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THE RELATIONSHIP BETWEEN CREATIVITY AND GLOBAL/NATIONAL IDENTITY: COMPARATIVE STUDY OF LITHUANIAN AND AMERICAN STUDENTS' SAMPLE

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The mindset of either a national or global identity was primed in the participants in the United States and Lithuania. The effects of priming on creativity were then examined. Two hundred and eighty-five participants from the United States and 95 Lithuanian participants received one of three possible manipulations: one that primed national identity, one that primed global identity, or no manipulation. They were then asked to complete measures of creativity. The results suggested that participants from Lithuania scored higher than the American participants on measures of national orientation regardless of the condition in which they participated. Lithuanian participants were the most affected by the national prime, and scored particularly low on global orientation when they were in the national identity condition. Lithuanian participants scored higher than participants from the United States on all measures of creativity, regardless of the condition. However, a country-by-condition interaction was also present, showing that participants in the US scored higher on creativity when they were in the global prime condition, while Lithuanians received higher creativity scores when in the national prime condition. Explanations and implications for these results are discussed.

Keywords: *creativity, global orientation, national orientation.*

A creative citizenry is often desirable because of the contributions to society made by those who engage in the creative process. Creativity is a culturally embedded phenomenon (Kharkhurin & Motalleebi, 2008; Lubart, 2010). Culture influences creative behaviors on both the individual (e.g., how people think and behave; Glăveanu, 2011) and contextual levels, for example, "[…] the prevailing disciplinary or aesthetic milieu" within a culture (Simonton, 1999, p. 124). Lubart (1999) proposed several ways in which culture may impact creativity. That includes the environment's role in fostering or hindering creativity, how language may influence creativity, how people engage in the creative process (i.e., perhaps through different cognitive approaches), and what they think is creative.

Cross-Cultural Studies of Creativity. Of the cross-cultural studies of creativity, many have compared prototypically Western countries (e.g., the United States) with prototypically Eastern countries (e.g., China). For example, Jaquish and Ripple (1985) found that, when comparing American and Chinese participants, Americans scored higher on tests of creative ideational fluency and flexibility than did Chinese participants. However, both groups scored similarly on tests of creative originality. Wang and Greenwood (2013) found that both Western and Chinese groups indicated that they perceived Western students to be, on average, more creative than Chinese students.

In other regions, Aviram and Milgram (1977) found that on tests of divergent thinking, American and Israeli children scored higher than did children from the former Soviet Union. Cultural distinctions in socialization practices at that historic time were highlighted, with the communist cultural orientation potentially stifling the creativity of the Soviet children due to an emphasis on conforming to larger social norms and not standing out. A more recent study sought to examine differences in divergent thinking between American, Russian, and Iranian students (Kharkhurin & Motalleebi, 2008). It was found that American and Russian participants evidenced a higher degree of divergent thinking when compared to Iranian participants. These differences were similarly explained in terms of larger cultural forces, with Iranian culture being more collectivistic than either American or Russian culture. Taken together, these studies suggest that relatively collectivist cultures likely underscore fitting in with the group, which could hinder the unique creative expression of an individual.

National and Global Orientation. As the world becomes increasingly interconnected through globalization, people frequently encounter others who are different from themselves in terms of appearance, customs, and language. Research has suggested that having an awareness of global issues and having a social network that supports global citizenship predicts greater intergroup empathy, along with other prosocial values toward "others" (Reysen & Katzarska-Miller, 2013). Global citizenship has been defined as "awareness, caring, and embracing cultural diversity while promoting social justice and sustainability, coupled with a sense of responsibility to act" (Reysen & Katzarska-Miller, p. 858). An attitude of global citizenship has been found to be related to higher creativity in a US sample (Tidikis & Dunbar, 2017). Other studies found that global citizenship might

be related to creativity through an expansion of conceptual categories (Kharkhurin, 2011). Human thought is category-based (Piaget, 1954); categories are formed through cultural experiences, and while many categories are shared among all people throughout all cultures (e.g., "living things") some are unique to each individual (e.g., "my family").

The conceptualization of national orientation toward one's country is more complicated (Mummendey, Klink, & Brown, 2001). On the one hand, people usually want to have positive sentiments about groups to which they belong, and having a high national pride seems to be one aspect of a thriving democratic society. However, sometimes this patriotism can lead to rejection and hostility toward people from other countries (Mummendey et al., 2001). Research that has examined national orientation has found that nationalistic ideas can both hinder and promote creativity; love of one's culture has been found to positively relate to creativity, yet glorification of one's culture negatively related to creativity (Clerkin, 2013). Another study found that national orientation was only related to hostility toward outgroups when participants were primed to make comparisons between their group and outgroups (Mummendey et al., 2001).

Global versus national orientation distinctions were first introduced in business literature when discussing marketing strategy, and these two orientations were viewed as either mutually exclusive or as opposite ends of the same continuum (e.g., Levitt, 1983; Kotler, 1986). Later research adopted a middle ground approach, arguing that global and national orientation can be complimentary, supporting the position that these two orientations are orthogonal (Yavas, Verhage, & Green, 1992). In psychological literature, these two constructs have been mostly examined separately (e.g., Clerkin, 2013; Reysen & Katzarska-Miller, 2013); thus, the question of their orthogonality has rarely arisen. Nonetheless, there are a few studies that discuss these two or similar constructs jointly. Esses, Dovidio, Semenya, & Jackson (2005) found a weak negative correlation between nationalism and internationalism ($r = -.18$). Other research similarly found a weak negative correlation between these two constructs, but with nationalistic tendencies measured as negative outcomes – such as xenophobia (not love of a particular culture or country; Ariely, 2017). In the present study, global and national orientations have been conceptualized as two distinct constructs. That is, an individual can be high on both, low on both, or anything in between.

