

SWPS UNIVERSITY OF SOCIAL SCIENCES AND HUMANITIES

FACULTY OF PSYCHOLOGY

Master's Thesis

Author: Vismaia Nurfitriani

49709

Self-complexity and Resilience of Asian International University Students in Poland

Key words: self-complexity, resilience, gender differences

Thesis written under the supervision of

Anna Gabinska, Ph. D.

Warsaw, 2019

Contents

Contents	2
Abstract	3
Theoretical introduction	4
Self-complexity	4
Resilience	8
Studying abroad.....	11
Asian international university student characteristics	14
How self-complexity is associated with resilience in Asian student.....	17
Methodology	23
Participants	23
Measurement	24
Procedure.....	27
Results	28
Descriptive Analysis.....	28
Correlation between the level of self-complexity, subscale of self-complexity, and resilience in Asian international university students in Poland.....	29
Additional Analysis: Relationship between self-complexity and resilience in Asian international university students in Poland based on gender	30
Discussion	33
Limitations and Suggestions for Future Studies.....	37
References	39
Appendices A-E	51

Abstract

The thesis discusses two psychological concepts, that is self-complexity and resilience, both being concerned as important factors for adaptation among Asian student population in Poland. The purpose of this research was to investigate the relationship between self-complexity and resilience. The study was conducted on international student population from Asia and included 100 participants. Using the paper-pencil method, participants were administered Linville's self-complexity trait sorting task and Connor-Davidson Resilience Scale, with a purpose to identify different aspects of the self and investigate how these self-aspects related with the level of resilience in the given population. Correlation analysis revealed no association between the level of self-complexity and resilience level. However, interesting finding was found in the additional analysis that age is positively correlated with the level of resilience in the group of male students, while in the group of female students, age is positively related with the number of adjectives and negative adjectives.

Theoretical introduction

Over the past year the world changes, and change is challenge. People may grate, students may struggle, and migration is becoming increasingly difficult especially for the student who decide to study abroad and leave their home country. In the growing interest of positive psychology that is developing right now on what makes people strong and adapt well, we know that are some particular factors that allow us to adapt better. Resilience is one of the concepts that gain much attention that could explain the differences in one's psychological adaptation. Lopez, Prosser and Edwards (2002) indicated that it is essential for every person to develop resilience because those who have resilience are expected to have better cope with negative and unexpected life events. Thus, the present study is important, particularly for the international students, about well-known adaptation that is resilience, and one of them is less well-known, about the self-complexity. However, for many researches it shows that self-complexity buffers stress and it is important for intercultural adaptation, because those who have self-complexity means that they have different self-aspects. The research aimed to find any correlation between resilience and self-complexity in the international university students from Asian countries. Thus, the relationship between self-complexity and resilience was investigated in this study. Additionally, another correlation between self-complexity and resilience in the group of men and women were examined as well.

Self-complexity

The theory of self-complexity presents a structural model of how self-knowledge is structured (Rafaeli-Mor, Gotlib & Revelle, 1999). The concept of self-complexity was first introduced by Patricia Linville (1985, 1987). Linville proposed that self is not unitary, rather it comprises from multiple cognitive structures or known as self-aspect. The self-aspects refer to

different inner parts or aspects, and each aspect is important for the different life or relationship context of the individual. These different self-aspects may include kind of relationships (i.e. me as a daughter of my mother, me as a friend, me as a sister), social roles (i.e. me as a psychology student, me as a technician, me as a president of student union), particular activities (i.e. swimming, ballet dance, writing), traits (creative, neat, honest), some concrete goals (i.e. graduate from school, career achievement), and so forth. Moreover, each of these self-aspects is associated with one or several attributes or traits (Linville, 1985).

Linville (1985, 1987) further explained that self-aspects will be activated by relevant experience, and these experiences affect how individual views particular self-aspects. When an individual has a pleasant experience, where he or she feels positive about the experience, the self-aspect that has been triggered by the experience will be associated with a positive feeling. On the contrary, if one experiences the undesirable event, he or she will associate the experience with negative thought and emotion and evaluate themselves more negatively. Linville (1985, 1987) added that individuals with high level of self-complexity are assumed to have a greater number of distinct self-aspect.

According to Linville (1986, 1987) she believes that high level of self-complexity buffers stress in a way that if one of self-aspect is affected by a negative evaluation which is distinctive to others, others will not get affected. This is because the greater distinctive the aspect is, the less possibility of a particular trait or aspect overlaps with other. Moreover, Linville (1985, 1987) indicated that the greater dimensions of self-aspects will provide alternative core of attention that help buffer against stress-related illness and depression after individual experiences stressful events. In addition, Rafaeli and Hiller (2010) identified that these high self-complexity individuals process the information in their environment differently and they will respond to these everyday life events in more moderate ways.

To illustrate, Adam has various roles in his life: as a boyfriend, a friend, a son, a member of the fraternity, and a brother. When he is as a boyfriend he may see himself as understanding, outgoing, and well-dressed boyfriend. When his role is as a friend, he may think about himself as admirable and outgoing. When he is as a son he might see himself as an obedient and honest son. When he is as a member of the fraternity he sees himself as energetic, fun and attractive. When he is as a brother, he will think himself as an anxious yet assertive brother. Correspondingly, Adam has six self-aspects while other people may have less, as 1 or 2 self-aspects, or as many as 18 or more self-aspects. The self-complexity model (Linville, 1985, 1987) explains that self-complexity comprises from numerous self-aspects, means that self-complexity increases with the number of self-aspects. As can be seen from Adam's case, Adam would have great level of self-complexity because he thinks of himself in a large number of self-aspects (six self-aspects) and also there is no redundancy of the features in those self-aspects (Adam uses different name or attributes between the domain of boyfriend and fraternity).

The self-complexity has been shown to predict significant outcomes such as mood stability and reactivity to stress (Linville, 1987; Rafaeli-Mor, Gotlib & Revelle, 1999; Shilling & Brown, 2015), that could help to moderate depressive symptom, physical illness, self-esteem and well-being (McConnell et al., 2009). It is argued that individual differences in complexity of self-knowledge can predict the emotional stability and reactivity to stress (Rafaeli-Mor, Gotlib & Revelle, 1999). From the developmental perspective, self-complexity is considered as one of the bases of individual development and it supposed to develop with age (Evans, 1994). Evans (1994) further argued that young children have less and undifferentiated self-aspects, thus young children are believed to have a simpler self-concept. As they grow up, their cognitive capacity is able to identify more distinct self-aspects, as well as the fewer

interconnection between one and other self-aspects. As a result, the child will develop multiple aspects of self-concept (high level of self-complexity).

Conversely, the clinical and personality perspective pointed out that self-complexity may become one of the protective factor buffering particular psychological symptoms (Evans, 1994). A study done by Linville (1987) revealed that participants with high level of self-complexity reported less depressive and physical illness symptom related to the psychological distress, than the participant with fewer facets and domains. This is because the individual with high level of complexity tried to compensate the negatively affected self-aspects by giving attention to self-aspects that are not impacted and maintaining their self-worth (Evans, 1994).

Take an example, a man who identifies himself as an outstanding doctor, father, friend, and professor/teacher, may experience less negative impact and self-appraisal after having tumor removal surgery because he has more and various self-aspects that he can depend on, compared to a man that only has restricted self-aspect as being a successful doctor and professor/teacher (Linville, 1987). Moreover, if the man's self-aspect as a professor/teacher is closely related with his self-aspect as a doctor (for instance if his wife is also a doctor) due to the spillover process his emotion may severely be affected, yielded uncomfortable thought and feeling, as well as psychological distress.

Donahue, et al. (1993) argued that individuals with high level of self-complexity may experience tense role conflict, doubting their identity, and identity competition (for instance, being a professor in a university vs. being a caring father in the family), which will enhance the probability of having depression, anxiety, and low self-esteem, and they probably will experience chronic mild stress resulting from life's daily hassles (Ryan, LaGuardia, & Rawsthorne, 2015; Rafaeli-Mor, Gotlib, & Revelle, 1998). Therefore, one can conclude that individuals will be beneficial if the various self-aspects remains distinct, but integrated between one another (Woolfolk et al., 1995).

Resilience

Resilience paradigm has developed to focus on how people face and cope with negative consequences of trauma, life stressor, crisis or disaster. The word resilience comes from Latin *salire* (spring up, to spring) and *resilire* (spring back). Hence it could be considered as a capacity to spring back or recover from significant life challenges (Davidson et al., 2005). Researchers define resilience as one's ability to spring back, bounce back, successfully adapt in the face of adversity despite exposure to adverse life stressor (J. Block & Kremen, 1996; Rirkin & Hoopman, 1991). Oxford (1989) established resilience as the ability to bounce back and get back to the original shape after the shock or traumatic event; as well the promotion of positive adjustment despite the stress and life adversity (Wagnild, 2003). Resilience can also be referred to "the capacity, process, or outcome of successful adaptation following the difficult experiences or threatening life situation" (Masten, Best, & Garnezy, 1990, p.426). According to Rutter (1987, p.316) resilience is considered as one of the protective factors that help one to respond to life challenges or environmental hardships that could bring a maladaptive outcome. For instance, individuals with high resilience level believe that they are strong and able to overcome the adverse life of successes situation, thus, they can adjust to the life changes, use previous experiences of success to face the current challenges to bounce back and recover from negative life stressor (Rutter, 1985). Moreover, Rutter (1985) indicated three characteristics that a resilient individual has: a sense of self-confidence and self-esteem; a sense of self-efficacy (belief that one can make a difference); and the ability of social problem-solving.

Resilience can be perceived as an individual trait (Rutter, 2006). Block & Kremen (1996) stated that psychological resilience is a stable personality trait characterized by one's ability to overcome, pull through, and bounce back from life stressor. Consistently Rirkin and Hoopman (1991) suggest resilience as individual capacity to spring back, rebound and successfully adapt despite facing numerous adversities, as well develop the academic, social

and vocational competence regardless of life stressor or merely to the stress of everyday life. From this perspective, individual is seen as a survivor who has capability and strength to overcome life stressors and adversity and achieve positive outcomes, rather than a victim that suffers from difficult life circumstance (Pan & Chan, 2007).

