Abstract The present study examined the differences in the psychological wellbeing of 270 Polish (198 female) and 209 South Korean (87 female) students. Specifically, it tested the difference in depressive symptom severity between Polish and Korean students, and how this difference may be accounted for by stress and sensitivity to frustration. Poles and Koreans were chosen for this investigation as they vary in terms of culture with Koreans being more collectivistic and more dependent on social context. It was hypothesized that Koreans will have higher levels of depressive symptom severity than Poles due to the elevated levels of stress and sensitivity to frustration. Participants in both countries completed a set of questionnaires including the PHQ-9 - Patient Health Questionnaire, the STAR - Situational Triggers of Aggressive Responses Scale, and the Perceived Stress Scale - PSS 10. We found that Koreans were more depressed than Poles due to the higher stress levels and sensitivity to frustration. We discuss our study from two culturally distinct perspectives: psychological and philosophical. As this article addresses the problem of frustration and stress with attention to social context of emotional expression (or restraining from it), a philosophical concept of resentment may turn out to be a promising area of further research and interpretation.

Keywords Sensitivity to frustration · Stress · Depression · Poland · Korea · Resentment

Depression is becoming one of the greatest public health problems in Korea (Park and Kim 2011). It varies cross-culturally, similarly to individual differences that may contribute to its genesis (Weissman et al. 1996). One of the most severe consequences of depression are suicide attempts and Korea is among countries with the highest suicide rate in the world (28.7 per 100,000 in 2013, in comparison to Poland 14.8 per 100,000 in 2014) (Cukrowicz et al. 2011; OECD, 2017, Suicide rates). Park and Kim (2011) claim that there is no clear answer regarding the epidemiology of depression in Korea, however based on the current data it can be foreseen that it will become even more common. At the social level, culture is one of the factors related to depression (Kessler and Bromet 2013).

When it comes to culture Korea is traditionally considered collectivistic and models a high context culture where group desires and goals are put ahead of individual ones (Nisbett 2003). At the same time currently Korean culture is an example of a shift from those strongly collectivistic values to more individualistic ones (Kim and Choi 1994). Children are taught to behave in accordance to cultural norms, but if the social change is fast there might be a discrepancy created between what is thought in the family and what social institutions demand. There is also some evidence that in collectivistic cultures that have experienced dramatic socioeconomic and political transformations, individualist factors have become more important in predicting the level of subjective wellbeing, and collectivist factors have become less important (Steele and Lynch 2013). Such incompatible demands may create maladaptive behaviors and psychological problems (Kim and Choi 1994).

Among European countries Poland similarly to Korea experience a fast social and economic growth in comparison to neighboring countries (Zajenkowska and Zajenkowski 2012). Those countries apart from aforementioned similarities differ in terms of culture as well as living conditions. In contrast to
Korea, Poland has a much more individualistic culture and, according to the national culture classification, ranks 17th on the scale, whereas Korea ranks 43rd (Hofstede 2001). In an individualistic society, personal needs are often put ahead of group expectations, that is why one can speculate that realizing individual goals and desires would be easier in such cultural environment as they would not be frustrated. The concept of frustration is widely understood as negative cognitive and emotional state elicited when people feel that demands placed on them exceed their ability to cope (Lazarus and Folkman 1984). A person whose needs are frustrated experiences discomfort, pain, and unhappiness (Snyder et al. 2002). Frustration is often felt when people have the sense of a lack of control due to circumstances or the behavior of others (Lawrence 2006) and personal control is one of the crucial factors of wellbeing (Thompson 2002). According to the learned helplessness theory (Seligman 1975) the prolonged experience of the lack of control (due to the circumstances or the behavior of others) may lead to the clinical depression. Higher levels of depression are also related to less coherent self-image, that is also more typical for individuals more sensitive to frustrating events (Lawrence 2006). Sensitivity to frustration, which differs cross-culturally, reflects proneness to feel particularly aggressive in response to having one’s goals blocked and it was significantly associated with tense arousal (Zajenkowska et al. 2013; Zajenkowska et al. 2015). A cross-cultural study showed that higher sensitivity to frustration was more typical for collectivist countries (Zajenkowska et al. 2014). Due to many cultural restraints in collectivist countries, like for example Korea, expressing negative emotions is frowned upon as it destroys social harmony (Markus and Kitayama 1991) and blocking anger in reverse is related to depression (McWilliams 2011).