Previous studies have mostly looked at global and national orientation in terms of a fixed dispositional identity. However, research suggests that our social identities, including national and global identity, might be fairly flexible and susceptible to priming (e.g., Esses, Wagner, Wolf, Preiser, & Wilbur, 2006; Gaither, Remedios, Sanchez, & Sommers, 2015; Levendusky, 2018). While some individuals may be predisposed to either a strong national or global identity, reminding them about other identities they hold may, at least temporarily, change their identification.

Lithuanian and American Cultures. Due in part to their proximity to other countries, some countries may have a citizenry that is more predisposed to a global orientation (e.g., European countries), whereas others,

due to their relative geographic isolation (e.g., the United States), might be more nationally-oriented. This is because exposure and close proximity to people with different cultural values can lead to greater feelings of connection with others in the world (Reysen & Katzarska-Miller, 2013). After joining the European Union, citizens of Lithuania have had increasing exposure to other European countries, both through travelling abroad and through experiences with travelers visiting their country. Further, with high emigration rates, most Lithuanians have close friends and relatives living in other European countries, and many young people consider living, studying, and working abroad (OECD, 2013), which could potentially induce a greater sense of global orientation. On the other hand, older citizens of Lithuania still recall the time of the Soviet occupation and the struggle for freedom of their country, which may make them more nationally oriented. Lithuania is a small country (population: 2.8 million; "Lithuania," 2017) with a unique culture, history, and language, which could make its people both proud of their national values and fearful of the forces of globalization, which may be perceived as a threat to their identity.

The United States has a history of immigration and diversity, but the regions from which immigrants originated have changed over the past several decades. Between 1901–1910, most immigrants came from the European nations, but from 1991–1998, most people originated from countries in Asia and Central/South America (Banks, 2004). People of color are increasingly becoming part of the fabric of American society and currently comprise about 40% of children in school (U.S. Census Bureau, 2000). This increasing ethnic diversity can serve as an impetus for some to become more accepting and open to others or, on the other hand, may create feelings of fear and concern about the changing ethnic composition of the country. These distinct beliefs about the benefits and/or dangers of multiculturalism are an obvious part of the culture wars that are part of the current political discourse in the United States and may influence whether people feel more nationally or globally oriented.

Purpose. To summarize, previous research found differences in the amount and type of creative expression between countries. Many researchers attributed these differences, in part, to such cultural differences as the individualistic versus collectivistic orientation of a country, with individualistic countries exhibiting more creativity (Lubart, 2010). A positive relationship between multicultural exposure and creativity has also been established (Leung & Chiu, 2010; Maddux, Adam, & Galinsky, 2010). Albeit a broad generalization, citizens in some countries appear to differ in their openness and positivity toward other cultures, with some countries embracing and encouraging global awareness and responsibility to a greater degree, perhaps due to their proximity to other countries and cultures. These attitudinal differences have been conceptualized as global and national citizenship.

Two countries were selected for this research: the United States and Lithuania. The United States was selected as it has been used as a reference point in many previous studies of cross-cultural differences in creativity (e.g., Chen et al., 2002). Lithuania,

on the other hand, has not been examined in the creativity research, and was thought to represent a country that has a unique culture and represents a middle point in the traditional East-West bipolar continuum.

Three hypotheses were tested. First, whether there was a difference in creativity scores between American and Lithuanian participants was analyzed. It was predicted that Lithuanian participants would be more creative than American participants due to their being a part of the European Union and potential increased exposure to people from different countries and cultures. Second, a main effect for condition was analyzed. Participants in the global prime condition were expected to score higher in creativity when compared to participants in the national prime condition and control condition because global identity might promote feelings of being a member of a global community and an openness to express creative ideas. Third, an interaction effect was explored, namely whether the global and national identity primes had the same effects on the participants in the US and Lithuania. Since no previous research exists on this topic, we did not form specific hypotheses about this relationship.

Method

Participants

A total of 380 participants participated in the study; 285 from the US and 95 from Lithuania. Participants were enrolled in psychology courses at two large universities in the US and Lithuania respectively. Both universities were comparable in terms of the ranking (the Lithuanian university in the top 2.7% and the US university in the top 2.9% of world ranking; CWUR, 2018) and the number of students enrolled (LT: 20 000, US: 31 000, with 22 740 students enrolled at the main campus, with the rest enrolled at other locations or online). The mean age of participants was in the US $M = 19.03$, $SD = 1.55$, and $M = 20.16$, $SD = 2.26$ in Lithuania. For the US sample, gender was reported as 71.5% females and 28.5% males, and for the Lithuanian sample 78.6% females, and 21.4% males. The reported race distribution for the US was 72.1% White, 5.1% Black or African-American, 5.7% American Indian or Alaskan Native, 7.0% Asian, 1.2% Pacific Islander, with the remaining 8.9% non-identified or identified as "other." The Lithuanian sample self-identified as 100% White.

Materials

Manipulation. Participants in the national identity prime condition received a manipulation previously successfully used in Esses et al. (2006) study. Participants were asked, "How important is it for you to be a Lithuanian/American" and "To what extent do you identify yourself as a Lithuanian/American." Responses were measured on a six-point scale ranging from "not at all" to "very much." These questions were shown to increase the salience of national identity in Esses et al. study.