Resilience can also be explained as a dynamic developmental process (Rutter, 2006). Fonagy et al. (1994) explained resilience as a group of social and intrapsychic processes that consist of individual, family, social, culture, and environment. This process described an interaction process between individual and environment, whereby the individuals under stressful situation utilizes the internal and external resources in order to acquire positive adaptation. Thus, resilience is not merely the individual ability to survive life adversity. It is rather a developmentally complex and interactive process, consists of various ecological levels (Anthony, 2011). There are two core components in this perspective. First, individual has to experience stressful condition that bears high risk for developing psychopathology (Luthar et al., 2000). Second is the generation and maintenance of positive adaptation under adverse life situation (Masten, 1994).

We can measure the resilience by the absence or the presence of risk factors (factors that lead to the problem or poor outcomes) and protection factors (factors that help to buffer the risk) (Venâncio Martins & Clemente Neto, 2016). Durlak (1998) established that risk factors increase the possibility of negative outcomes in the future, while the protective factors are moderating these risks effects. The risk factors of resilience refer to variables that enhance one's probability of psychopathology or undesirable negative development outcomes (Boyden & Mann, 2000, p. 7). Consequently, Masten (1944) argued that risk is a statistical concept that is adequately used for groups rather than individuals because the individual outcomes in a risk group can be varied between one another based on varying protective factors.

Futher Masten and Garmezy (1985) explained that there are two types of risk factors in resilience concept: individual attributes and environmental context. Kaplan (1999; as cited in Pan & Chan, 2007) assumed that risk status is often defined regarding individual experiences of adverse life events. These adversity experiences comprise physical and psychosocial adversities, psychological stressor that varies from daily life stress to traumatic events (Masten, 1994). In accordance, Luthar (2000) noted that adverse situations vary from single life stressor event to several negative experiences. Pan and Chan (2007) further explained that most of the resilience research focuses on traumatic experiences, for instance childhood abuse, poverty, burn survival, and anti LGBT campaign (lesbian, gay, bisexual people), particularly those events that occur during childhood period. Thus, Masten and Garmezy (1985) concluded that the risk factors may increase the likelihood of undesirable outcomes, however these risk factors do not necessarily indicate a relationship between them.

There are two generation of resilience research. The first generation tried to find out the association between protective factors and resilience (Pan & Chan, 2007). This generation tried to discover what makes a difference between individuals who do well and poorly (Infante & Lamond, 2003, p. 69). The second generation of resilience that developed in 1990s tried to explore the underlying process of how the protective factors may reduce the negative consequences of the risk factors (Pan & Chan, 2007; Rutter, 1987). Research in this generation perceived resilience as the balance of protective factors against the risk factors and indicated the resilience as a dynamic process rather than an individual trait (Henderson & Milstein, 2003; Ah Shene, 1999; Werner & Smith, 1982).

The protective factors include both individual and environmental factors (Fonagy et al., 1994; Masten, 1994; Masten & Garmezy, 1985). Rutter (2006) suggested several examples of personal protective factors that play an important role in facilitating the development of resilience such as intelligence, temperament, locus of control, sense of humor, social and

emotional regulation and competences, gender, prospect of future, religiosity, problem-solving skills, coping strategies, secure attachment, attention, understanding of self and self-esteem. Connor and Davidson (2003) proposed several examples of protective factors, for instance tolerance to negative affect, optimism, patience and faith. These protective factors can be found at the individual level, peer level, family level, neighborhood level, school level, community level, societal and cultural level (Anthony, 2011).

The family-related factors involve factors such as competent, loving and tolerant parents, efficient parenting, support from family members, clear communication within the family, intimate and secure relationship in the family, socioeconomic advantages, and respect for autonomy and individuality to every member of the family (Fonagy et al., 1994; Masten, 1994; Pan & Chan, 2007). School-related factors include educational experience, good connection to prosocial and rule-following group of peers, good network of friends, efficient schooling method, and social support (Fonagy et al., 1994; Masten, 1994; Pan & Chan, 2007). At the third level, the community level, the factors such as connection to prosocial organizations, connection to other competent individuals, good community resources, and active involvement to religious activities and community activities (Fonagy et al., 1994; Masten, 1994; Pan & Chan, 2007).

Studying abroad

In order to respond to the demand for international opportunities, it is significant for students to develop global competencies. In recent years, studying abroad has received increasing attention from students worldwide. According to the UNESCO Institute for Statistics (UIS), over the past decades, global number of international students who continue their university-level education outside their home country increased largely from 0.8 million in 1975 to 1.3 million in 1990. However, in 2009 the number became tripled to 3.4 million (Chien & Kot, 2012). The number of mobile students will be expected to grow to 8 million by 2020

(Altbach, 2006; as cited in Chien & Kot, 2012). Asian students represent 53% of foreign students studying abroad in the world, with the largest number of international students coming from China, India, and Korea, followed by Europeans students (23%), Africa (12%) and the rest of the world (12%) (OECD, 2013). Further, according to OECD (2010) the most preferred OECD country for study destination are United States (with roughly 1 million international students), China (around 489.000 international students), United Kingdom (442.000 students), Germany (374.000 students), Canada (370.000 students), and France (309.000) students). These five countries host more than half of all the international students in the world. The OECD (2018) noted that recently incoming international student mobility has also grown for almost all OECD and partner destination countries; between 2013 and 2016 in Estonia, Latvia, and Poland, the number has almost doubled.

Nowadays, Poland is becoming one of the popular and preferred study destinations. Poland is located in the very center of Europe. It is the sixth most populous and the ninth largest country in Europe. According to the Central Statistical Office, in the past ten years, the number of international students studying in Poland has increased from 12.000 to more than 65.000 students, as the living cost, including rent and tuition, is the most affordable in Europe, around € 7.000 (Rodriguez, 2018). The majority of international college students come from Ukraine (approximately 23.329 students). The second largest student population is from Belarus (4.118 students), followed by Norwegians (1.538 students), Spanish students (1.188 students), and Swedes (1290 students) (Study in Poland, 2018). The number of Asian students in Poland is also growing significantly. Study in Poland (2018) observed that there are around 5.602 of Asian students in Poland, including 785 Chinese students, 410 students from Taiwan, and 545 from India (it has increased by 227 students from the previous year). The number of Vietnamese students is 205, and there are 211 students from Malaysia (Study in Poland, 2018).

Studying abroad is one of the opportunities for students to gain educational experience and global competencies such as global learning and development, cross-cultural skills, as well as the intercultural maturity and sensitivity (Braskamp, Braskamp & Merrill, 2009). Clarke, Flaherty, Wright and McMillen (2009) added the advantages that international students may acquire when continuing their education abroad are knowledge, skill, an attitude that enable the students to relate and work well with other people from different cultures, in a cross-cultural setting. Studying abroad may also increase the probability of students to get better quality education, obtaining skills that are not taught in the home country, access to a better job, broadening knowledge of other culture, and improving their language skills, particularly English (Stebbleton, Soria & Cherney, 2013). Likewise, Hunter, White and Godbey (2006) suggested that a lot of students may be encouraged to study abroad because many institutions have frequently expected them to possess global awareness and competencies.

Despite the benefits of studying abroad already described above, leaving home to pursue higher-level education is an important turning point for every student. The transition might be rewarding and life-challenging, particularly for a student studying abroad. International students may experience adaptation challenges during their stay in host countries; some of the students might cope well in response to the difficulties, while the other students may not. A study done by Gebhard (2012) about adjustment problems that international students had while they studied in the university in the United States, found that the international students were challenged by three areas such as academic, emotional reaction and social interaction in the environment.

Similarly, Yi et al. (2003) identified five areas of the adjustment issues that the international students are more likely to experience: academic area, financial area, physical health area, social and personal area, and vocational area. Review of research on the psychological adjustment of international student conducted by Church (1982) established that

the most common problems faced by international students are the language barrier, adapting to new educational system, financial problems, new social norms, as well the racial discrimination while they are still adjusting to their host country. Some of the international students may also confront depression, anxiety, academic problems, relationship issues, loneliness, and cultural adjustment (Yokushko et al., 2008). Most of the international students also face academic language problem while they are trying to adapting to university life. For instance, students often have difficulties in taking notes in lecture class (Huang, 2006, as cited in Gebhard, 2012), explaining their knowledge on essay exams (Lin & Yi, 1997, as cited in Gebhard, 2012), comprehending and understanding professors' expectations and grading style (Kuo, 2011; Zhou, Freg & Bang, 2006, as cited in Gebhard, 2012), giving oral presentation, and being active participation in seminar discussion (Coward, 2003; Ferris & Tagg, 1996; Gebhard, 2010; Han, 2007; Kao & Gansneder, 1995; Liu, 2001; as cited in Gebhard, 2012). However most of the international students slowly adapt to the new situation, and they gradually build their confidence and become emotionally stable. For example, Choe (1996) emphasized that some of the Korean students use Korean church to cope with adjustment difficulties, while Alazzi & Chiodo (2006) points out that numerous Middle Eastern students engaged in religious activities to cope with the stress.

Asian international university student characteristics

Culture is essential to human development as culture affect individual self-perception, communication style, and educational strategies and practices in the society (Juszczyk & Kim, 2017). Hofstede (1991) stated that culture in one's country shapes individual from early childhood through personal values, beliefs, and assumption. Hofstede et al. (1983) identified five cultural dimensions: power distance (PDI), individualism (IDV), masculinity (MAS), uncertainty avoidance index (UAI), and long-term orientation. Long term orientation dimension focuses on the virtue of future reward, particularly on the perseverance and thrift (Hofstede et

al., 2010). This could explain how Asian students consider the importance of sharing their academic achievement with the family; therefore, their academic accomplishment would not be recognized as a reward before they come back home with success and share with the loved ones (Mesidor & Sly, 2016).