A quickly changing social environment can create frustrating situations in which an individual wants to meet his or her own needs but at the same time wants to fulfill social obligations. A study found that acculturative stress was related to greater levels of suicidal symptoms, social anxiety, and anxious arousal among minority college students with higher, but not lower, levels of experiential avoidance (Zvolensky et al. 2016). This is particularly plausible considering cross-cultural studies that have shown sensitivity to frustration level may differ cross-culturally and could be higher in more collectivist countries, where group goals are prioritized over individual’s goals. It is also probable that Koreans are likely to experience more stress due to a temperament structure that is less adaptive in a stimulating environment. This is consistent with data obtained by Samsung Economic Research Institute in 2010, where Korea was listed as a country with the highest stress levels among all OECD countries. Hence, in the current study, it was hypothesized that Korean students would have higher levels of depression than Poles due to higher stress and sensitivity to frustration, which were considered mediators.

Current Study

Based on previous data, it was assumed that collectivist Koreans would have higher levels of depressive symptom severity than individualistic and less suicidal Poles. Yet, psychological qualities underlying these differences remain unclear. Given the ubiquity of depressive symptoms and their relationship to suicidal attempts, understanding what determines this state is an important undertaking. We expect the qualities responsible for these differences are sensitivity to frustration and proneness to stress. We assume that young Koreans would experience elevated levels of frustration coming from a discrepancy between traditional, collectivistic principles and new individualistic cultural values and therefore would be more sensitive to frustrating situations. This is particularly plausible considering cross-cultural studies that have shown sensitivity to frustration level may differ cross-culturally and could be higher in more collectivist countries, where group goals are prioritized over individual’s goals. It is also probable that Koreans are likely to experience more stress due to a temperament structure that is less adaptive in a stimulating environment. This is consistent with data obtained by Samsung Economic Research Institute in 2010, where Korea was listed as a country with the highest stress levels among all OECD countries. Hence, in the current study, it was hypothesized that Korean students would have higher levels of depression than Poles due to higher stress and sensitivity to frustration, which were considered mediators.
Method

Materials and Procedure

PHQ-9 The Patient Health Questionnaire was designed as a measure of depression severity and it consists of the criteria on which the diagnosis of DSM-IV depressive disorders is based (Kroenke and Spitzer 2002). It has a dual-purpose: it can establish provisional depressive disorder diagnoses and grade depressive symptom severity. It has questions about psychological wellbeing within the last two weeks, including one about hurting oneself. In the current study, it was used as a severity measure with score ranging from 0 to 27 - each of the nine items can be scored from 0 (“not at all”) to 3 (“nearly every day”) (5 - mild, 10 - moderate, 15 - moderately severe, and 20 - severe depression).

Star The Situational Triggers of Aggressive Responses Scale was used to measure aggression-related sensitivities (Lawrence 2006). The questionnaire consists of 22 situations (10 reflect Sensitivity to Frustration [SF], and 12 reflect Sensitivity to Provocation [SP]). In this study, we used only SF scale. Participants were asked to rate how an aggressive situation each makes them feel on a 5-point scale. The instrument has high internal consistency (αs = .82 and .80 for SF and SP respectively) and its validity has been examined and supported previously (Lawrence 2006; Lawrence and Hodgkins 2009; Lawrence and Hutchinson 2013). The Polish version of STAR was used previously and validated (Zajenkowska et al. 2013). In Korea, the questionnaire was translated for the current study into Korean, then back-translated into English by two experts and a bilingual translator. The translation was approved by the author of the original scale. The internal consistency of the STAR dimensions in the present research was high (see Table 1).