Participants in the global identity prime condition received a manipulation adopted from Türken & Rudmin's study (2013). They were asked to answer two questions on the same six-point scale as above, "How important is it for you to identify with the world community?" and "To what extent

do you consider yourself a citizen of the world more than a citizen of some nation?" These questions were designed to increase the salience of global identity.

Participants in the control condition were asked if they had previously participated in any research studies conducted at their attending university and if so, how many. These questions were thought to be unrelated to either national or global identity salience, and were used as fillers to create a comparable experience for the participants in this condition to that of the other two conditions in terms of time expenditure and cognitive load.

Manipulation Check. To see whether national and global identity priming manipulation worked, participants were asked at the end of the study to answer questions adapted from Türken and Rudmin's (2013) Global Identity Scale. The items represented two dimensions: global (e.g., *I consider myself more as a citizen of the world than a citizen of some nation*) and national (e.g., *My own culture is the best in the whole world*) orientation. The internal consistency for the global dimension was .78, and for the national dimension .70. The items in each dimension were added up to create composite scores for global and national orientation.

Creativity Measure. Participants were asked to create three drawings using different geometrical shapes: one drawing using triangles, another using only circles, and the third rectangles. Participants were instructed to create drawings that were highly creative and imaginative. This task has been previously used and validated in cross-cultural research examining creativity (Chen et al., 2002).

Procedure

All measures were first translated from English into Lithuanian, and then back translated to English to insure that both English and Lithuanian measures were equivalent in meaning and accurately translated. The participants from the US signed up for the experiment using an online participation system (SONA). Lithuanian participants contacted researchers in person in their respective university after being introduced to the research in their psychology classes.

Each participant attended a one-hour session in a laboratory located on a university campus in the United States or Lithuania. Upon arrival, the participants were informed of the study's purpose and signed an informed consent form prior to the experiment. Participants were then randomly assigned to one of three conditions: national identity prime, global identity prime, or control. Participants used personal computers to complete the measures, along with paper and pencil booklets for creative drawings. The measures' presentation order was randomized across the participants. Each participant was debriefed at the end of their session. Stimuli were presented electronically using E-Prime 2.0 (Psychology Software Tools, Pittsburgh, PA, 2012) and Inquisit 3 (2011) software.

The scoring procedure for the creative task was adopted from the procedure used in previous (Amabile, 1996; Chen et al., 2002) studies. Each drawing was removed from the original packet and all of the identifying information that might have suggested the country of origin was removed. Two trained undergraduate student raters from the

Table 1. ***Interclass correlation coefficient (ICC) between the coders in the United States and Lithuania***

Rating	US	LT	US & LT
Creativity	.74	.81	.78
Liking	.76	.80	.72
Uniqueness	.71	.77	.76
Technical Quality	.78	.76	.77

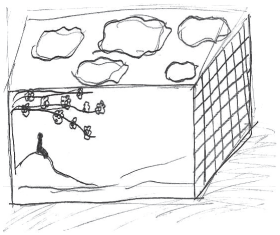
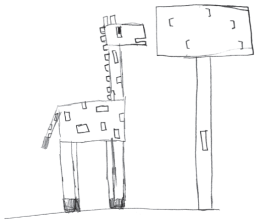
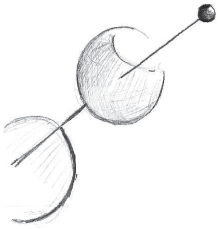
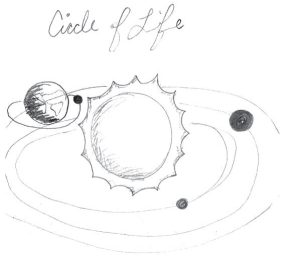
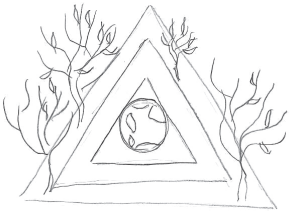
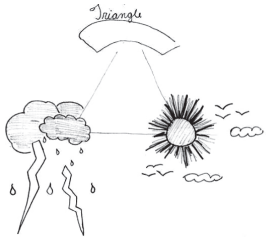
Rectangle		
	Mean creativity rating = 4.67 Drawn by = Lithuanian female Condition = control	Mean creativity rating = 4.17 Drawn by = American female Condition = national
Circle		
	Mean creativity rating = 5.00 Drawn by = Lithuanian female Condition = global	Mean creativity rating = 4.00 Drawn by = American female Condition = national
Triangle		
	Mean creativity rating = 4.33 Drawn by = Lithuanian female Condition = control	Mean creativity rating = 4.66 Drawn by = American female Condition = global

Figure 1. ***Examples of highly rated drawings for each geometrical shape.***

United States and two trained researchers in Lithuania rated the drawings for *uniqueness*, *technical quality*, *liking*, and *creativity* on a 1–5 scale. Student raters in the United States were recruited for economic reasons, and due to the previous research results showing that such raters provide reliable and valid judgements (Amabile, 1996; Chen et al., 2002; Sternberg & Lubart, 1995). All coders rated the drawing independently. To avoid order effects, coders shuffled the drawings prior to rating them. For the *creativity* rating, coders were asked to use their own subjective definition of creativity. For the *liking* score, raters used their subjective reaction to the drawing. *Uniqueness* was conceptualized as the degree to which the drawing showed a novel representation as compared to other drawings in the sample. *Technical quality* was defined as technical artistic ability. Interrater reliability between the coders in two countries separately, and between the countries was adequate and consistent with the scores obtained in other studies using the same scoring method (e.g., Chen et al., 2002). Mean of the two coder's ratings in each country was calculated for each creativity component. For the raters' agreement measured with interclass correlation coefficients (*ICC*), see Table 1. For the examples of drawings, see Figure 1.