Asian culture has been strongly influenced by Confucianism. For instance, China, Japan, Korea, Singapore, Vietnam, and many other Asian countries used the idea of Confucius for their educational and social system (Tan & Yates, 2011). Amorim and Lam (2013) further explained that until now the concept of “*Xiào*” or means Filial piety, has become a vital position in Asian culture. Taking care of parents, being obedient, having good behavior and performance are compulsory as well as brings honor to one’s family. Moreover, Amorim and Lam (2013) noted that Asian students also feel they are obliged to show their loyalty to their parents. This because their parents are willing to make the economic sacrifice in the family, supporting their children so they could have a better education and a better life in the future.

As the consequences, Asian parents expect excellent performance and behavior from their children based on the Confucius system, and thus Asian students do not only study for themselves but also for their parents (Amorim & Lam, 2013). The poor and inadequate academic achievement would cause Asian students to feel stressed and burdened, and they might react in destructive ways. To illustrate, Statistic of Korea (2003, as cited in Mesidor & Sly, 2016) found that Korean students experience psychological distress and strain because of the poor academic result, and it makes the suicidal rate of Asian students grow. Asian parents’ expectation and ideal standard could affect the expectation of the children as well, as it is compulsory for the children to obey and follow the filial piety (Tan & Yates, 2011). Additionally, Konopsake and Ivanecvich (2004) characterized the Asian culture as group-oriented, therefore Asian students are being motivated by the interest of the group rather than an individual. Parents of the Asian students emphasize student responsibilities to other people

or to the group in the society, consider that people need to support each other and helping other people or the group achievement is more important than the students' self-actualization (Dion and Dion, 1993; Triandis, 1995). In addition, obedience, conformity to other people, reliability and proper behavior in society is valued in collectivistic countries.

Nowadays, there are many Asian students who choose to study outside their home country. OECD (2014) reported that in 2014 Asian international students represented 53% of the foreign students in the world, with the largest number of foreign students coming from China, India, and Korea. Studying abroad gives opportunities for Asian students to pursue higher-level and better education as well as to improve their global competence. However, those students could also experience various challenges. For instance, many of the Asian international students are not familiar with the social rules and social norms in the host country when they studying abroad. DeCapua and Wintergerst (2004) study that attempted to find the comparison between Americans and Asians, found that American people tend to use direct communication to complain, explain, clarify, or ask questions, while Asian and other collectivistic cultures will use indirect ways to do those things. Another challenge that Asian international students may face during their study abroad is academic difficulties. As we discussed earlier, the Asian students may feel anxious, for example when their academic performance is decline, or when their grade is dropping, or when they fail to accomplish something that their parents or family expected; it means that the discrepancy between the ideal standard set by parents and the reality is different, and this could lead to the poor level of self-esteem, and thus their level of anxiety is higher than any other ethnicities (Kim, Peng & Chui, 2008; Tan & Yates, 2011).

High level of anxiety and low level of self-esteem might affect how the Asian students perform in the class and in society. For example, research done by Coward (2003) that attempted to find an interaction between American and Asian students (from China, Korea, and Taiwan) during graduate seminar discussion, resulted that these Asian students continuously

tried to understand what was going on during the class, when they should talk, what kind of role could they employ. Another study by Lee and Carrasquillo (2006) examined the professor perception of the linguistic or cultural feature that contributes Korean college student difficulties in the United States. The results include uncomfortable to talk in the class, thinking that professors have absolute authority, difficulties to express the idea and critical thoughts, as well as having trouble with responding negative questions (Lee & Carrasquillo, 2006). It is not surprising to find such results because Asian students were reported to be shyer than students from a different culture. For example, review of international shyness study done by Zimbardo, Pilkonis & Marnell (1977) illustrated that the prevalence of self-reported shyness was found to be higher in Asian (around 60%) rather than Western sample (around 40%) and it was related to such context as social and communication anxiety, introversion and unassertiveness.

In the collectivist countries, such as Asia or Latin America, speech and self-expression are not normally and routinely encouraged by the parents, and thus speech and self-expression are not as important as in the individualist culture (Kim & Markus, 2002). Asian parents taught their children of how to be thoughtful and self-disciplined silenced, and even if the children have to speak, these young Asian students need to be in a great caution of the potential negative social implication of the speech (Kim & Markus, 2002). Besides, Asian students believe that active participation of their classmates in class is motivated by attention-seeking (Kwan, Bond, Boucher, Maslach, & Gan, 2002).

How self-complexity is associated with resilience in Asian student

In response to the growing demand for global opportunities, studying overseas has become a popular choice among the student worldwide. OECD noted that in 2014, more than 4.5 million students studying outside their home country, with 53% were from Asia (OECD, 2014). Studying abroad allows the students to expand their knowledge, experience new and a

different culture as well as the education system, opportunities for career development, learning and improving another language, travelling, and establishing a new friendship. Koernig (2007) concluded the international students may also become more independent because they have to be away from their home, learning the differences between culture as they meet with other people from the different region in the world, as well as advance the skill and knowledge. However, those students may also experience various challenges such as anxiety prior to the travel abroad, adjusting to the new and unfamiliar environment at the moment they arrived, acclimating with the new education system, also balancing between academic and cultural activities (Koernig, 2007). Even though most of the international students adjust relatively well to the academic and host culture (Church, 1982), these students could experience certain difficulties.

During adjustment process, the international students who find it hard to adapt to the new environment and culture are more likely to suffer culture shock, loneliness and physical problems, for example, pain, fatigue, stomachache or a headache as a manifestation of psychological adjustment problem in some cultures (Mesidor & Sly, 2016). For instance, Asian international students reported experiencing stressful events when adjusting to the acculturation process (Kuo, Roysircar, & Newby-Clark, 2006; Sodowsky & Lai, 1997). Rahman and Rollock (2004) point out that these students generally indicated the feeling of alienation and perception of prejudice. Asian students are frequently reported to have a lower level of self-esteem and self-confidence in contrast to other ethnicities (Kim, Peng & Chui, 2008; Leung & Wong, 1996). Han, Han, Jacobs, and JeanBaptiste (2013) investigate that approximately 45% of Chinese international students were reported to have depression symptom, and 29% were reported to experience anxiety symptom, during their study abroad. In addition, Li, Wang, and Xiao (2014) established that duration of stay in the host country, the tendency for looking for

help, English proficiency, acculturation and depression are commonly reported as significantly associated with the psychological well-being of East Asian international students.

Having multifaceted and more complex self may be helpful for Asian international students, particularly in the emerging adulthood stage because it could help them to enjoy the positive experience and ‘buffer’ harmful effects against the negative life events, or what Linville (1987) described as “buffering hypothesis”. The buffering hypothesis explained that a self-concept, indicated by a high level of self-complexity, will prevent the spread of effective spillover and the individual will be less vulnerable to the excessive response to the negative life experience. Linville (1987, p.644) explained that having a complex self means the individuals have many various and independent ways of thinking about themselves and maintaining the greater distinction between self-aspects. Based on the social-cognitive model, the self is viewed as consisting of numerous perspectives, roles, and aspects. Every single of those multiple selves relates to the knowledge we have about ourselves because we are in that particular aspect of ourselves (Rafaeli & Hiller, 2010). Accordingly, individual differences might be present in the organizational structure and content of the self-knowledge, while the content and structure are both important for individual well-being and resilience (Rafaeli & Hiller, 2010). Further, Zeigler-Hill and Showers (2007) examine that individuals with dominant positive self-aspects would possess the highest level of self-esteem yet they are also more vulnerable to everyday life events, compared to the integrated individuals; thus, preserving evaluative integration apparently to be the source of resilience.

When the high self-complex individuals have to cope with the difficulties that are recognized as harmful and uncontrollable, they will respond more efficiently by using their stable and distinct self-aspects. On the contrary, individuals with an unstable and confused aspect of the self are expected to show elevated and extreme reaction following the stressful events as they do not have efficient and consistent information on how to deal with the situation

effectively in their self-concept (Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000). Staudinger et al. (1995, p.818) point out that resilient individuals possess “various and diverse priority structure, self-concept, and multiple identities that prosperously construed” and “access to a greater set of possible selves that are well-developed”. That cognitive complexity could be one of the protective factors as the individual encounters the developmental changes and manage growing old to have better mental health (Staudinger et al., 1995, p.818). Further, according to Setterlund and Niedenthal (1993) individuals who are confident with their self-beliefs are likely to use the self for guide decision, find any feedback on the ideas of which they are certain (Swann & Read, 1981), and more resistant to change their self-belief (Swann & Ely, 1984), thus being more resilient to adverse life experience. Therefore, one can conclude that self-complexity is one of the resilience factors against depression and stressful life event, as already predicted by Linville (1987).

The international students who have more complex self, or high level of self-complexity, tend to have more positive outcomes, such as higher level of self-esteem (Rafaeli-Mor & Steinberg, 2002), high tolerance for negative events (Gramzow, Sedikides, Panter, & Insko, 2000) and lower illness and stress level (Kalthoff & Neimeyer, 1993). On the contrary, the negative outcomes related to one particular aspect of the self may enormously affect the individual with a low level of self-complexity (Linville, 1985, 1987). Indeed, several types of research indicated that international students from Asia have a higher level of self-complexity. For example, two studies done by Brown, Shilling, and Park (2017) point out that participants from East Asian countries had more self-aspects and higher self-complexity level than participant from the United States. Another study by Ip and Bond (1995) that attempted to measure self-concept level with Twenty Statement Test (TST) found that participants from Asia are more likely to refer themselves in the context of social roles (e.g. I am Bernard’s friend) or social group (e.g. I am the member of Zhang’s family) than participant from the United States.

Accordingly, Markus and Kitayama (1991) emphasize that Asian participants tend to include references to other people in their self-concept, compared with United States participants who ~~are~~ frequently describe themselves using internal characteristics that indicate their specific feature and uniqueness. Moreover, the self-concept of bicultural participants that reported acculturation to both individual and collectivistic cultures display shifts depend on which culture they think they are when completing the TST test. For instance, a study done by Ross, Xun, and Wilson (2002) demonstrates that Chinese students living in Canada were reported to possess more independent aspects when they were asked to write TST test response in Chinese language, as a contrast to English.

