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Sociotropic threat and Tolerance on Minorities: The Mediating Effects of Subjective Well-being, Trust in Government and Society

Moonsoo Lee*

Public and Nonprofit Management, The University of Texas at Dallas, U.S.
mxl210001@utdallas.edu, 800 W Campbell Rd, Richardson, TX 75080, US

Abstract: This study aims to fill the theoretical gap of why an anxiety about indefinite one(s) causes intolerance on minorities. This study hypothesizes the mediating role of subjective well-being, trust in government and society on the relationship between sociotropic threat and tolerance on minorities. This study confirms sociotropic threat reduces tolerance on minorities through the mediation of the three mediating variables, and the direct effects of sociotropic threat are insignificant whereas the indirect effects are significant. Sociotropic threat cannot affect tolerance on minorities without the mediating variables. It identifies the theoretical path where safety issues can affect tolerance on minorities.

Keywords: Sociotropic threat, Subjective well-being, Trust in government, Trust in society, Tolerance on minorities

1. Introduction

The concept of tolerance is multi-dimensional (Erisen and Kentmen-Cin, 2017; Gibson, 2006; Lee, 2014; Walzer, 1997). The minimal definition of tolerance refers to “a resigned acceptance of or a passive indifference toward cultural and political differences” (Lee, 2014: 712). As a social tolerance, this definition is associated with a willingness to accept the disliked or non-conformist groups and their culture in everyday life (Lee, 2014; Walzer, 1997). It is an example of social tolerance that Western people accept Muslims’ wearing of hijab in public places. Beyond accepting the objects of tolerance in everyday life, political tolerance refers to “a willingness to “put up with” those things that one rejects” (Sullivan, Piereson, and Marcus, 1979: 784). This definition of tolerance implies a willingness to broaden the rights of citizenship to everybody of the polity, which allows the expression of ideas or interests one objects to (Gibson and Bingham, 1982; Sullivan, Piereson, and Marcus, 1979). As a requisite of democracy, it also refers to a willingness to enable one’s political opponents to participate in competition for political power as well as forbearance to endure things one opposes (Gibson, 1998). It is the base of pluralism and cultural diversity as a principle to protect freedom of idea and expression (Gibson and Bingham, 1982; Habermas, 1998; 2001; Thomassen, 2006). Social or political, it is impossible to coordinate different idea and culture without tolerance on those who are disliked or recognized as non-conformist people.

The most investigated research question in tolerance literature is about what determine the degree of individual’s tolerance on outgroups (Gibson, 2007). Studies of determinants of tolerance mainly focus on psychological variables such as personality traits and emotion. Social and political determinants have also been discussed as important, but such determinants eventually affect the degree of tolerance through psychological variables. So, the author focuses on the psychological determinants in this section.

Psychological studies of tolerance suggest self-esteem is linked to tolerance (Sullivan et al., 1981). Ones with low self-esteem have little confidence about themselves, so they think they will have difficulty on overcoming threats (Cohen, 1959). The negative self-picture about threats makes ones avoid those that are different from one's worldview, so they tend to reject social norms such as tolerance towards outgroups (Sniderman, 1975). Empirical findings usually report the positive association between self-esteem and tolerance (McClosky and Brill, 1983; Sniderman, 1975; Sullivan, Piereson, and Marcus, 1982). However, Eisenstein and Clark (2014) proposed the possibility that the relationship between self-esteem and tolerance may not be straightforward. They made hypothesis that self-esteem positively affects tolerance based on the previous studies, but their empirical test demonstrated that self-esteem negatively affects tolerance, even if it is not significant.

There have also existed scholarly attentions on authoritarian personality as a psychological determinant of tolerance. The literature argues that authoritarian personality results in little (or in-) tolerance on minorities (Adorno et al., 1950; Feldman and Stenner, 1997; Gibson, 1987; Sullivan et al., 1981). Authoritarian individuals have strong respect toward authority and ingroup norms, so they fail to endure those who do not conform to the mainstream values (Duckitt, 1989; Feldman and Stenner, 1997). These people have strong negative prejudices about outgroups, who are different from and have different norms with themselves (Duckitt, 2005). On the other hand, those who are less authoritarian have higher tolerance on minorities. A survey showed that activists for gays, one of minorities intolerant by many societies and individuals, are substantially less authoritarian (Sullivan, Piereson, and Marcus, 1982).