Results

First, we examined whether demographic characteristics might have had an impact on the creative outcomes. No difference was found between women (M = 10.17, SD = 3.81) and men (M = 9.39, SD = 3.34) on creativity scores in our overall sample, t (227) = 1.50, p = .14. Likewise, no performance differences on the creative tasks were observed in differing ethnic groups in the US sample, F (1, 142) = 1.73, p = .117, partial η^2 = .068.

There was a small negative correlation between national and global identity dimensions on the Türken and Rudmin's (2013) Global Identity Scale (GIS), r = –.11, p = .028, which explained only 1.2 % of shared variance. Thus, for our analysis, we treated these two dimensions as orthogonal.

To test whether our global and national identity priming manipulation had an effect, two 3 (condition) x 2 (country) ANOVAs for the national and global orientation scores on the GIS were conducted. ANOVA for the national orientation scores had a significant main effect of condition (Table 2). Participants in the national prime condition (M = 4.31, SD = 1.48) scored significantly higher on the items endorsing national orientation than participants in the control condition (M = 3.80, SD = 1.60), M_{diff} = 0.50, SE = 0.20, p = .035, 95% CI [–0.98; –0.03]. No significant difference was found between other conditions. There was also a main effect of country, Lithuanian participants (M = 7.64, SD = 1.49) scoring significantly higher on the national orientation than American participants (M = 6.68, SD = 1.47). There was no significant country by condition interaction.

There was a main effect of condition for the global orientation scores (Table 3). Participants in the global prime condition (M = 3.66, SD = 0.94) scored significantly higher on the items endorsing global orientation than participants in the control condition (M = 3.35, SD = 0.95), M_{diff} = 0.31, SE = 0.12, p = .013, 95% CI [–0.55; –0.07], and participants in the national orientation con-

Table 2. ***Between-Subject ANOVA for the National Orientation Scores***

Source	Type III SS	*df*	*MS*	*F*	Sig.	Partial η^2
Intercept	12963.49	1	12963.49	5979.96	.000	.946
Condition	13.31	2	6.65	3.07	.048	.018
Country	57.04	1	57.04	26.31	.000	.071
Condition x Country	4.07	2	2.04	0.94	.392	.005
Error	745.73	344	2.17			
Total	17515.00	350				

Table 3. ***Between-Subject ANOVA for the Global Orientation Scores***

Source	Type III SS	*df*	*MS*	*F*	Sig.	Partial η^2
Intercept	6060.75	1	6060.75	2397.89	.000	.875
Condition	69.11	2	34.56	13.67	.000	.074
Country	2.12	1	2.123	0.84	.360	.002
Condition x Country	27.68	2	13.84	5.48	.005	.031
Error	869.47	344	2.53			
Total	9113.00	350				

dition, M_{diff} = 0.40, *SE* = 0.13, *p* = .002, 95% CI [0.15; 0.65]. There was no main effect of country. However, there was a country by condition interaction. While no difference was detected in the global orientation scores in the global prime condition between the two countries, Lithuanian participants in the national prime condition (*M* = 2.90, *SD* = 0.87) scored significantly lower on the global orientation scale compared to the Lithuanian control (*M* = 3.65, *SD* = 0.96), M_{diff} = 0.75, *SE* = 0.25, *p* = .037, 95% CI [0.03; 1.47], while no difference between the national prime condition and control was detected for the US participants.

Because of the high inter-correlations between the creativity ratings (Table 4), a composite creativity score was created by summing all four ratings into one score. Next, 3 (condition) × 2 (country) ANOVA on the creativity scores was conducted (Table 5). Although there were unequal group sizes, the homogeneity of variance assumption was not violated for the dependent variable scores. Thus, we proceeded with the interpretation of the results.

There was a main effect of country, with Lithuanian participants' creativity ratings (*M* = 12.40, *SD* = 3.90) significantly higher than the U.S. participants' ratings (*M* = 8.92, *SD* = 2.93. There was also a main effect of condition: participants in the national prime condition (*M* = 9.80, *SD* = 3.97) received significantly higher creativity ratings than participants in the control condition (*M* = 9.27, *SD* = 3.24), M_{diff} = 1.49, *SE* = 0.49, *p* = .003, 95% CI [–2.46; –0.52]. Participants in the global prime condition (*M* = 10.20, *SD* = 3.27) received higher ratings than participants in the control condition, M_{diff} = 1.06, *SE* = 0.48, *p* = .036, 95% CI [–1.96; –0.07]. However, no difference was found between the national and global prime conditions, *ns*.