For Asian international students, studying in a foreign country may create conflict with parents (Ahn & Baek, 2013), as well as adjustment problems due to the cultural conflict in transition to the adulthood stage. In emerging adulthood stages, the students are changing their self-system – they are experiencing the differentiation of self-representation, experimenting with numerous roles (Arnett, 2004; Damon & Hart, 1988), also gradually withdrawn from the social roles in the later adulthood stage (Fry & Debats, 2010). In this stage, the adolescence may also experience contradicting in self, which could serve as a risk for depression during early to the middle adolescence, particularly for female (Cohen et al, 2014). Therefore, emerging adulthood is a critical stage which one's self-structure is being restructured and reorganized. In addition, emerging adulthood literature proposes that individual differences in psychological resilience may explain the adaptive mechanism in adverse life events are confronted, managed, and transformed (Ong, Bergeman, Bisconti & Wallace, 2006).

Masten, Best, and Garnezy (1990) suggested that “resilience is a process of, capacity for, or outcome of successful adaptation regardless of the difficult situations.” (p.426). Correspondingly, McIntosh and Shaw (2017) explained resilience is a term comprising both individual characteristics and external situations that is necessary to be present for improving

the success of students. Indeed, the college students are reported to be severely impacted by the stress of the school demand and overload subjective work, thus negatively related to psychological well-being which generates anxiety, higher depression level, decline self-esteem, as well as life satisfaction (Eisenbarth et al., 2013). However, students who have a better understanding of their effort and strategy towards the work are more likely to have a sense of control and it could impact the academic outcomes (Martin & Marsh, 2006). These students possess a greater level of subjective well-being and they are more motivated to accomplish their targets, as a result, they tend to be more resilient when facing academic difficulties along the way (Sheldon & Krieger, 2007). In addition, Martin (2013) added that if the students were more resilient, they would cope with various academic difficulties, and thus have more positive and improved outcomes. Moreover, international students were reported to have higher resilience level than the home students, probably because most of them encounter various difficulties in the process of adjustment to the host country. For instance, Bleasdale and Humphreys (2018) study that attempted to measure self-perceived resilience in undergraduate students using Connor-Davidson 10-point resilience scale found that the international students have higher resilience level than the home students. Thus, they suggested that having various multiple identities or interest could support psychological resilience in international students.

As mentioned above, one can conclude that self-complexity is one of the resilience factors against depression and stressful life event, as already predicted by Linville (1987). Having complex self seems to be important for Asian international student as it could help them to buffer the negative experiences in life and thus enhance their resilience level. In summary, the present study attempted to test the following hypotheses with Asian international students. It was hypothesized that there is a correlation between self-complexity and resilience in Asian international students. Additionally, researcher wanted to explore whether gender differences

may change the possible relationship between resilience and self-complexity. Thus, the aim of the present research is to answer the following questions:

Hypothesis 1: There is a significant correlation between the self-complexity level and resilience level of Asian international students.

Hypothesis 2 : Are there differences in self-complexity and resilience relationship in men and women?

Methodology

Participants

The data of the present study was collected over a three-month period from 100 participants, 50 women and 50 men, between the ages of 18 and 24 ($M = 22.39$, $SD = 3.033$).

Participants were Asian college students attending several schools and universities in Poland in Warsaw, Lodz, Wroclaw, Lublin, and Krakow. In this study, the researcher collected the data from students from Indonesia, South Korea, Hongkong, Taiwan, Thailand, Vietnam, China, Malaysia, India, Papua, Philippines, and Japan.

Measurement

The present study comprises three parts that included questions about demographic characteristic of the participant (e.g. age, gender, education, duration of stay in Poland, etc.), the Self-Complexity Trait-sorting Task (Linville, 1985, 1987), and Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003).

Demographic Questionnaire was developed by the researcher of the present study included questions about gender, level of education, age, and duration of stay in Poland.

Self-Complexity Trait-sorting Task procedure assesses the level of self-complexity, that is the number and independence of ‘self-aspects’ that individual possesses (Linville, 1985, 1987). To measure self-complexity, Linville adopted the dimensionality statistic (H), a measure of nominal scale dispersion utilized in exact sciences. This index is obtained in a trait-sorting task in which participants ascribe a predefined set of traits to a variable, self-generated set of self-aspects (Pilarska & Suchańska, 2015). High self-complexity results from trait sorts composed of a high number of self-aspects with low redundancy between them.

In the original version of self-complexity trait-sorting task, participants are instructed to sort a set of trait words into meaningful categories or groups, in such way that each group consists of those traits that are descriptive of the participant in some aspects of his or her life. The choice of categories is idiosyncratic, because every participant sorts the trait into individual categories. The original set consists of 33 cards with adjective traits written on each card, for example ‘individualistic’ ‘organized’, etc. (Linville, 1985, 1987).

Participants are asked to choose traits from the cards that are the characteristic of themselves. Then, they sort the chosen traits into meaningful groups, so that each group describes different aspect of themselves and their lives. Participant are also asked to create the label for each group that could reflect the overall meaning of type of aspect in the answer sheet (i.e. I as a student, I as a friend, I as a sister). Participants are allowed to identify as many self-aspects numerous traits (for instance, self-aspects they feel confident with), or use the trait once, or more than once, or not use any trait adjectives at all. The adjective can be used more than once or not at all, and the blank card can be used if the participants want to repeat the traits or write new adjectives that are not available in the given cards.

Due to the purpose of the present study the researcher made several minor adaptations of the method. First, the set of adjectives was modified. The researcher asked 5 Asian international university students studying in Poland whether the presented adjective list was able to describe themselves. Some of the students added, deleted, and corrected several adjectives from the original Linville's adjective list of sorting task, and thus the researcher used 46 adjectives in this study.

Therefore, participants were provided with 46 randomly order cards, each printed with an adjective relating to common human traits. 28 of these were positively valenced adjectives and 18 were negative valenced adjectives. There were also 14 blank cards that allowed the participants to add to the set a particular adjective that was characteristic of him/her and was not included in the given cards (the list of the traits for the self-complexity trait-sorting task is presented in Appendix D).

An individual SC score (SC-D) is then computed using the dimensionality statistic, H formula (*Attneave, 1959; Scott, 1969; Rafaeli-Mor, Gotlib, Revelle, 1999*) : $H = \log_2 n - (\sum n_i \log_2 n_i)/n$; where n is a total number of the adjective traits (in this study was 46) and n_i is the number of adjective traits that showed up in the i^{th} group combination, $i = 1, \dots, 2^k$ where k is

the number of self-aspect groups (Linville, 1985, 1987; Luo, Watkins, & Lam, 2008). Linville (1985, 1987) explained that the higher the number of H value is, the greater the self-complexity that an individual possesses.

Connor-Davidson Resilience Scale (CD-RISC) developed by Connor & Davidson (2003) was used in order to measure resilience. CD-RISC contains 25 self-rated items. Items are related to hardiness, action orientation, self-efficacy, confidence, adaptability, patience, and capability to endure adverse life events (Connor & Davidson, 2003). CD-RISC has a 5-point range of responses, where (0) indicates “not true at all” and (4) stands for “true nearly all of the time”. Participants were asked to rate each item based on how they felt over the past month. The total score ranges from 0–100, with higher scores reflecting greater resilience. The completion of the scale is approximately 3 minutes (Connor & Davidson, 2003).

Connor and Davidson (2003) derived five factors from CD-RISC: (1) the strongest of which captured aspects of persistence/tenacity and strong sense of self-efficacy; (2) corresponded to emotional and cognitive control under pressure; (3) adaptability/ability to bounce back; (4) control/meaning; (5) meaning. The CD-RISC could have potential utility in both clinical practice and research. The scale exhibits validity relative to other measures of stress and hardiness, and it reflects different levels of resilience in populations that are thought to be differentiated by their degree of resilience; e.g., general population vs. patients with anxiety disorders (Connor & Davidson, 2003).

For instance, from the Chinese study of CD-RISC of 560 residents in Guangdong and Beijing, Yu and Zhang (2007) found out three factors that best account to their results: tenacity, strength and optimism. Tenacity (hardiness) explained the greatest variance, identical with the original finding of Connor and Davidson (Connor & Davidson, 2003). The complete version of the questionnaire is presented in the Appendix F.

Procedure

Participants were recruited through personal invitation, notice, and through their group or acquaintances (chain sampling). Each participant was equipped with an envelope with research materials. On the first page there was an inform consent. Participants were asked to read the purpose of the study, what will be done, possible risk or discomfort, confidentiality, rules, contact information and sign the agreement for participating in this research. Then they were asked to fill out the demographic data on the second page, where they were asked to provide the following information: age, gender, nationality, level of education and duration of stay in Poland (the sample of inform consent is presented in Appendix A, and demographic survey is displayed in the Appendix B).

Afterwards, participants were asked to read the instruction of self-complexity trait-sorting task (the instruction is available in Appendix C) and then do the self-complexity trait-sorting task (the list of the adjectives is presented in Appendix D). Then, participants were informed that they could write answers on the provided answer sheet page (the answer sheet for self-complexity trait-sorting task is available in the Appendix E). Further, the last step for the participant was to fill out Connor-Davidson Resilience Scale (CD-RISC).

Results

Descriptive Analysis

All of the analysis was conducted on 100 participants. First, demographic characteristics of the research group were analyzed. The results are presented in Table 1.

Table 1. *Demographic characteristic of the research group*

Respondent characteristic	<i>n</i>	%
Gender		
Male	50	50
Female	50	50
Education Level		
Secondary school	35	35
Bachelor degree	57	57
Master degree	8	8
Age Group		
18-20	17	17
21-23	36	36
24-26	47	47
Duration of stay in Poland		
1-7 months	34	34
8-19 months	41	41
20-78 months	25	25

There were 6 main variables taken into account in further analysis: overall score of resilience, overall score of self-complexity (H), number of groups made by participants, number of adjectives chosen by participants, number of positive adjectives chosen by participants, and

number of negative adjectives chosen by participants. Descriptive statistics of these variables are presented in Table 2.