Sullivan, Piereson, and Marcus (1982) tested the effects of various personality traits on tolerance, and they discovered there is the strongest relationship between psychological insecurity and tolerance. Psychologically insecure people feel more threat compared with psychologically secure ones. This discussion is related to the discussion of the relationship between social-economic status and tolerance. Sullivan et al. (1981) contended high income earners are more tolerant on outgroups. According to them, high income earners have confidence in overcoming threatening idea and behaviors, so they can accept those who have different norms and culture.

Through literature review of determinants of tolerance, we can discover that threat perception is the key variable in explaining the mechanism that psychological features affect the degree of tolerance. It is because they feel threatened that low self-esteemed, authoritarian, or psychological insecure people are less tolerant on outgroups, in particular minorities (Duckitt and Fisher, 2003; Sullivan, Piereson, and Marcus, 1982). As well, studies of hatred pinpoint that threat perception results in hatred (Dozier, 2002; Glaeser, 2005; Navarro, Marchena, and Menacho, 2013). Hatred comes from an emotional response to a belief that a group or person is risky and deviates from social norms (Glaeser, 2005). Hatred is a key determinant of intolerance (Halperin, Canetti-Nisim, and Hirsch-Hoefler, 2009). Haters deny any possibility of improving relations with the objects of hatred (Halperin, Canetti-Nisim, and Hirsch-Hoefler, 2009). In Oxford Handbook of political behavior, Gibson (2007) also stated that threat perception is discussed as one of the strongest determinants of intolerance in tolerance literature. When feeling threatened, people become defensive and close-minded (Haas and Cunningham, 2014). Defensive and close-minded people cannot tolerate those who have different culture and traits. As Gibson pointed out, a number of empirical studies have confirmed the negative relationship between perceived threat from a specific group and tolerance on the group (Gibson, 1998; 2006; Gibson and Gouws, 2003; Marcus et al., 1995; Sullivan, Piereson, and Marcus, 1982; Wang and Chang, 2006).

Some scholars subdivide the concept of threat perception. Threat perception is usually divided into sociotropic and personal threat depending on whose safety an individual is anxious about (Davis and Silver, 2004; Huddy et al., 2002). Sociotropic threat refers to "a generalized anxiety and sense of threat to society, the country as a whole, or the region where one lives", whereas personal threat means "a sense of threat to oneself or one's

family" (Davis and Silver, 2004: 34). It is also possible to subdivide the concept of threat perception depending on whom an individual feel threatened from. In this view, we can divide into the concept of threat perception as 'threat perception caused by a certain group(s) or person' and 'perceived threat of indefinite one'. The latter is a similar concept with sociotropic threat in that the one who makes an individual worried about is not defined as a specific object. So, this study considers both sociotropic threat and 'perceived threat of indefinite one' as the same. Also, 'threat perception caused by a certain group(s) or person' is labeled as "particularized threat".

Previous studies subdivided the concept of threat perception, but it is difficult to find a theoretical discussion that explains how each type of threat perception is associated with tolerance. Previous studies just states that every type of threat perception is negatively associated with tolerance on minorities because threat perception reduces the degree of tolerance. This is tautological and raises a concern about why they subdivided the concept of threat perception. They should have answered to such question like "what is the difference between the mechanisms that each type of threat perception is associated with tolerance?". It is easy to understand why particularized threat is negatively associated with tolerance on minorities. It is natural that one cannot tolerate those who cause threat perception. However, it is a little unnatural that threat perception about indefinite one is connected to intolerance about a definite group(s). There is a gap in discussing why the anxiety about safety of overall society or local community one lives in associated with hatred of a specific group(s).

About the theoretical gap, this study suggests the mediating role of subjective well-being (SWB), trust in government (TIG), and trust in society (TIS) on the negative relationship between sociotropic threat (ST) and tolerance on minorities (TOM). This study hypothesizes that sociotropic threat negatively affects tolerance on minorities through the mediation of subjective well-being, trust in government and society based on the following mechanism.

