression: emotional – impulsive (E – IR), habitual – cognitive (H – CR) and personality – immanent (P – IR) readiness for aggression.

The first class of readiness, emotional – impulsive, is responsible for the aggressive behavior that is easily generated by anger and is unable to an appropriate emotional control. This class of readiness has an emotogenic character and it is related to temperamental properties (Smulczyk, 2008). Aggressive reactions are violent and limited in time. They are in fact a manifestation of emotional states, which are a reaction to harmful stimuli or a provocation. Socializing experience that favors the formation of this kind of readiness is a lack of training of gratification postponement and over protectiveness.

Habitual – cognitive readiness is of a different character. Intrapsychic structures that regulate aggressive behavior consist of unique habits, behavior patterns and tasks characteristic for a certain social role. Cognitive processes, such as: social perceptions, anticipation, attribution, have a crucial role in its regulation. This class of readiness is responsible for habitual and planned aggressive behavior that occurs in response to a situation and a role, e.g., sexual (Konopka, 2008). The schemes development and conviction that determines the acceptability of aggressive behavior, undergo the processes of modeling and strengthening (socializing training).

The last class of readiness is called immanent. Its characteristic feature is that aggressive behavior is a constant and immanent need of a person. This class of behavior comes with positive emotions (satisfaction) that are caused not only by an act but also by observing its results. The need of stimulation and a low level of empathy are the correlatives of this class of readiness. Furthermore, the experiences where aggressive behavior brings desired results, especially self-esteem improvement, favor the development of the readiness.

The presented examinations had an explorative character. First of all, we were interested in whether men and women are different from each other in

respect of an intensity of readiness for interpersonal aggression. Second of all, we wanted to test which of the class of the readiness is developed the most in the group of women, and which one is developed the most in the group of men. Besides, the examination taken in China, Spain and Uruguay using RIAI revealed an answer to the question whether the observed changes between men and women in Poland take place in the countries of a different culture as well.

Method

Participants and Procedure

The examined group consisted of students from Poland, Spain, Uruguay and China (N= 984, 450 women, 534 men). The examined students were of the age of 15 – 19 (M = 16,53; SD = 1,28). The research was carried out between 2009 and 2010 during students' classes. Detailed information about the examined students is presented in table 1.

Table 1. The sample characteristics

country	SEX		Overall	age	Mean age
	females	males			
Poland	136	99	235	16–19	17,80
China	62	138	200	15–18	15,44
Uruguay	192	164	356	15–19	16,27
Spain	60	133	193	15–19	16,59
overall	450	534	984		

Materials

The Readiness for Interpersonal Aggression Inventory was used to measure the readiness to aggression (RIAI; Frączek, Konopka, Smulczyk, 2008). The inventory consists of 30 sections that measure three classes of readiness for aggression: Emotional – Impulsive Readiness (E – IR), Habitual – Cognitive Readiness (H – CR) and Personality – Immanent Readiness (P – IR). The inventory consists of 30 statements (10 in each scale). The task of an examined student was to take a stance on each statement by choosing a positive or a negative answer (Yes/No). These are some examples of statements of each class of readi-

ness: “I get angry easily, but I calm down quickly or After a failure I feel strong anger” (E – IR); “You can get revenge on those who deserve it, I think there is nothing wrong with violence when defending others” (H – CR); “Sometimes I feel like distressing somebody without having a serious reason, Sometimes I am pleased when I am making fun of others” (P – IR). The tool functions in a few languages: Polish, English, German, Italian, and Spanish.

The accuracy of the inventory scales measured by the Cronbach’s Alpha coefficient is presented in table 2. The intercorrelation coefficients between the scales measured by the Pearson’s r coefficient are presented in table 3.

Table 2. Internal consistency of RIAI Cronbach’s Alpha

	E – IR	H – CR	P – IR
Poland	.675	.768	.716
China	.764	.811	.790
Uruguay	.673	.763	.667
Spain	.664	.753	.753

Table 3. Pairwise correlations of RIAI’s sub-scales

	EIR * HCR	EIR * PIR	HCR * PIR
Poland	.137*	.153*	.448**
China	.546**	.613**	.632**
Uruguay	.134*	.069	.419**
Spain	.331**	.342**	.472**

Note: * p <.05, ** p <.001

The accuracy of all the three scales is satisfactory in all the examined samples. The correlation coefficients between the scales indicate that the three kinds of readiness are not depended from one another; it concerns mainly the Chinese trail, where the correlation coefficients range from r =.546 to r =.632. The highest correlations occur between H – CR and P – IR in all the examined samples. Correlations between E – IR and H – CR, and E – IR and P – IR are rather low or average in Poland, Spain and Uruguay.

Results

In order to test whether the intensity of the three kinds of readiness to aggression varies depending on sex of a tested person, the series of t-student tests for independent groups was carried out. The results are shown in the tables 4–6.