Table 2. *Descriptive statistic of variables included in analysis (N=100)*

	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>S-W</i>
Resilience	70.88	9.980	40	94	-.638	.551	.020
Self-complexity	3.00	.975	1.1	4.92	-.021	-.944	.046
Number of groups	7.02	2.903	3	13	.683	-.435	.000
Number of adjectives	26.86	8.888	7	50	.360	-.153	.276
Number of positive adjectives	19.71	6.972	2	42	.124	.358	.545
Number of negative adjectives	7.03	4.589	0	21	.774	.337	.001

In the beginning, the normal data distribution was being checked for each variable. Since the sample of the present study was rather small, the researcher decided to use Shapiro-Wilk test. Result revealed that variable *resilience*, *self-complexity (H)*, *number of groups*, and *number of negative adjective* were not distributed normally ($p < .05$), as presented in the Table 2.

The results were double-checked by histogram and Q-Q plot, and the result was supported the obtained Shapiro-Wilk test. Skewness and kurtosis values range between -2 and +2, which means that the univariate distribution was not normal. To examine further analysis, non-parametric statistics were used in the current study.

Correlation between the level of self-complexity, subscale of self-complexity, and resilience in Asian international university students in Poland

In order to verify the first hypothesis, stating that there is a significant correlation between the self-complexity level and resilience level of Asian international university students in Poland, Spearman analysis was conducted. Results presented in Table 3, revealed that the

level of self-complexity is not correlated with the level of resilience ($r=.035$, $p=.731$). Therefore, the first hypothesis did not find support in statistical analysis.

Table 3. *Spearman* correlation between self-complexity and resilience in Asian international university students in Poland

	1	2	3	4	5	6
1. Resilience (RES)	-					
2. Self-complexity (SC)	.035 .731	-				
3. Number of groups	.042 .679	.617** .000	-			
4. Number of adjectives	.028 .778	.705** .000	.540** .000	-		
5. Number of positive adjectives	.182 .070	.578** .000	.486** .000	.872** .000	-	
6. Number of negative adjectives	-.191 .057	.530** .000	.242** .015	.595** .000	.201** .045	-

** Correlation is significant at the 0,01 level (2-tailed)

* Correlation is significant at the 0,05 level (2-tailed)

Additional Analysis: Relationship between self-complexity and resilience in Asian international university students in Poland based on gender

In order to check whether the relationship between self-complexity and resilience is different depending on gender of participants, correlation analysis was done once again, separately for men and women. For this purpose, the researcher ran a spearman correlation (see Table 4 and 5). Result revealed that females age is significantly correlated with number of

adjectives ($r=.349$, $p=.013$) and the number of negative adjectives ($r=.370$, $p=.058$), suggesting that the older the female students, the more they describe themselves negatively in their social roles.

As for the Asian male international university students in Poland, the spearman correlation analysis revealed that age is statistically significant and positively correlated with the level of resilience ($r=.418$, $p=.003$), though the correlation was moderate. Thus, it is suggested that the older the Asian male students in Poland, the higher the resilience level they have. Spearman correlation results are shown in Table 4 and Table 5.

Table 4. *Relationship between resilience and self-complexity level in female Asian international university students in Poland (N = 100)*

	1	2	3	4	5	6	7
1. Age	-						
2. Resilience (RES)	-.147 .308	-					
3. Self-complexity (SC)	.270 .058	-.011 .938	-				
4. Number of groups	.099 .493	.024 .866	.507** .000	-			
5. Number of adjectives	.349* .013	.066 .647	.671** .000	.534** .000	-		
6. Number of positive adjectives	.269 .059	.196 .172	.587** .000	.458** .001	.887** .000	-	
7. Number of negative adjectives	.370** .058	-.195 .175	.560** .000	.331* .019	.663** .000	.319* .024	-

** Correlation is significant at the 0,01 level (2-tailed)

* Correlation is significant at the 0,05 level (2-tailed)

Table 5. *Relationship between resilience and self-complexity level in **male** Asian international university students in Poland (N = 100)*

	1	2	3	4	5	6	7
1. Age	-						
2. Resilience (RES)	.418**	-					
	.003						
3. Self-complexity (SC)	.058	.113	-				
	.687	.435					
4. Number of groups	.111	.049	.696**	-			
	.444	.733	.000				
5. Number of adjectives	.088	-.037	.733**	.567**	-		
	.544	.800	.000	.000			
6. Number of positive	.191	.145	.571**	.505**	.852**	-	
adjectives	.184	.317	.000	.000	.000		
7. Number of negative	-.100	-.194	.487**	.178*	.534**	.127	-
adjectives	.490	.176	.000	.216	.000	.379	

** Correlation is significant at the 0,01 level (2-tailed)

* Correlation is significant at the 0,05 level (2-tailed)

Discussion

The primary aim of the present study was to explore if self-complexity positively correlates with resilience level. The research was conducted in Asian international university student population in Poland, who answered the questionnaire in paper and pencil format. It was hypothesized that there is a significant correlation between the self-complexity level and resilience level of Asian international university student in Poland. Additionally, there was a question posed gender differences on self-complexity and resilience of Asian international university students in Poland.

First hypothesis was not confirmed as the spearman correlation result between the level of self-complexity and resilience in Asian international university students in Poland was found to be not statistically significant. A similar study done by Rafaeli-Mor and Steinberg (2002) tried to find the correlation between Linville's dimensionality index (or what we called the H statistic) and a well-being measure. The study was subdivided into three groups (1) participants that had experienced several uniform stresses (failure condition); (2) participants in which the entire sample had experienced a uniform positive event (success condition); and (3) participants in which no uniform event was specified. Among their 3 study groups, the third group which is the largest group of studies, failed to support Linville's (1985) theory of stress buffering model. When the effect size is aggregated, the association between self-complexity and well-being was weak, but negative ($r = -.04$) correlation. Although, in group 1 (uniform stress group), the complexity was positively related to the well-being, the aggregate effect was relatively small (mean weighter $r = .03$) suggesting very weak stress buffering (Rafaeli-Mor & Steinberg, 2002). Another prospective study (for instance the study conducted by Constantino et al., 2006;

Rothermund & Meiniger, 2004) also reported a failure to support Linville's theory that self-complexity buffers the stress-related illness and depression.

According to Rafaeli & Hiller (2010) there are some particular factors of self-complexity trait-sorting task designs that have been used in most of the previous researches that might have affected the association between self-complexity and resilience. For instance, the H statistic could be one of the causes of previous studies' failure. Rafaeli-Mor and Steinberg (2002) explained originally H was developed for measuring variability or dispersion, thus, the H is failed to describe one's complexity. Later it was found that continuous effects of the valence content in adjective trait used in self-complexity trait-sorting task – cross-sectional studies that include more negative traits in the task, reported greater negative association in the correlation of self-complexity and well-being. In the conclusion, it seems that the negative self-complexity buffers the impact of both positive and negative events (Rafaeli & Hiller, 2010).

Further, Morgan and Janoff-Bulman (1994) tried to investigate the self-complexity role in students' lives, especially the students who were experiencing (or not experiencing) trauma life events. They computed three separate dimensionality indices (H statistic): one for positive self-complexity, one for negative self-complexity, and one for overall self-complexity. The result revealed that there were no differences in participants that experienced the traumatic events and participants who did not experience the traumatic events in their positive self-complexity, negative self-complexity, or overall self-complexity (Morgan & Janoff-Bulman, 1994). Nevertheless, participants that were exposed to trauma and had greater positive self-complexity, showed better adjustment, and the opposite was found in participants that had less self-complexity. The negative self-complexity is associated with poorer adjustment for the participants that were not exposed to the negative life event (Morgan & Janoff-Bulman, 1994). Thus, it is concluded that the more people perceive themselves with multiple and various

negative self-aspects, the greater the depression level they have, and the lower of self-esteem level and adjustment to traumatic life experience (Rafaeli & Hiller, 2010).

The additional analysis, that aim to look for the relationship between level of self-complexity and resilience in gender differences on Asian international university students showed interesting results. For the group of female Asian international university students, age is significantly correlated with the number of adjective traits ($r=.349$, $p=.013$) and number of negative adjective traits ($r=.370$, $p=.058$). From the result we can consider that the older the female Asian international students, the more the number of adjective traits and the number of negative adjective traits they have, meaning that these female students will describe themselves negatively in their social roles.

This result is identical with previous study done by Pilarska (2017) who was looking for correlation of multiple roles and sense of identity, comparing early and later adulthood female university students. In her study, women in the early adulthood indicated by the high number of roles (self-aspects) and higher level of self-description. However, their content of self-aspects was less diverse. The reason is because older people tend to have limited number of significant roles, and in terms of content, the images of oneself in these roles are becoming more distinct as the result of more mature sense of identity (Pilarska, 2017). Diehl and Hay (2011) also supported the results by the theoretical reports of developmental transformations in the self-system, stated that the stage of emerging adulthood is the stage of extended identity moratorium. The intensive process of self-exploration, identity formation and transformation for shaping one's identity is typical patterns for people in the emerging adulthood stage (Pilarska, 2017).

Furthermore, for the male group of Asian International university students in Poland, the spearman correlation analysis showed that resilience level is positively correlated with age, significantly ($r=.418$, $p=.003$). From the statistical analysis result, we believe that when Asian

male students in Poland become older, their resilience level will increase. This result is consistent with the previous study conducted by Tusaie and colleagues (2017), that investigated the resilience level of adolescents. The study demonstrated that males are found to be more resilient than females. However, some several studies that are looking for the impact of resilience level based on gender, had some mixed results.

For instance, the study done by DuMont, Widom, and Czaja (2007) as well as previous study by Wright and Masten (2005), showed that females have greater level of resilience comparing to the male, and females are less exposed to the risky behaviors. Another interesting study by Fergusson, Horwood, and Swain-Campbell (2003) who were looking for the relation of cannabis dependence and psychotic symptoms in young people, found that females are more resilient to externalizing activities (e.g. alcohol abuse, antisocial personality disorder, and criminal activities), and the males were found to have a greater level of resilience for internalizing activities, such as, anxiety problem, depression, suicidal thought and behavior, as well as ideation. However, there have not been any studies that investigating these relationship, especially in Asian international student population.