PSS 10 The Perceived Stress Scale was applied to measure the level of stress (Cohen et al. 1983). The PSS is one of the most widely used psychological tools for evaluating the perception of stress. It measures the degree to which situations in one’s life are considered as stressful. The scale consists of 10 items (four positively stated and six negatively stated) that can be scored from 0 (“never”) to 4 (“very often”). The PSS scores are obtained by reversing the responses to the positively stated items and then summing across all the scale items. In this study, we used the Polish (Juczyński and Ogińska-Bulik 2009) and Korean (Park and Seo 2010) adaptation of the PSS.

Participants

The overall sample consisted of 479 individuals. The age range was 18–48 years (M = 22.82; SD = 2.35). The sample consisted of 270 Poles (198 women) aged 18–40 (M = 22.88; SD = 2.06) and 209 Koreans (87 women), aged 18–48 (M = 22.75; SD = 2.69). Groups of students were tested in classrooms or in dormitories. Part of data was also gathered using an online tool. All participants were informed of the nature, purpose, and anonymity of the study. Informed consent was obtained from all individual participants included in the study.

Results

Mediation Analysis

Table 1 presents means and standard deviations for proneness to frustration, level of stress, and depression, together with correlations among those variables.

To analyze relations between nationality, proneness to frustration, level of stress, and depression, mediation analysis was performed with the use of Hayes’ macro model 4 (Hayes 2013). Nationality was included in the model as an explanatory variable. It was dummy coded. Poland was coded as 0 and Korea was coded as 1. Proneness to frustration and level of stress were analyzed as possible mediators and depression was included as a dependent variable. Values of regression coefficients are presented in Fig. 1.

Indirect total effect of nationality on depression was statistically significant (Beta = 0.31, p < 0.001), but the direct effect of nationality on depression - when level of frustration and stress were controlled for - was not statistically significant (Beta = 0.04, p > 0.05). Nationality was a statistically significant predictor of proneness to frustration. Proneness to frustration was higher in the Korean group than in the Polish group and it was a significant predictor of depression level. The higher the proneness to frustration, the higher the level of depression.

Nationality was also a statistically significant predictor of stress level. It was higher in the Korean group than in the Polish group. Level of stress was in turn positively related to depression. The higher the level of stress, the higher the level of depression.

Both proneness to frustration and level of stress were parallel mediators of relation between nationality and depression. However, as Fig. 1 presents, the path nationality-stress-depression was stronger than the path nationality-frustration-depression.

| Scale     | Cronbach’s α |
|-----------|--------------|
| Frustration | 0.85         |
| Stress     | 0.71         |
| Depression | 0.87         |

Table 1 Internal consistency estimates for the STAR, PHQ and PSS scales
Discussion

Our study aimed to investigate if postulated mediating variables, i.e. stress and sensitivity to frustration, explain higher expected depression symptoms in the Korean sample in comparison to the Polish one. In line with our expectations young adult Koreans in our sample had higher levels of proneness to frustration and stress than Poles. These results could be explained in relation to cultural differences. In the case of societies, like Korea’s, where context is extremely important, people are described as sharing the belief that humans are interwoven with others and in general they tend to conform to others (Hashimoto et al. 2011). In contrast, Poles belonging to the Western culture are considered internally-driven individuals operating independently from others, with unique goals, desires, emotions, and feelings, which can differ from others (Hashimoto et al. 2011). Besides, recent studies show that although in general both Westerners and Easterners share the same need to be unique and to satisfy individual goals, they act differently with varying default strategies programmed by their national cultures (Hashimoto et al. 2011).