Table 4. ***Correlations between Mean Creativity Ratings in Two Countries Combined***

Creativity Ratings	Creativity	Liking	Uniqueness
Creativity	–		
Liking	.799**	–	
Uniqueness	.845**	.879**	–
Technical Quality	.741**	.838**	.851**

Table 5. ***Between-Subject ANOVA for the Creativity Scores***

Source	Type III SS	*df*	*MS*	*F*	Sig.	Partial η^2
Corrected Model	905.88	5	181.18	18.532	.000	.220
Intercept	27789.62	1	27789.62	2842.581	.000	.897
Condition	94.57	2	47.28	4.837	.009	.029
Country	771.92	1	771.92	78.959	.000	.194
Condition x Country	115.2	2	57.60	5.892	.003	.035
Error	3206.59	328	9.78			
Total	35885.90	334				

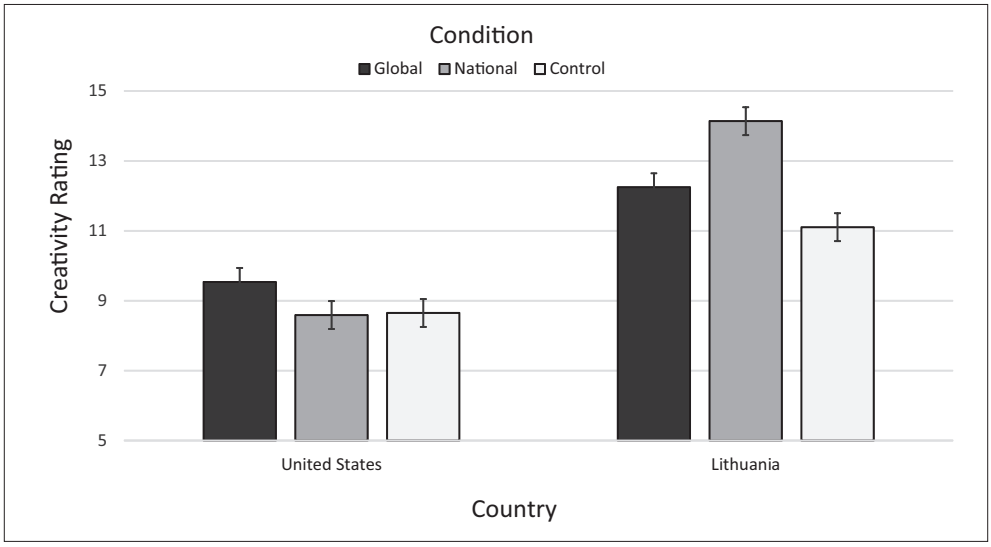


Figure 2. ***Mean creativity rating as a function of country and condition.***

There was also a country by condition interaction (Figure 2). Pairwise comparisons showed that Lithuanian participants received significantly higher creativity ratings in the national prime condition (M = 14.14, SD = 4.26) compared to the control condition (M = 11.10, SD = 3.42), M_{diff} = 3.03, SE = 1.04, p = .017, 95% CI [0.45; 5.62]. No other pairwise comparisons reached the traditional significance level for the Lithuanian sample. For the American sample, on the other hand, participants in

the global prime condition (M = 9.55, SD = 2.87) received a significantly higher rating than the participants in the control condition (M = 8.65, SD = 2.95), M_{diff} = 0.89, SE = 0.45, p = .049, 95% CI [–1.77, –0.01] and participants in the national prime condition (M = 8.59, SD = 2.91), M_{diff} = 0.95, SE = 0.45, p = .035, 95% CI [0.07, 1.83].

Discussion

Three hypotheses were examined in this research. Two hypotheses analyzed whether (a) creative works were different between participants in different countries, and (b) if creative works differed between national prime, global prime, or control conditions. The third hypothesis was more exploratory and analyzed whether global and national identity primes had the same effects on the participants in the US and Lithuania.

The manipulation of national and global salience worked. Participants in the national salience condition showed significantly higher national orientation during the manipulation check than other conditions, while participants in the global salience condition were significantly more globally oriented, as compared to two other conditions. Also, there were differences in national and global orientation between the two countries. Participants in Lithuania were significantly more nationally oriented than American participants, regardless of the condition. Lithuanian participants scored particularly low on the global orientation scale when they were in the national salience induction group, while no difference was found for the participants in the US. That is, when reminded about their national values, Lithuanian participants downgraded the importance of the global values, while this did not appear to impact American participants. This could mean that whether national and global orientation are mutually exclusive or independent constructs depends on the culture. Lithuanians, being from a small country with a history of expansive neighbors and occupations, may feel less secure about their culture; thus, global values may come as a threat when reminded about their nationality (Putinaitė, 2014), while in general, they may be positive about global values (e.g., Lithuania is comparable to the European civilization with varied forms of nations and languages). The United States, on the other hand, having a culturally diverse population for a longer period of time, may not be as threatened by globalization.

In terms of the creativity ratings, Lithuanian participants were more creative than American participants, regardless of the induction condition. There might be several potential reasons why Lithuanians are more creative than Americans. Differences in creative products may be due, in part, to cultural differences. Lubart (1999) suggests that cultures differ in their environments, which can facilitate (or hinder) creative expressions and processes. Lithuanians may live in an environment that is more conducive to creative expression in schools, for example, as indicated by their considerably greater investment of time and monetary resources on art education, particularly in the area of fine arts (EACEA P9 Eurydice, 2009; Petrulyte, 2011). Having taken multiple art classes throughout their school career might have given Lithuanian participants an advantage on a creative drawing task. Conversely, the current state of the

educational system in the United States, with a focus on standardized testing rather than on the arts, may stifle the production of creative drawings.

Overall, participants in both national and global salience condition did better than controls. This finding was further explained by a higher order country by condition interaction. Participants in the United States were more creative in the global salience induction condition, while participants in Lithuania did better in the national salience induction condition. These findings can be explained by a differential interpretation of the primes in the two countries.