Table 4. Comparison of level of Emotional – Impulsive Readiness for Aggression among boys and girls in the studied samples

Country	Boys		Girls		t	p
	M	SD	M	SD		
Poland	4.38	2.35	5.3	2.36	3.04	.003
Spain	5.33	2.46	5.7	2.24	0.98	.324
Uruguay	5.31	2.33	5.81	2.32	2.00	.046
China	3.29	2.69	3.55	2.44	0.63	.524

Table 5. Comparison of level of Habitual – Cognitive Readiness for Aggression among boys and girls in the studied samples

Country	Boys		Girls		t	p
	M	SD	M	SD		
Poland	5.82	2.47	3.8	2.61	5.83	.001
Spain	5.57	2.53	3.95	2.24	4.00	.001
Uruguay	5.99	2.52	3.48	2.36	9.66	.001
China	3.81	2.81	2.55	2.69	2.94	.004

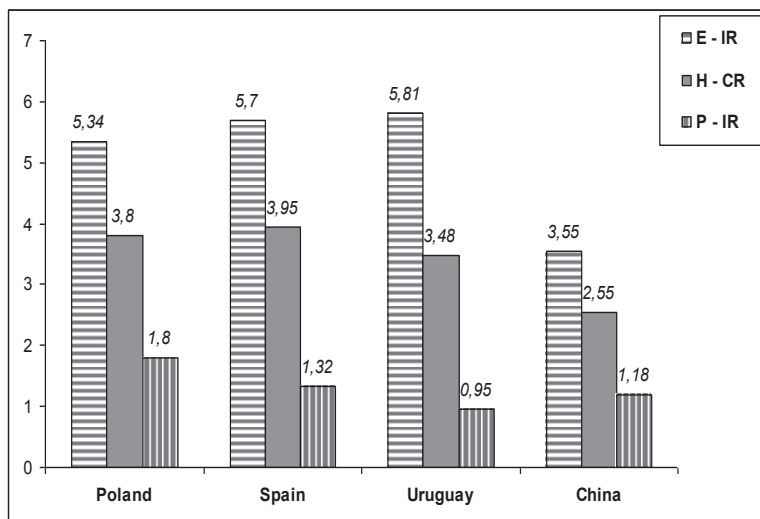
Table 6. Comparison of level of Personality – Immanent Readiness for Aggression among boys and girls in the studied samples

Country	Boys		Girls		t	p
	M	SD	M	SD		
Poland	3.24	2.23	1.8	2.01	5.11	.001
Spain	2.37	2.30	1.32	1.66	3.58	.001
Uruguay	2.08	1.80	0.95	1.36	6.59	.001
China	2.47	2.37	1.18	1.86	4.14	.004

Crucial differences associated with sex of a tested person occurred among all the classes of readiness for aggression. In comparison to men, women characterized in a significantly higher level of Emotional – Impulsive readiness; however, it occurred in Poland and Uruguay only. There is no difference in the intensity of this class of readiness among men and women from Spain and China. In case of the H – CR and P – IR readiness, some substantial inter-sexual differences occurred in every sample. In comparison to women, men characterized in a stronger readiness of both classes.

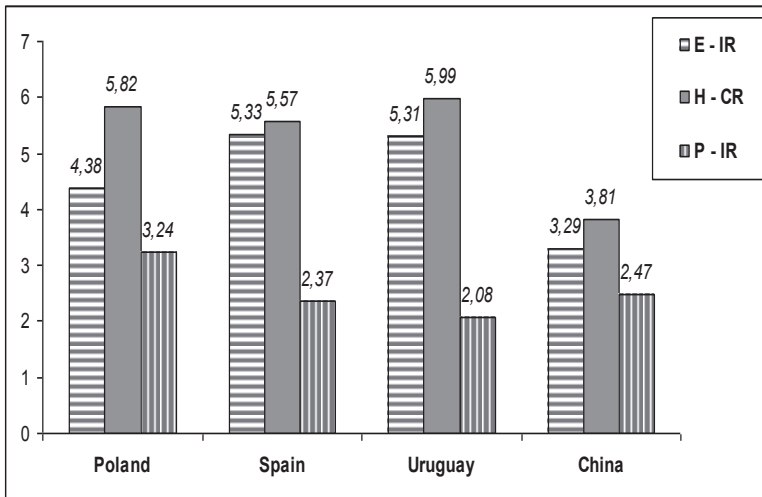
It was also tested whether the intensity of the three classes of aggression are different from one another regardless of sex of a group. In order to examine it, a series of variation analysis (one – way Anova) regardless of the sex of a group was carried out. The analysis revealed that there are some significant differences in the E-IR readiness among girls from the tested countries [$F(3,443) = 15,11$, $p < .001$]. The lowest level of this class of readiness was presented by girls from China, which was substantially different from girls from Poland, Spain and Uruguay, whose E – IR level is the same. Similar results were revealed in the H – CR readiness [$F(3,441) = 4,14$, $p < .01$]; however, the difference in this case was shown only between girls from China, and those from Poland and Spain. The intensity of this class of readiness between girls from China and Uruguay is the same. Similarly, the intensity of this class of readiness of girls from Uruguay is the same as of girls from Poland and Spain. The smallest differences among girls from different countries were noticed in P – IR readiness [$F(3, 444) = 6,75$, $p < .001$]. The evident difference in the intensity of this kind of readiness occurred only between girls from Poland, who revealed the lowest level of this class of readiness, and girls from Uruguay, who revealed the highest level. Chart 1 presents the average intensity of the three classes of readiness in the four tested groups of girls. The chart indicates that the profiles of readiness intensity in the four samples are the same, i.e. girls, regardless of the country they come from, present the highest intensity of the E – IR readiness and the lowest intensity of the P – IR readiness.