First, ST is negatively associated with TOM through the mediation of SWB. Subjective well-being refers to a set of positive emotion. Life satisfaction, happiness, and feeling worthwhile are the construct of SWB (Chebotareva, 2015). It is easy to understand the negative relationship between ST and SWB. Needs for safety is a basic desire for human-being, so threat perception makes one feel unsatisfied, unhappy, and not worthwhile (Maslow, 1943). Nobody feels positive emotion when threatened. Safety is an important indicator on the measurement of the quality of life. On the one hand, people become generous and further try to help for others when feeling positive emotions (Bekkers, 2004; Thoits and Hewitt, 2001). Positive emotions make one full of positive psychological energy. Positive psychological energy produces surplus cognitive resources, so one is more generous to others and try to understand those who are different from oneself. Chebotareva (2015) tried to identify the relationship between SWB and tolerance. She found there exist significant associations between some constructs of SWB and tolerance through correlation analysis. That is, ST is negatively associated with SWB while SWB is positively associated with TOM. In short, the higher sociotropic threat one perceives, the lower one's subjective well-being becomes, and finally the lower tolerance on minorities is.

Second, ST is negatively associated with TOM through the mediation of TIG. Safety is an important value government pursues. People depend on government when they suffer from disaster, accident, and crime. So, one's perception of safety or threat is an important determinant of TIG (Jeong and Han, 2020; Lee and Min, 2015). The evaluation of government cannot be good when one threatens. In fact, many countries have experienced political power shifts because of governmental failure of responding to emergencies. In U. S. Donald Trump lost his presidency due to bad evaluations in the Covid-19 pandemic and The Democratic Party of Japan must return its ruling power to Liberal Democratic Party because it failed to soothe the public sentiment after Great East Japan Earthquake. In contrast, Barak Obama won his second presidential election in 2012 owing to his skillful response to hurricane Sandy occurred during the electoral campaign period. The ruling

party of South Korea won the national assembly election in 2020 because the government was evaluated to be good to the Covid-19 pandemic during the electoral campaign period. On the one hand, government plays an important role in raising the degree of tolerance as well as safety level (Duncan, 2003; Ryu and Lee, 2020; Silver, 2010). Government can improve the degree of tolerance on minorities by a set of socio-economic policies (Ryu and Lee, 2020). Policies for improving TOM cannot be effective without individuals' trust in government (Ryu and Lee, 2020). In their empirical study of social inclusion in South Korea, synonym for tolerance on minorities, Ryu and Lee (2020) found trust in central and local government positively affects the degree of social inclusion (tolerance) on minorities. Following their discussion and test result, this study also expects the positive relationship between TIG and TOM. In summary, the higher sociotropic threat one perceives, the lower trust in government becomes, and finally the lower tolerance on minorities is.

Third, ST is negatively associated with TOM through the mediation of TIS. It is not easy to trust in other people in threatening surroundings. An individual is wary of others when they are among unfamiliar people, or when they feel unknown danger. People behave selfishly in risky situations, and the selfishness lowers interpersonal trust. Historically, there have been tragic massacres on outgroup or minorities in the period of war or disaster owing to unreasonable fear of the massacre targets. By this mechanism, socio-tropic threat is expected to lower trust in society. On the one hand, TIS has been regarded as a positive determinant of TOM by previous literature (Bobo and Licari, 1989; Gibson, 1987; Lee, 2014; Ryu and Lee, 2020; Sullivan, Piereson, and Marcus, 1982). One with more trust in others tend to be less anxious about threat posed by outgroups (Eisenstein & Clark, 2014). They believe in either that the outgroups will become less aggressive or that there are more reasonable people and those reasonable people can enough obstruct anti-social behavior of minorities (Eisenstein & Clark, 2014; Ka, Kim, and Lim, 2014; Sullivan and Transue, 1999). In conclusion, the higher sociotropic threat is, the lower trust in society becomes, and finally the lower tolerance on minorities is.

2. Research Design

2.1. Data

This study employs the 2020 Korea Social Integration Survey (KSIS). This survey was designed and conducted by the Korea Institute of Public Administration (KIPA).¹ KIPA have published a report of social integration in South Korea based on the KSIS since 2011. Many Korean social scientists have used this survey to analyze social phenomena and test social science theories. The number of respondents of the 2020 KSIS is 8,336. The respondents are aged more than 19 and the survey was conducted from Sep. 1 to Oct. 31, 2020.²

2.2. Dependent variable: Tolerance on minorities (TOM)

The KSIS measures the degree of tolerance on minorities (TOM) as a question "To what extent in a relationship can you accept the following people: the disabled, children raised by grandparents or a single parent, foreigners or international laborers, criminals, homosexuals, and North Korean defectors". This question is measured by a 5-point Likert scale from 1 to 5, where 1 means no acceptance, 2 means acceptance as a neighborhood, 3 means acceptance as a colleague, 4 means acceptance as an intimate friend, 5 means acceptance as a spouse. This study excepts the sub-question about the degree of accepting criminals in a relationship because criminals cannot be the object of tolerance, and joints the other sub-questions as factor analysis. The result of factor analysis on tolerance questions and Cronbach's alpha value are presented in the following Table 1.