While the result of the present study had mixed results, the researcher concluded that gender play important roles in Asian international student population. For instance, in South-East Asia region, the majority of the society are mainly patriarchal. The traditional ideology of people in this society is ‘boys are born to earn money and become a head to support of the family’ while girls are born to be fed in their lives (Niaz & Hassan, 2006). In Asian cultures, as the men grow up they are expected to be strong and reliable, while the women are perceived to be weaker and more fragile than the men. Ruggles (2015) has expressed a similar view that indicated females as weaker creatures and need to be protected from the harshness of the world. He added that in Asian countries, men are expected to work on the day in offices or factories,

and women will stay at home and expected to manage the household, care for children, clean the house, prepare the meals, and comfort the men after the work (Ruggles, 2015).

Abdullah, Noor and Wok (2008) established that women's role in Asian culture, is oriented towards family issue rather than the self-fulfillment. Niaz and Hassan (2006) further explained that women in South-East Asian region are more likely to focus on the matter of reproduction such as childbearing or family planning, yet the women's mental health issues has been generally neglected. In the South-East Asian region women and unmarried females are commonly suffer from physical and psychological stress as the consequences of the abuse and violent behavior from men, such as beating and murder of wife, rape, physical assault, women trafficking, and forced prostitution (Niaz & Hassan, 2006). These unequal gender roles issues that separate the function, activities, responsibility and the authority of men and women, as well as the women's low status in the society, may encourage the Asian women to describe themselves with more negative traits.

Limitations and Suggestions for Future Studies

The present study has some various limitation that should be considered for future research. The most significant limitation of this study is the sample of the study, as it was small (N=100) and it will be difficult to generalize findings to the larger population, although the male students (N=50) and female students (N=50) were equally distributed. However large sample may lead to the different results of the study and might be more beneficial for future studies.

While conducting this study, the participants were required to fill out the demographic data, the self-complexity trait-sorting task, including the instruction, and the Connor-Davidson Resilience Scale. However, most of the participants reported the difficulties in the self-complexity trait-sorting task. They reported that the instruction was too long and unclear, and the 46 adjective traits in self-complexity sorting-task are better to be given in one page of paper,

instead of choosing the adjective traits from the cards. This limitation should be considered carefully, as the participants might be less motivated to read the instruction and finish the task. Thus, it could influence the result of the study. However, there were no difficulties reported by the participants, regarding the Connor-Davidson Resilience Scale, as they clearly understood how to fill out the questionnaire.

The result of the present study established that if we take the whole group into account there is no significant correlation between self-complexity and resilience in Asian International students living in Poland. However, the result may differ when we analyze the gender separately. Thus, it would be better for the future studies to replicate this research. Regarding the limitation of the present study as was mentioned above, having larger participants should also be taken into consideration for the later research.

While the culture may also influence the result of this study, the future research may also investigate the self-complexity and resilience level of students from individualistic countries, focus on the differences, and compare the culture between collectivistic countries and individualistic countries. For instance, Shilling and Brown (2015) declared that self-construal might develop in the context of beliefs and social norms, therefore individual that are coming from independence and interdependence culture may process their social experiences differently. Moreover, Shilling and Brown (2015) added that individuals with greater interdependent self-construal might also have higher self-complexity because the individuals are more likely to incorporate social experiences as distinct self-aspects.

Despite the contradictory findings of the present research, it is undeniable that the international students may experience adjustment issues during their staying in host countries, as it was previously described by Mesidor & Sly (2016). In order to overcome the difficulties, Chan (2012) suggested that the international students should be prepared emotionally and mentally, and the university in the host countries should also make the international students

feel welcome. This could be achieved by creating an environment that facilitates the adaptation of these international students, for example, invite other international students attending the universities as the mentor for incoming international students, and establish various welcoming activities for the new international students (Chan, 2012). The universities in the host countries and the international students may also work collaboratively on the academic, cultural, and psychological adjustment difficulties for the smooth transition.

References

- Abdullah, K., Noor, N. M., & Wok, S. (2008). The perceptions of women's roles and progress: A study of Malay women. *Social indicators research*, 89(3), 439-455.
- Ah Shene, D. (1999). Resiliency: A vision of hope. *AADAC, Developments*, 18(7).
- Ahn, S. Y., & Baek, H. J. (2012). Academic achievement-oriented society and its relationship to the psychological well-being of Korean adolescents. In *The psychological well-being of East Asian youth* (pp. 265-279). Springer, Dordrecht.
- Alazzi, K., & Chiodo, J. J. (2006). Uncovering problems and identifying coping strategies of Middle Eastern university students. *International Education*, 35(2), 65.
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York, NY: Oxford University Press.
- Anthony, E. K. (2011). Youth Development Tip Sheet: Three Questions about Children and Adolescent Development. Retrieved on July 26, 2015, from

<http://www.helpstartshere.org/kidsandfamilies/youth-development/child-and-adolescentresilience.html>.

- Boyden, J., & Mann, G. (2005). Children's risk, resilience, and coping in extreme situations. *Handbook for working with children and youth: Pathways to resilience across cultures and contexts*, 3, 26.
- Bleasdale, L., & Humphreys, S. (2018). Undergraduate Resilience Research Project. *Technical Report*, DOI: 10.13140/RG.2.2.11500.26245.
- Block, J., & Kremen, A. M. (1996). IQ and ego-resiliency: conceptual and empirical connections and separateness. *Journal of personality and social psychology*, 70(2), 349.
- Braskamp, L.A., Braskamp, D.C., Merrill, K.C. (2009). Assessing progress in global learning and development of students with education abroad experiences. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 13, 101-118.
- Brown, C. M., Shilling, A. A., & Park, S. W. (2017). A comparison of self-complexity in the United States and South Korea. *Self and Identity*, 16(1), 16-36.
- Carvalho, I. G., Bertolli, E. D. S., Paiva, L., Rossi, L. A., Dantas, R. A. S., & Pompeo, D. A. (2016). Anxiety, depression, resilience and self-esteem in individuals with cardiovascular diseases. *Revista latino-americana de enfermagem*, 24.
- Chan, H., Y. (2012). My journey as an international doctoral student in the United States. *Journal of International Students*, 2(2), 133-134.
- Chien, C. L., & Kot, F. C. (2012). New patterns in student mobility in the Southern Africa development community. *Montreal: UNESCO Institute for Statistics*.
- Choe K. K. (1996). Acculturative stress among Korean students. *Dissertation Abstracts International*, 57, 3-A.

- Church, A. T. (1982). Sojourner adjustment. *Psychological Bulletin*, 9, 540- 572.
- Clarke, I., Flaherty, T. B., Wright, N. D., & McMillen, R. M. (2009). Student intercultural proficiency from study abroad programs. *Journal of Marketing Education*, 31(2), 173-181.
- Cohen, J. R., Spiegler, K. M., Young, J. F., Hankin, B. L., & Abela, J. R. (2014). Self-structures, negative events, and adolescent depression: Clarifying the role of self-complexity in a prospective, multiwave study. *The Journal of early adolescence*, 34(6), 736-759.
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety*, 18(2), 76-82.
- Constantino, M. J., Wilson, K. R., & Horowitz, L. M. (2006). The direct and stress-buffering effects of self-organization on psychological adjustment. *Journal of Social and Clinical Psychology*, 25, 333–360.
- Coward, F. L. (2003). The challenge of "doing discussions" in graduate seminars: a qualitative study of international students from China, Korea, and Taiwan. *Dissertation Abstracts International*, 64, 1-A.
- Damon, W., & Hart, D. (1988). Cambridge studies in social and emotional development. *Self-understanding in childhood and adolescence*. New York, NY, US: Cambridge University Press.
- Davidson, J. R., Payne, V. M., Connor, K. M., Foa, E. B., Rothbaum, B. O., Hertzberger, M. A., & Weisler, R. H. (2005). Trauma, resilience and saliostasis: Effects of treatment in post-traumatic stress disorder. *International Clinical Psychopharmacology*, 20(1), 43–48.
- DeCapua, A., & Wintergerst, A. C. (2016). *Crossing cultures in the language classroom*. University of Michigan Press.

- Diehl, M., & Hay, E. L. (2011). Self-concept differentiation and self-concept clarity across adulthood: Associations with age and psychological well-being. *International Journal of Aging and Human Development*, 73(2), 125-152.
- Donahue, E.M., Robins, R.W., Roberts, B.W., & John, O.P. (1993). The divided self: Concurrent and longitudinal effects of psychological adjustment and social roles on self-concept differentiation. *Journal of Personality and Social Psychology*, 64(5), 834-846.
- DuMont, K. A., Widom, C. S., & Czaja, S. J. (2007). Predictors of resilience in abused and neglected children grown-up: The role of individual and neighborhood characteristics. *Child abuse & neglect*, 31(3), 255-274.
- Durlak, J. A. (1998). Common risk and protective factors in successful prevention programs. *American journal of orthopsychiatry*, 68(4), 512-520.
- Eisenbarth, C. A., Champeau, D. A., & Donatelle, R. J. (2013). Relationship of appraised stress, coping strategies, and negative affect among college students. *International Journal of Psychology and Behavioral Sciences*, 3(5), 131-138.
- Evans, D. W. (1994). Self-complexity and its relation to development, symptomatology and self-perception during adolescence. *Child Psychiatry and Human Development*, 24(3), 173-182.
- Fergusson, D. M., Horwood, L. J., & Swain-Campbell, N. R. (2003). Cannabis dependence and psychotic symptoms in young people. *Psychological medicine*, 33(1), 15-21.
- Fonagy, P., Steele, M., Steele, H., Higgitt, A., & Target, M. (1994). The Emanuel Miller memorial lecture 1992 the theory and practice of resilience. *Journal of child psychology and psychiatry*, 35(2), 231-257.
- Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crisis? A prospective study of resilience and emotions following the

- terrorist attacks on the United States on September 11th, 2001. *Journal of personality and social psychology*, 84(2), 365.
- Fry, P. S., & Debats, D. L. (2010). Sources of human life-strengths, resilience, and health. *New frontiers in resilient aging: Life-strengths and well-being in late life*, 15-59.
- Gebhard, J., G. (2012). International Students' Adjustment Problems and Behaviors. *Journal of International Students*, 2(2), 184-193.
- Gilligan, R. (1997). Beyond permanence? The importance of resilience in child placement practice and planning. *Adoption & Fostering*, 21(1), 12-20.
- Gramzow, R. H., Sedikides, C., Panter, A. T., & Insko, C. A. (2000). Aspects of self-regulation and self-structure as predictors of perceived emotional distress. *Personality and social psychology bulletin*, 26(2), 188-205.
- Han, X., Han, X., Luo, Q., Jacobs, S., & Jean-Baptiste, M. (2013). Report of a mental health survey among Chinese international students at Yale University. *Journal of American College Health*, 61(1), 1-8.
- Henderson, N., & Milstein, M. M. (2003). *Resiliency in schools: Making it happen for students and educators*. Corwin Press.
- Hunter, B., White, G. P., & Godbey, G. C. (2006). What does it mean to be globally competent? *Journal of Studies in International Education*, 10, 267-285.
- Infante, F., & Lamond, A. (2003). Resilience and biculturalism: The Latino experience in the United States. *Resilience for today: Gaining strength from adversity*. Westport, Conn.: Praeger Publishers.
- Ip, G. W. M., & Bond, M. H. (1995). Culture, values, and the spontaneous self-concept. *Asian Journal of Psychology*, 1(1), 29-35.