Those culturally bound strategies make them act based on what they think others would think and do (Hashimoto et al. 2011; Zou et al. 2009). To Koreans, “what people think” would be more important and could possibly relate to their higher level of sensitivity to frustration because they are not allowed to express openly emotions like anger that destroys social harmony (Markus and Kitayama 1991).

Another explanation of results bridges the psychological and the philosophical-phenomenological perspectives by referring to the idea of resentment. We believe that it may be useful in cross-cultural research, particularly in studying societies or communities going through a profound change, especially when the change means revaluation of social values (Steele and Lynch 2013; Cho et al. 2010). Resentment is most often understood as a reaction to frustration coming from an experience of undeserved injustice. This emotion may occur when one finds himself in a position of inferiority, being second, or submissiveness and his need for response is frustrated (for situational, institutional, or cultural reasons). It is a reaction of quiet, latent anger that influences one’s whole system of values. Resentment is considered an important factor in stabilizing or destabilizing an individual’s psychological life (MacLachlan, 2010; Vetlesen 2006) as well as the life of societies and nations (Berlet 2011; Tomelleri 2009). In the context of this article it is important to realize that resentment may affect the level of sensitivity to frustration and stress, problems of equality and personal merit, differences in collectivism and individualism, and, finally, the significance of tradition. Scheler (1915) insisted on the importance of cultural factors, when analysing social and psychological consequences of resentment. He argued that despite all inequalities, societies do not suffer from resentment as long as they do not have a sense or idea of equality (Scheler 1915). In this context, Asian cultures appear particularly interesting, which is also valid for contemporary South Korea. In Korea, the young have already discovered the Western sense of equality. They know of cultures more universalistic in thinking and judging, less collective and hierarchical, validating individual emotions. Young Koreans have discovered what individualism and equality bring into the social and personal life. Nevertheless, they still appreciate and follow typical Asian values, like the idea of community and the collectivistic social model, preferring particularism over universalism (Hampden-Turner and Trompenaars 1997). The dimension of particularism versus universalism explains how the information

Table 2  Means, standard deviations and correlations for measured variables

| Variable   | M     | SD    | Pearson’s correlation |
|------------|-------|-------|-----------------------|
|            |       |       | 1       | 2       | 3       |
| 1. Frustration | 29.05 | 7.97  | -       | 0.464** | 0.428** |
| 2. Stress   | 24.59 | 5.99  | 0.464** | -       | 0.621** |
| 3. Depression| 13.21 | 6.02  | 0.428** | 0.621** | -       |
from an external environment may affect the perception of a given situation. The universalistic approach stresses the importance of following rules (irrespective of the characteristics of the given case), whereas in particularism the specific context of the situation determines decisions and (when necessary) may lead to bending rules. In particularistic societies, context matters as there are no universalistic norms that apply to every situation. This uncertainty combined with emerging Western sense of equality may lead to resentment, which can turn into stress and increase sensitivity to frustration (Table 2).

Additionally it is also worth acknowledging that when analyzing answers from questionnaires, cross-cultural response bias has to be considered. In general respondents from collectivistic cultures could engage more in impression management (Lalwani et al. 2006). In our sample, Korean students achieved higher scores both on stress and sensitivity to frustration than more individualistic Poles, which could be interpreted as them not trying to adhere to some general good-impression expectation. Also, when it comes to extreme response style, referring to a greater tendency to select the endpoints of a response scale when giving their answers to questions, Koreans were less likely to choose the extreme response (Johnson et al. 2005; Chun et al. 1974). Still, in our study Koreans gave more extreme answers than Poles.

Several factors may limit our conclusions. Most importantly our study was conducted only among students. It would be recommended to analyze also the importance of cultural values among participants in investigated countries.

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Compliance with Ethical Standards All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Conflict of Interest Anna Zajenkowska declares that she has no conflict of interest.

Dorota Jasielska declares that she has no conflict of interest.

Justyna Melonowska declares that she has no conflict of interest.

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