Figure 1. Comparison of level of E – IR, H – CR and P – IR



In the male sample, the E – IR readiness revealed the most significant differences among the countries [$F(3,526) = 21,46, p < .001$]. The examined men from Spain and Uruguay presented the highest level of the readiness for aggression of this class, between which no substantial statistical differences occurred. Men from China similarly presented the lowest level. In case of the H – CR readiness, the tested men from Poland, Spain and Uruguay did not present any differences. However, a crucial difference was observed between the three tested countries and China [$F(3,521) = 20,36, p < .001$], which, as in the last case, present the lowest level of the readiness to aggression intensity. The P – IR readiness reveals a little different average level. The highest level of this class present men from Poland; men from Uruguay present the lowest level. In the contrary to the two other classes of readiness, men from China present results which are very close to those from Poland, and between the two groups there are no statistically crucial differences. In the sample of men, the similarity of readiness profiles for aggression in different countries is also noticeable. Men demonstrate the H – CR readiness the most and, similarly to women, they demonstrate the P – IR readiness the least.

Figure 2. Comparison of level of E – IR, H – CR and P – IR among boys from studied samples



Discussion

The current examinations on different Polish samples (N = 1257; Frączek, Konopka, Smulczyk, 2008) clearly indicate that women are distinguished by a higher readiness index of the E – IR readiness than men. Meanwhile, men demonstrate a higher H – CR and P – IR readiness levels. The examination in the article illustrates a similar and distinct pattern. Although the tested groups of women from Spain and China also demonstrate a higher E – IR intensity than man from those countries, they are no statistical differences. The results indicate that the opinion about a higher level of aggression of men than that of women matters when the mechanism of aggressive behavior is taken into consideration.

The obtained results indicate that the sex regularities are very weak and hardly sensible to cultural differences. Similarities in H – CR and P – IR between the countries reveal that the universality of norms and convictions concerning aggression, exist in the tested countries. At the beginning of the article it was mentioned that the H – CR and P – IR classes of readiness are the most prone to the impact of socializing training. In order to explain the sexual differences in those classes of readiness it would be necessary to appeal to well documented divergences in the process of socializing of women and men (Bem,

2000; Deaux, 1985). Adults treat girls and boys in accordance to a well – known social stereotype of sex. Children begin to see the reality from the angle of the difference and accommodate their characters and behavior to it (Bem, 2000; Deaux, 1985). According to Eagly and Steffen, social roles performed by men contain norms that encourage them to aggressive behavior; however, in case of women, protectiveness and communication skills are mostly emphasized. Because of this, femininity is associated with expressive traits, such as: tenderness, sensitivity. However, masculinity is associated with instrumentative traits, such as: independence, assertiveness. It is hard to explain why differences between women and men from Spain and China of the E – IR kind of readiness are not observed. One of the explanations might be that it is due to international differences; however, it has not been verified. Spanish people are considered to be very emotional, which might cause that the differences become obliterated. Ramirez (1990) proved that Spanish people accept strong emotions as an excuse for aggression more than Polish people, and their disacceptance limits of the behavior caused by those emotions (e.g., yelling caused by anger) are definitely lower. It is hard to interpret the lack of differences in respect to E – IR, which is observed in China. On one hand, the culture of that country is quite suppressive regarding showing emotions, which can also cause the fact that sexual differences do not become apparent. On the other hand, the examined group of people was from Hong-Kong, which is a special city that breaks with the stereotypes.

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Międzyplciowa oraz międzykrajowa specyfika gotowości do agresji wśród młodzieży

Sex and country related specificity of readiness for aggression among adolescents

Summary

Readiness for aggression is defined as a set of psychological processes and structures that regulate (underlie) aggressive manifestations. It is reasonable to identify three main classes of such mechanisms: emotional-impulsive readiness (E – IR), habitual-cognitive readiness (H – CR) and personality-imminent readiness (P – IR). Readiness for aggression was diagnosed by a psychometrically verified inventory, The *Readiness for Interpersonal*

Aggression Inventory (RIAI; Frączek, Konopka, Smulczyk, 2008). The study was run on 984 students (534 males and 450 females) from Poland, China, Spain and Uruguay, mean age 16,53. The analyses yielded the following findings: boys manifested significantly higher level of H – CR and P – IR than girls find it is true for every country. At the same time girls manifested significantly higher indicator of E – IR than boys, but only in case of Poland and Uruguay. It seems that both sex-related roles and nationality are to some extent related to manifested level of differences in a level of measured forms of readiness for interpersonal aggression.

Keywords: readiness for aggression, emotional-impulsive readiness (E – IR), habitual-cognitive readiness (H – CR) and personality-imminent readiness (P – IR).