- Juszczyk, S., & Kim, Y. (2017). Impact of Culture on Education in Poland and South Korea. A Comparative Analysis. *Stanisław Juszczyk*, 132.
- Kalthoff, R. A., & Neimeyer, R. A. (1993). Self-complexity and psychological distress: A test of the buffering model. *International Journal of Personal Construct Psychology*, 6(4), 327-349.
- Kernis, M. H., Paradise, A. W., Whitaker, D. J., Wheatman, S. R., & Goldman, B. N. (2000). Master of one's psychological domain? Not likely if one's self-esteem is unstable. *Personality and Social Psychology Bulletin*, 26(10), 1297-1305.
- Kim, H. S., & Markus, H. R. (2002). Freedom of speech and freedom of silence: An analysis of talking as a cultural practice. *Engaging cultural differences: The multicultural challenge in liberal democracies*, 432-452.
- Kim, Y. H., Peng, S., & Chui, C. Y. (2008). Explaining self-esteem differences between Chinese and North Americans: Dialectical self (vs. self-consistency) or lack of positive self-regard. *Self and Identity*, 7(2), 113-128.
- Koernig, S. K. (2007). Planning, organizing, and conducting a 2-week study abroad trip for undergraduate students: Guidelines for first-time faculty. *Journal of Marketing Education*, 29(3), 210-217.
- Kuo, B. C., Roysircar, G., & Newby-Clark, I. R. (2006). Development of the Cross-Cultural Coping Scale: Collective, avoidance, and engagement coping. *Measurement and Evaluation in Counseling and Development*, 39(3), 161-181.
- Kwan, V. S., Bond, M. H., Boucher, H. C., Maslach, C., & Gan, Y. (2002). The construct of individuation: More complex in collectivist than in individualist cultures. *Personality and Social Psychology Bulletin*, 28(3), 300-310.
- Lee, K. S., & Carrasquillo, A. (2006). Korean college students in United States: Perceptions of professors and students. *College Student Journal*, 40(2).

- Leung, F. K. S., & Wong, M. (1996). Hong Kong pupils' mathematics achievement in the international comparison. *Science and mathematics achievements at the mid-primary level in Hong Kong*.
- Li, J., Wang, Y., & Xiao, F. (2014). East Asian International Students and Psychological Well-Being: A Systematic Review. *Journal of International Students*, 4(4), 301-313.
- Liem, J. H., James, J. B., O'toole, J. G., & Boudewyn, A. C. (1997). Assessing resilience in adults with histories of childhood sexual abuse. *American Journal of Orthopsychiatry*, 67(4), 594-606.
- Linville, P. W. (1985). Self-complexity and affective extremity: Don't put all of your eggs in one cognitive basket. *Social Cognition*, 3, 94-120.
- Linville, P. W. (1987). Self-complexity as a cognitive buffer against stress-related illness and depression. *Journal of personality and social psychology*, 52(4), 663.
- Lopez, S. J., Prosser, E. C., Edwards, L. M., Magyar-Moe, J. L., Neufeld, J. E., & Rasmussen, H. N. (2002). Putting positive psychology in a multicultural context. *Handbook of positive psychology*, 700-714.
- Luo, W., Watkins, D., & Lam, R. Y. (2008). Measuring self-complexity: A critical analysis of Linville's H statistic.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development*, 71(3), 543-562.
- Martin, A. J. (2013). Academic buoyancy and academic resilience: Exploring 'everyday' and 'classic' resilience in the face of academic adversity. *School Psychology International*, 34(5), 488-500.

- Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, 43(3), 267-281.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological review*, 98(2), 224.
- Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 3-25). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
- Masten, A. S., & Garmezy, N. (1985). Risk, vulnerability, and protective factors in developmental psychopathology. In *Advances in clinical child psychology* (pp. 1-52). Springer, Boston, MA.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and psychopathology*, 2(4), 425-444.
- McConnell, A. R., Strain, L. M., Brown, C. M., & Rydell, R. J. (2009). The simple life: On the benefits of low self-complexity. *Personality and Social Psychology Bulletin*, 35(7), 823-835.
- Mesidor, J. K., & Sly, K. F. (2016). Factors That Contribute to the Adjustment of International Students. *Journal of International Students*, 6(1), 262-282.
- McIntosh, E., & Shaw, J. (2017). Student resilience: Exploring the positive case for resilience.
- Morgan, H. J., & Janoff-Bulman, R. (1994). Positive and negative self-complexity: Patterns of adjustment following traumatic versus nontraumatic life experiences. *Journal of Social and Clinical Psychology*, 13, 63-85.

- Niaz, U., & Hassan, S. (2006). Culture and mental health of women in South-East Asia. *World Psychiatry*, 5(2), 118.
- OECD. (2013). "How many students study abroad and where do they go?", in Education at a Glance 2013: Highlights. OECD Publishing, Paris.
- OECD. (2014). Education at a Glance 2014: Highlights. OECD Publishing, Paris.
- OECD (2018). Education at a Glance 2018: OECD Indicators. OECD Publishing, Paris.
- Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of personality and social psychology*, 91(4), 730.
- Oxford Dictionary. (1989). Oxford: Clarendon Press.
- Pan, J. Y., & Chan, C. L. W. (2007). Resilience: A new research area in positive psychology. *Psychologia*, 50(3), 164-176.
- Pilarska, A. (2017). Multiple roles and sense of identity among women in early and later adulthood. *Roczniki Psychologiczne/Annals of Psychology*, 19(2), 349-364.
- Pilarska, A., & Suchańska, A. (2015). Self-complexity and self-concept differentiation—What have we been measuring for the past 30 years?. *Current Psychology*, 34(4), 723-743.
- Rafaeli, E., & Hiller, A. (2010). *Self-Complexity: A source of resilience. Handbook of adult resilience*. Guilford Press. 171-192.
- Rafaeli-Mor, E., Gotlib, I. H., & Revelle, W. (1999). The meaning and measurement of self-complexity. *Personality and Individual Differences*, 27(2), 341-356.
- Rafaeli-Mor, E., & Steinberg, J. (2002). Self-complexity and well-being: A review and research synthesis. *Personality and Social Psychology Review*, 6(1), 31-58.

- Rahman, O., & Rollock, D. (2004). Acculturation, competence, and mental health among South Asian students in the United States. *Journal of Multicultural Counseling and Development*, 32(3), 130-142.
- Rirkin, M., & Hoopman, M. (1991). Moving beyond risk to resiliency. *Minneapolis, MN: Minneapolis Public Schools*.
- Rodriguez, C. (2018, March 14). Planning Study Abroad? The 10 Best European Countries For International Students. Retrieved from <https://www.forbes.com/sites/ceciliarodriguez/2018/03/13/planning-study-abroad-the-10-best-european-countries-for-international-students/>
- Ross, M., Xun, W. E., & Wilson, A. E. (2002). Language and the bicultural self. *Personality and Social Psychology Bulletin*, 28(8), 1040-1050.
- Rothermund, K., & Meiniger, C. (2004). Stressbuffering effects of self-complexity: Reduced affective spillover or self-regulatory processes? *Self and Identity*, 3, 263–281.
- Ruggles, S. (2015). Patriarchy, power, and pay: The transformation of American families, 1800–2015. *Demography*, 52(6), 1797-1823.
- Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder. *The British Journal of Psychiatry*, 147(6), 598-611.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American journal of orthopsychiatry*, 57(3), 316-331.
- Rutter, M. (2006). The promotion of resilience in the face of adversity. In C. Stewart, & J. Dunn, (Eds.), *Families count: effects on child and adolescent development: The Jacobs Foundation series on adolescence* (pp. 26-50). Cambridge: Cambridge University Press.

- Ryan, R. M., LaGuardia, J. G., & Rawsthorne, L. J. (2005). Self-complexity and the authenticity of self-aspects: Effects on well-being and resilience to stressful events. *North American Journal of Psychology*, 7(3).
- Setterlund, M. B., & Niedenthal, P. M. (1993). "Who am I? Why am I here?" Self-esteem, self-clarity, and prototype matching. *Journal of personality and social psychology*, 65(4), 769.
- Sheldon, K. M., & Krieger, L. S. (2007). Understanding the negative effects of legal education on law students: A longitudinal test of self-determination theory. *Personality and Social Psychology Bulletin*, 33(6), 883-897.
- Shilling, A. A., & Brown, C. M. (2015). A cultural examination of self-complexity. *The Journal of Integrated Social Sciences*, 5, 1-26.
- Sodowsky, G. R., & Wai Ming Lai, E. (1997). Asian immigrant variables and structural models of cross-cultural distress.
- Staudinger, U. M., Marsiske, M., & Baltes, P. B. (1995). Resilience and reserve capacity in later adulthood: Potentials and limits of development across the life span. *Developmental psychopathology*, 2, 801-847.
- Stebbleton, M., Soria, K., & Cherney, B. (2013). The high impact of education abroad: College students' engagement in international experiences and the development of intercultural competencies. *Frontiers: The Interdisciplinary Journal of Study Abroad*.
- Study in Poland. (2018, October 31). Retrieved January 20, 2019, from <https://www.topuniversities.com/where-to-study/europe/poland/guide>.
- Swann, W. B., & Ely, R. J. (1984). A battle of wills: self-verification versus behavioral confirmation. *Journal of personality and social psychology*, 46(6), 1287.
- Swann, W. B., & Read, S. J. (1981). Acquiring self-knowledge: The search for feedback that fits. *Journal of Personality and Social Psychology*, 41(6), 1119.