Research showed that national identity can both hinder and promote creativity depending on how it is conceptualized (Clerkin, 2013). For example, love for one's country and culture, also called "constructive patriotism" (Spry & Hornsey, 2007) and "national attachment," has been shown to promote creativity. Other studies (Hornsey, 2006; Janis, 1982; Rothi, Lyons, & Chryssochoou, 2005; Spry & Hornsey, 2007) also found that "constructive patriotism" was related to information gathering and suspended judgement, qualities that had been also shown to relate to creativity (Steiner, 1988). On the other hand, the glorification of one's culture was found to be negatively related to creativity (Clerkin, 2013). Glorification was also shown to relate negatively to motivation for novelty (Roccas, Schwartz, & Amit, 2010). Novelty seeking and openness to new experiences has been linked to creativity in numerous studies (for review, see Feist, 2010). It is conceivable that the same priming stimuli for our induction conditions primed different concepts for Lithuanians and Americans. The social priming paradigm may explain this phenomenon through a different chronically accessible cultural mindset available for use in different cultures (Oyserman, 2016). In our case, the reasons for different interpretations of the same prime might have been different historical and cultural associations. Lithuania, a country that was once part of the former Soviet Union, may have a citizenry more attuned to their national identity, as their independence was more recently achieved (i.e., in the past few decades rather than the past few centuries, like the United States). Thus, for Lithuanians, the national prime might have primed love and pride for their country, while for Americans, the same prime was associated with blunt nationalism (Clerkin, 2013).

Likewise, for Americans, the global prime was positively associated with the world community. Lithuania, on the other hand, is a small country of 2.8 million people ("Lithuania," 2017), with population that has been steadily declining in the recent decades. Thus, in contrast, the global prime might have evoked negative thoughts and feeling about the insecurity of Lithuanian national values for Lithuanians. As a result of different interpretation of the prime, Lithuanian participants in the global prime condition might have experienced negative emotions when reminded about the recent occupation. Alternatively, the national prime for Americans might have primed the thoughts of the recent nationalistic tendencies, such as wars in the Middle East, consequently evoking negative emotions. Previous research associated negative emotions with lower creativity on divergent thinking tasks, while positive emotions promoted creativity on these tasks (see

meta-analyses by Baas, De Dreu, & Nijstad, 2008 and Davis, 2009).

While this research has led to novel findings about how the relationship between global or national orientation is dependent on the interpretation of the global or national prime, it is not without limitations. First of all, data from other, non-Western countries in the world could provide firmer ground to draw more conclusive interpretations of the relationship. Second, measures of emotional or implicit interpretation of the primes would add more convincing support to the idea that people in the two countries interpreted the same prime differently. Future research would benefit from including these measures as well as collecting data in other, non-Western countries.

In conclusion, this research provided a novel perspective about the relationship between global/national orientation and creativity. With global challenges, like climate change and war, understanding the factors that promote creative thinking among people in different cultures is important in the hopes that we can all work together to tackle these challenges. Different cultures may assign different meaning to such concepts as global culture and nationalism. Understanding these differences may help us to unite our fractured world into a truly global community.

REFERENCES

Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview.

Ariely, G. (2017). Global identification, xenophobia and globalization: A cross-national exploration. *International Journal of Psychology, 52 (S1)*, 87–96. doi:10.1002/ijop.12364.

Aviram, A., & Milgram, R. M. (1977). Dogmatism, locus of control and creativity in children educated in the Soviet Union, the United States, and Israel. *Psychological Reports, 40 (1)*, 27–34.

Baas, M., De Dreu, C. K., & Nijstad, B. A. (2008). A meta-analysis of 25 years of mood – creativity research: Hedonic tone, activation, or regulatory focus? *Psychological Bulletin, 134*, 779–806.

Banks, J. A. (2004). Teaching for social justice, diversity, and citizenship in a global world. *The Educational Forum, 68,* 289–298.

Chen, C., Kasof, J., Himsel, A. J., Greenberger, E., Dong, Q., & Xue, G. (2002). Creativity in drawings of geometric shapes: A cross-cultural examination with the consensual assessment technique. *Journal of Cross-Cultural Psychology, 33,* 171–187. doi:10.1177/0022022102033002004.

Clerkin, C. E. (2013*). Creative we stand: Exploring the links between American national identity, multicultural exposure and creativity* (Doctoral dissertation). Retrieved from http://hdl.handle.net/2027.42/99846. (2013-09-24T16:01:49Z).

Crisp, R. J., & Turner, R. N. (2011). Cognitive adaptation to the experience of social and cultural diversity, *Psychological Bulletin, 137*, 242–266.

CWUR World University Rankings 2018/19. (2018, November 5). Retrieved from https://cwur.org.

Davis, M. A. (2009). Understanding the relationship between mood and creativity: A meta-analysis. *Organizational Behavior and Human Decision Processes, 108,* 25–38.

EACEA P9 Eurydice: Education, Audiovisual and Culture Executive Agency. (2009). Arts and cultural education at school in Europe. doi:10.2797/28436.

Esses, V. M., Dovidio, J. F., Semenya, A. H., & Jackson, L. M. (2005). Attitudes toward Immigrants and Immigration: The Role of National and International Identity. In D. Abrams, M. A. Hogg, J. M. Marques (Eds.), *The Social Psychology of Inclusion and Exclusion* (pp. 317–337). New York, NY, US: Psychology Press.

Esses, V. M., Wagner, U., Wolf, C., Preiser, M., & Wilbur, C. J. (2006). Perceptions of national identity and attitudes toward immigrants and immigration in Canada and Germany. *International Journal of Intercultural Relations, 30,* 653–669. doi:10.1016/j.ijintrel.2006.07.002.

Fee, A., Gray, S. J., & Lu, S. (2013). Developing cognitive complexity from the expatriate experience:

Evidence from a longitudinal field study. *International Journal of Cross Cultural Management, 13,* 299–318. doi:10.1177/1470595813484310.