Table 1. Tolerance on minorities: Factor analysis and Cronbach's α

<i>Variables</i>	<i>Factor loads</i>	<i>Ratio of variance explanation (%)</i>
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Tolerance on minorities	Cronbach's $\alpha=0.803$	56.458
<i>The disabled</i>	0.779	
<i>Children raised by grandparents or a single parent</i>	0.795	
<i>Foreigner or international laborers</i>	0.834	
<i>Homosexuals</i>	0.549	
<i>North Korean defectors</i>	0.767	

The factor analysis extracts only one factor about TOM. As Table 1 shows, every sub-question explains the factor at higher degree than 0.5 in factor loading, enough to joint into a unique measurement. Cronbach's alpha value is 0.803, higher than 0.7 used as a criterion of reliability. So, the validity and reliability of jointing the sub-questions for TOM is regarded as high.

The measurement of TOM used in the KSIS raises a concern that it just measures the degree of social tolerance. Literature of the impacts of threat on tolerance are focused on political tolerance, and the two types of tolerance are not always together despite a positive correlation between them (Erisen and Kentmen-Cin, 2017; Lee, 2014). However, intolerance in everyday life (in other words, social intolerance) also results from threat perception (Bilodeau et al., 2018; Sniderman and Hagendoorn, 2007). Threat perception causes hatred or hostility, which increases social intolerance (Dangubić, Verkuyten, and Stark, 2020; Erisen and Kentmen-Cin, 2017). In addition, social conflicts around minorities in South Korea are more related with social intolerance than political one. Anti-discrimination law proposals submitted to National Assembly focus on discrimination in everyday life more than one related with political rights. Thus, it is meaningful to pay attention to social tolerance.

2.3. Independent variable: Sociotropic threat (ST)

As discussed, sociotropic threat indicates a generalized anxiety or threat perception of overall society or the region one lives in. The KSIS measures individuals' safety perception through questions about to what extent the respondents feel safe about 'overall society', 'city (Si, Gun, Gu)', and 'town' they live in by an 11-point Likert scale ranging from 0 (Not Safe At All) to 10 (Perfectly Safe). This study codes the questions of safety perception reversely (0: Perfectly Safe, 10: Not Safe At All = Perfectly Threatened) and joints the reverse-coded sub-questions as factor analysis. The factor analysis extracts only one factor about ST. As the following Table 2 shows, every sub-question makes accounts for the factor at higher degree than 0.8 in factor loading, enough to joint into a unique measurement. Cronbach's alpha value is 0.889, higher than 0.7, the criterion of reliability. So, the validity and reliability of jointing the sub-questions for ST is high.

Table 2. Sociotropic threat: Factor analysis and Cronbach's α

<i>Variables</i>	<i>Factor loads</i>	<i>Ratio of variance explanation (%)</i>
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Sociotropic threat	Cronbach's $\alpha=0.889$	82.396
<i>Threat perception of overall society</i>	0.837	
<i>Threat perception of city</i>	0.955	
<i>Threat perception of town</i>	0.927	

2.4. Mediating variables: Subjective well-being (SWB), Trust in government and society (TIG, TIS)

To measure subjective well-being (SWB), the KSIS asks the respondents such questions like "How happy did you feel yesterday?", "Overall, how satisfied are you with your life nowadays?", and "Overall, to what extent do you feel that the things you do in your life are worthwhile?" by an 11-point Likert scale from 0 (Not Happy/Satisfied/Worthwhile At All) to 10 (Very Happy/Satisfied/Worthwhile). These questions are also jointed as a factor analysis. Each items' factor loadings are all higher than 0.8 (Cronbach's alpha = 0.838, see Table 3).