- Tan, J. B., & Yates, S. (2011). Academic expectations as sources of stress in Asian students. *Social Psychology of Education, 14*(3), 389-407.
- Tugade, M. M., Fredrickson, B. L., & Feldman Barrett, L. (2004). Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *Journal of personality, 72*(6), 1161-1190.
- Tusaie, K., Puskar, K., & Sereika, S. M. (2007). A predictive and moderating model of psychosocial resilience in adolescents. *Journal of Nursing Scholarship, 39*(1), 54-60.
- Venâncio Martins, M. H., & Clemente Neto, V. (2016). Resilience and self-concept of competence in institutionalized and non-institutionalized young people. *Psicologia: Revista da Associacao Portuguesa Psicologia, 30*(2).
- Wagnild, G. (2003). Resilience and successful aging: Comparison among low and high income older adults. *Journal of gerontological nursing, 29*(12), 42-49.
- Wemer, E. E., & Smith, R. S. (1982). Vulnerable but invincible: A study of resilient children. *New York: McGraw-Hill*.
- Woolfolk, R.L., Novalany, J.G., Allen, M.A., & Polino, M. (1995). Self-complexity, self-evaluation, and depression: An examination of form and content within the self-schema. *Journal of Personality and Social Psychology, 68*, 1108-1120.
- Wright, M. O'D., & Masten, A. S. (2005). *Resilience processes in development*. Handbook of resilience in children (pp. 17-37). Springer.
- Yakushko, O., Davidson, M. M., & Sanford-Martens, T. C. (2008). Seeking help in a foreign land: International students' use patterns for a US university counseling center. *Journal of College Counseling, 11*(1), 6-18.
- Yi, J. K., Lin, J. C. G., & Kishimoto, Y. (2003). Utilization of counseling services by international students. *Journal of Instructional Psychology, 30*(4), 333-342.

- Yu, X., & Zhang, J. (2007). Factor analysis and psychometric evaluation of the Connor-Davidson Resilience Scale (CD-RISC) with Chinese people. *Social Behavior and Personality: an international journal*, 35(1), 19-30.
- Zeigler-Hill, V., & Showers, C. J. (2007). Self-structure and self-esteem stability: The hidden vulnerability of compartmentalization. *Personality and Social Psychology Bulletin*, 33(2), 143-159.
- Zhang, Y., Haddad, E., Torres, B., & Chen, C. (2011). The reciprocal relationships among parents' expectations, adolescents' expectations, and adolescents' achievement: A two-wave longitudinal analysis of the NELS data. *Journal of youth and adolescence*, 40(4), 479-489.
- Zimbardo, P. G., Pilkonis, P. A., & Marnell, M. E. (1977). Shyness: What it is, what to do about it.

Appendix A

The informed consent form in English

Purpose of the Study: This is a study for master thesis in psychology that is being conducted by Vismaia Nurfitriani, in SWPS University of Social Sciences and Humanities in Warsaw, Poland. The purpose of this study is to search for relationship between the ability to positively overcome challenging situations and how people think about themselves.

What will be done: You are asked complete two measures, which will take approximately from 20 to 35 minutes. The first tool is a questionnaire evaluating your adaptational abilities. The second tool is a sorting task assessing how you perceive yourself in different aspects of your life. There are no good or bad answers here, as this is about your opinion, so please answer

as honestly as you can. Please fill in the questionnaires in the order it was given to you.

Risks or discomforts: No risks or discomforts are anticipated from taking part in this study. If you feel uncomfortable with a question/item, you can skip that question/item or withdraw from the study altogether. If you decide to quit at any time before you have finished the questionnaire, your answers will NOT be recorded.

Confidentiality: Your responses will be kept completely confidential. All data from this study will be kept from inappropriate disclosure and will be accessible only to the researcher and the faculty advisor.

Your particular individual results are not going to be used, showed or shared anywhere. The researcher is only interested in the results of the study performed on the whole research group. These outcomes will be presented in author's Master thesis and possibly in some scientific articles or on conferences.

Contact information: If you have concerns or questions about this study, please contact Vismaia Nurfitriani at vismaianf@gmail.com or +48508552771. You may obtain information about the outcome of the study at the end of the academic year by contacting Vismaia Nurfitriani.

I have read this information and agree to participate in this research.

Date _____

Signature _____

Appendix B

Demographic information

Demographic Data

- Age :
- Sex : ☐ Male ☐ Female
- Nationality :
- How long have you been in Poland?
- How do you evaluate your stay here?
☐ 0 = I wish I would never come here

☐ 1 = Sometimes it is tough

☐ 2 = It is average, neither good nor bad

☐ 3 = I can adapt well in this country

☐ 4 = I am happy that I am here and it is very easy for me to adapt

Note : please check ✓ ☐ inside the box above

Appendix C

Procedure of self-complexity trait sorting task for participants

Self-complexity Sorting Task Instructions

The purpose of this study is to understand how people describe themselves. This Self-complexity Sorting Task will be given to Asian students living in Poland and they will be asked to describe how they feel in different situations.

You will get the envelope which contains 52 cards; 6 cards are empty and 46 cards contains different name of expression of your feelings. Your task is to spread out the cards so that you can see what is written on the cards. Choose those cards which contains different adjective lists,

and group them in such a way so that in each group will have the terms that related and can describe some aspects of you or your life. You can combine these terms into groups on any basis and each group of feelings should represent a different aspect of you or yourself.

Each group can contain as many description as you like. You do not need to use every term and just only use those that you think are specific and related to you. Each of the cards can be used more than once. If you want to use one term in more than one group, then you can use one of the blank cards from the envelope – remember to write the name and the number on the empty piece of paper and proceeds as shown with another cards.

You will also get the response sheet which has some several columns. Use this response sheet to indicate which terms that describe the aspects of you or your self in the different situation. Each column will match one of your groups. Be careful and pay attention to the number in the corner of each card: write **only the number** of the name in the column of response sheet, not the term's name. Remember that in each column, put the numbers of the terms that make up the group.

The easier way to do this task, is to create one or more groups and then you can transfer them into the answer sheets, then remix all the cards and see if there are any groups that you would like to create. Repeat this procedure until you feel that you have already created all the important groups that describe you or your life. Keep in mind that you can always use the blank cards if you want to use the same term more than once. The set includes the additional answer sheet in case you need it. The order of how you group the cards, as well as the individual terms in the groups on the answer sheet, is not important. The researcher is only interested in which feelings that you will connect with each other. It is also not necessary to name the groups unless you feel like it. Do not write your name on the answer sheet. This survey is completely anonymus and confidential, so please be as honest as you can.

While doing the task please remember that you describe yourself, not other people. You do not have to use all of the expression of the feelings in the cards. You can use the same term or card again in more than one group. Please take your time and do not be a hurry in order to do this task.

Appendix D

Adjective List for Self-Complexity Trait Sorting Task

SELF-COMPLEXITY SORTING TASK

(1) Friendly	(14) Empathetic	(27) Patience	(40) Disorganized
(2) Caring	(15) Sensitive	(28) Easy-going	(41) Easy to get angry
(3) Kind	(16) Optimistic	(29) Worried	(42) Passive/aggressive
(4) Helpful	(17) Organized	(30) Lazy	(43) Sad and blue

(5) Hard-working	(18) Forgiving	(31) Stubborn	(44) Embarrassment
(6) Tolerant	(19) Determined	(32) Unsure	(45) Immature
(7) Positive	(20) Energetic	(33) Short-tempered	(46) Childish
(8) Understanding	(21) Funny	(34) Impatient	(47)
(9) Honest	(22) Mature	(35) Undecided	(48)
(10) Independent	(23) Happy	(36) Shy	(49)
(11) Respectful	(24) Family	(37) Panic	(50)
(12) Intelligent	(25) Polite	(38) Selfish	
(13) Creative	(26) Smiling	(39) Complaining	

Appendix E

Self-complexity trait sorting task Answer Sheet

Name of the	Feelings belongi ng to the group	

SHEET ANSWER

	I as ...
	I as ...
	I as ...
	I as ...
	I as ...
	I as ...
	I as ...
	I as ...
	I as ...

Appendix F

Connor-Davidson Resilience Scale 25 (CD-RISC-25) ©

For each item, please mark an “x” in the box below that best indicates how much you agree with the following statements as they apply to you over the last **month**. If a particular situation has not occurred recently, answer according to how you think you would have felt.

not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
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1.	I am able to adapt when changes occur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	I have at least one close and secure relationship that helps me when I am stressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	When there are no clear solutions to my problems, sometimes fate or God can help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	I can deal with whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Past successes give me confidence in dealing with new challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	I try to see the humorous side of things when I am faced with problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Having to cope with stress can make me stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	I tend to bounce back after illness, injury, or other hardships.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Good or bad, I believe that most things happen for a reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	I give my best effort no matter what the outcome may be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	I believe I can achieve my goals, even if there are obstacles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Even when things look hopeless, I don't give up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	During times of stress/crisis, I know where to turn for help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Under pressure, I stay focused and think clearly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	I prefer to take the lead in solving problems rather than letting others make all the decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	I am not easily discouraged by failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	I think of myself as a strong person when dealing with life's challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	I can make unpopular or difficult decisions that affect other people, if it is necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	In dealing with life's problems, sometimes you have to act on a hunch without knowing why.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	I have a strong sense of purpose in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	I feel in control of my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23.	I like challenges.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	I work to attain my goals no matter what roadblocks I encounter along the way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	I take pride in my achievements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