Feist, G. J. (2010). The Function of Personality in Creativity: The Nature and Nurture of the Creative Personality. In J. C. Kaufman, R. J. Sternberg (Eds.), *The Cambridge Handbook of Creativity* (pp. 113–130). New York, NY: Cambridge University Press. doi:10.1017/CBO9780511763205.009.

Gaither, S. E., Remedios, J. D., Sanchez, D. T., & Sommers, S. R. (2015). Thinking outside the box: Multiple identity mind-sets affect creative problem solving. *Social Psychological and Personality Science, 6*, 596–603.

Glăveanu, V. P. (2011). Creativity as cultural participation. *Journal for the Theory of Social Behaviour, 41 (1),* 48–67. doi:10.1111/j.1468-5914.2010.00445.x.

Hornsey, M. J. (2006). Ingroup Critics and Their Influence on Groups. In T. Postmes, J. Jetten (Eds.), *Individuality and the Group: Advances in Social Identity* (pp. 74–91). London, UK: Sage.

Hunter, S. T., Bedell-Avers, K. E., Hunsicker, C. M., Mumford, M. D., & Ligon, G. S. (2008). Applying multiple knowledge structures in creative thought: Effects on idea generation and problem-solving. *Creativity Research Journal, 20*, 137–154. doi:10.1080/10400410802088779.

Inquisit 3 [Computer software]. (2011). Retrieved from http://www.millisecond.com.

Janis, I. L. (1982). *Groupthink: Psychological Studies of Policy Decisions and Fiascoes.* Boston, MA: Houghton Mifflin.

Jaquish, G. A., & Ripple, R. E. (1985). A life-span developmental cross-cultural study of divergent thinking abilities. *The International Journal of Aging and Human Development, 20 (1)*, 1–11.

Kharkhurin, A. V. (2011). Conceptual freedom of the globalized mind: Multicultural experiences enhance human cognition through the expansion of conceptual categories. *Journal of Consciousness Studies, 18 (3–4)*, 66–83.

Kharkhurin, A. V., & Motalleebi, S. S. (2008). The impact of culture on the creative potential of American, Russian, and Iranian college students. *Creativity Research Journal, 20*, 404–411. doi:10.1080/10400410802391835.

Kotler, P. (1986). Global standardization-Courting danger. *Journal of Consumer Marketing, 3 (2)*, 13–15.

Leung, A. K.-y., & Chiu, C.-y. (2010). Multicultural experience, idea receptiveness, and creativity. *Journal of Cross-Cultural Psychology, 41 (5–6),* 723–741.

Leung, A. K., Maddux, W. W., Galinsky, A. D., & Chiu, C. (2008). Multicultural experience enhances creativity: The when and how. *American Psychologist, 63*, 169–181.

Levendusky, M. S. (2018). Americans, not partisans: Can priming American national identity reduce affective polarization? *The Journal of Politics, 80*, 59–70.

Levitt, T. (1983). The globalization of markets. *Harvard Business Review, 61*, 92–102.

"Lithuania." *The World Factbook*. Central Intelligence Agency, 2017. Web. 8 Aug 2017.

Lubart, T. I. (1999). Creativity Across Cultures. In R. J. Sternberg (Ed.), *Handbook of Creativity* (pp. 339–350). New York, NY: Cambridge University Press.

Lubart, T. I. (2010). Cross-cultural Perspectives on Creativity. In J. C. Kaufman, R. J. Sternberg, J. C. Kaufman, R. J. Sternberg (Eds.), *The Cambridge Handbook of Creativity* (pp. 265–278). New York, NY, US: Cambridge University Press. doi:10.1017/CBO9780511763205.017.

Maddux, W. W., Adam, H., & Galinsky, A. D. (2010). When in Rome ... Learn why the Romans do what they do: How multicultural learning experiences facilitate creativity. *Personality and Social Psychology Bulletin*, *36*, 731–741.

Maddux, W. W., Bivolaru, E., Hafenbrack, A. C., Tadmor, C. T., & Galinsky, A. D. (2013). Expanding opportunities by opening your mind: Multicultural engagement predicts job market success through longitudinal increases in integrative complexity, *Social Psychological and Personality Science, 5,* 608–615.

Maxwell, S. E., & Delaney, H. D. (2004). *Designing experiments and analyzing data: A model comparison perspective*. Mahwah, NJ: Lawrence Erlbaum Associates.

Mummendey, A., Klink, A., & Brown, R. (2001). Nationalism and patriotism: National identification and out-group rejection. *British Journal of Social Psychology, 40*, 159–172.

Nijstad, B. A., De Dreu, C. K. W. , Rietzschel, E. F., & Baas, M. (2010). The dual pathway to creativity model: Creative ideation as a function of flexibility and persistence, *European Review of Social Psychology, 21 (1),* 34–77.

OECD (2013). Coping with Emigration in Baltic and East European countries. *OECD Publish-*

ing, Paris. Retrieved from http://dx.doi.org/10.1787/9789264204928-en.

Oyserman, D. (2016). What does a priming perspective reveal about culture: Culture-as-situated cognition. *Current Opinion in Psychology, 12*, 94–99. doi:10.1016/j.copsyc.2016.10.002.

Pavlenko, A. (1999). New approaches to concepts in bilingual memory. *Bilingualism: Language and Cognition, 2 (3)*, 209–230. doi:10.1017/S1366728999000322.

Petrulyte A. (2011). Bendrojo lavinimo mokyklų, kuriose sustiprintas meninis ugdymas, mokinių kūrybiškumas ir mokymosi sėkmė. *Educational Psychology, 22*, 48–54.

Piaget J. (1954). *The origins of intelligence in children.* New York: Basic Books.

Psychology Software Tools, Inc. [E-Prime 2.0]. (2012). Retrieved from http://www.pstnet.com.

Putinaitė N. (2014). *Trys lietuviškosios Europos: tauta, Europa, ES dabartinėje tapatybėje*. Vilnius: Lietuvių katalikų mokslo akademija, Naujasis Židinys-Aidai.

Reysen, S., & Katzarska-Miller, I. (2013). A model of global citizenship: Antecedents and outcomes. *International Journal of Psychology, 48 (5)*, 858–870. doi:10.1080/00207594.2012.701749.

Roccas, S., Schwartz, S. H., & Amit, A. (2010). Personal value priorities and national identification. *Political Psychology*, *31 (3)*, 393–419.

Rothi, D. M., Lyons, R., & Chryssochoou, X. (2005). National attachment and patriotism in a European nation: A British study. *Political Psychology, 26*, 135–155.

Simonton, D. K. (1999). Creativity from a Historiometric Perspective. In R. J. Sternberg, R. J. Sternberg (Eds.), *Handbook of Creativity* (pp. 116–133). New York, NY, US: Cambridge University Press.

Smith, G. J., & Carlsson, I. (2006). Creativity under the Northern Lights: Perspectives from Scandinavia. In J. C. Kaufman, R. J. Sternberg, J. C. Kaufman, R. J. Sternberg (Eds.), *The International Handbook of Creativity* (pp. 202–234). New York, NY, US: Cambridge University Press. doi:10.1017/CBO9780511818240.008.

Spry, C., & Hornsey, M. (2007). The influence of blind and constructive patriotism on attitudes toward multiculturalism and immigration. *Australian Journal of Psychology, 59*, 151–158.

Steiner, G. (1988). The Creative Organization. In R. Katz, R. Katz (Eds.), *Managing Professionals in Innovative Organizations: A Collection of Readings* (pp. 201–214). New York, NY, US: Ballinger Publishing Co/Harper & Row Publishers.

Sternberg, R. J., & Lubart, T. I. (1995). *Defying the crowd: Cultivating creativity in a culture of conformity.* New York: Free Press.

Tidikis, V., & Dunbar, N. D. (2017). Openness to experience and creativity: When does global citizenship matter? *International Journal of Psychology*, doi:10.1002/ijop.12463.

Torrance, E. (1995). *Why Fly?* [e-book]. Westport, CT, US: Ablex Publishing; 1995. Available from: PsycINFO, Ipswich, MA. Accessed January 5, 2017.

Türken, S., & Rudmin, F. W. (2013). On psychological effects of globalization: Development of a scale of global identity. *Psychology & Society, 5 (2)*, 63–89.

Turner, S. I. (2014). Attitudes toward diversity and reward allocations: Examining the role of global and national identity. Dissertation Abstracts International, 74.

U.S. Census Bureau (2000). Summary statistics. Retrieved from https://www.census.gov/census2000/states/us.html.

Vartanian, O., Martindale, C., & Matthews, J. (2009). Divergent thinking ability is related to faster relatedness judgments. *Psychology of Aesthetics, Creativity, and the Arts, 3*, 99–103. doi:10.1037/a0013106.

Wang, B., & Greenwood, K. M. (2013). Chinese students' perceptions of their creativity and their perceptions of Western students' creativity. *An International Journal of Experimental Educational Psychology, 33 (5)*, 628–643.

Yavas, U., Verhage, B. J., & Green, R. T. (1992). Global consumer segmentation versus local market orientation empirical findings. *Management International Review (MIR), 32*, 263–272.

KŪRYBIŠKUMO IR PASAULINIO / NACIONALINIO IDENTITETO RYŠIAI: LYGINAMASIS LIETUVOS IR JUNGTINIŲ AMERIKOS VALSTIJŲ STUDENTŲ TYRIMAS

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Santrauka

Eksperimento dalyviai iš Jungtinių Amerikos Valstijų ir Lietuvos buvo paskatinti identifikuotis su nacionalinės arba pasaulinės mąstysenos vertybėmis. Paskui buvo nagrinėjami nacionalinės ir pasaulinės mąstysenos ryšiai su kūrybiškumu. 285 dalyviai iš Jungtinių Amerikos Valstijų ir 95 iš Lietuvos buvo atsitiktiniu būdu priskirti vienai iš trijų eksperimentinių grupių: nacionalinio identiteto, pasaulinio identiteto ir kontrolinei. Tada tyrimo dalyviai atliko kūrybiškumo užduotis. Gauti rezultatai parodė, kad visų trijų grupių dalyviai iš Lietuvos labiau identifikavosi su nacionaline mąstysena nei dalyviai iš Jungtinių Amerikos Valstijų. Dalyviai iš Lietuvos, palyginti su dalyviais iš Jungtinių Amerikos Valstijų, gavo didesnius kūrybiškumo įverčius, kad ir kokia būtų buvusi taikyta manipuliacija. Buvo aptikta tyrimo dalyvių šalies ir identifikacijos sąveika: dalyviai iš Jungtinių Amerikos Valstijų buvo kūrybiškesni, kai buvo paskatinti identifikuotis su pasaulinės mąstysenos vertybėmis, o dalyviai iš Lietuvos buvo kūrybiškesni, kai buvo paskatinti identifikuotis su nacionalinės mąstysenos vertybėmis.

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