This study follows the measurement of previous studies using the KSIS in order to measure trust variables. Trust in government (TIG) is measured by jointing the questions asking trust in the following institutions by a 4-point Likert scale from 1 (Do Not Trust At All) to 4 (Completely Trust): central government, National Assembly, court(s), prosecution, police, and local government. The questions of TIG are also jointed as a factor analysis. As Table 3 presents, factor loadings of each sub-questions are all higher than 0.6, enough to joint into a unique measurement and Cronbach's alpha value is 0.843. Unlike the above variables, trust in society (TIS) is measured by a unique question about a generalized trust in unspecified people in society. The scale to measure TIS is a 4-point Likert scale from 1 (Do Not Trust At All) to 4 (Completely Trust).

Table 3. Subjective well-being and Trust in government: Factor analysis and Cronbach's α

<i>Variables</i>	<i>Factor loads</i>	<i>Ratio of variance explanation (%)</i>
Subjective well-being	Cronbach's $\alpha=0.838$	75.700
<i>Yesterday happiness</i>	0.861	
<i>Life satisfaction</i>	0.913	

<i>Worthwhileness</i>	0.834	
Trust in government	Cronbach's $\alpha=0.843$	56.216
<i>Central government</i>	0.691	
<i>National Assembly</i>	0.703	
<i>Court</i>	0.819	
<i>Prosecution</i>	0.784	
<i>Police</i>	0.773	
<i>Local government</i>	0.721	

2.5. Control variables

Since Stouffer (1955) began an empirical test, many scholars have identified the determinants of social and political tolerance. Previous studies commonly tested and confirmed the effects of demographic variables such as age, gender, education level, and household income on tolerance (Côté and Erickson, 2009; Gibson, 2007; Ka, Kim, and Lee, 2014; Lee, 2014; Ryu and Lee, 2020; Stouffer, 1955; Sullivan et al., 1981). Age is known as a negative determinant of tolerance because the young are more likely to be open-minded and less likely to feel threatened from new or different culture (Côté and Erickson, 2009; Ka, Kim, and Lim, 2014; Stouffer, 1955; Sullivan et al., 1981). The discussion of gender effects on tolerance is mixed. Some argue women are more open-minded towards outgroups, so women are more tolerant on minorities than men (Ka, Kim, and Lim, 2014; Sotelo; 1999). For example, women are more likely to accept homosexuals as their everyday lives (Herek and Glunt, 1993; LaMar and Kite, 1998). However, some empirical studies reported women are less tolerant than men in terms of political tolerance (Golebiowska, 1999; Stouffer, 1955; Todosijević and Enyedi, 2008). In their empirical study using the KSIS data (2016 – 2018), Ryu and Lee (2020) reported that among their seven models only one model showed women are more tolerant on minorities while the other six models showed women are less tolerant than men. Golebiowska (1999) explained that women are less tolerant than men because women are more likely to feel threatened from outgroups, and to be inclined towards existing norms and moral traditionalism. Following this logic, this study also expects women are less tolerant on minorities than men. Educational level and household income has been regarded as positive determinants of tolerance (Côté and Erickson, 2009; Ka, Kim, and Lim, 2014; Lee, 2014; Sullivan et al., 1981). Higher educated people are more exposed to democratic norms and trained to interact with those who have diverse characteristics. High income-earners are less likely to be insecure psychologically. Likewise, those who think their social status as high class are more tolerant (Lee, 2014; Sullivan et al., 1981). So, this study expects education level, household income, and social status perception (SSP) as positive determinants of tolerance on minorities.

Political ideology is also an important determinant of tolerance (Ka, Kim, and Lim, 2014; Sullivan et al., 1981). Whether one is progressive or conservative is influenced by one's openness to experience and outsiders (Fatke, 2017; Gerber et al., 2010). More opened one tends to support progressive parties, which seek to improve tolerance on minorities in the society. On the one hand, Ryu and Lee (2020) investigated whether and how national pride (NP) and sense of belonging to the local community (SBL) affect TOM. They hypothesized that NP and SBL affect TOM negatively based on the social identity theory. According to the social identity theory, an individual identifies oneself through a sense of belonging to one's community (e. g. race, nation, local community, etc.), and finally internalizes norms within oneself (Brewer, 1991; Hogg, 2000; Singh & Winkel, 2012). The process of internalization of norms strengthens negative prejudices towards outgroups (Allen

and Wilder, 1975; Ryu and Lee, 2020). The empirical findings of Ryu and Lee supported their hypothesis. Following their empirical analysis results, this study also expects the negative effects of national pride and sense of belonging to the local community on tolerance on minorities. In the KSIS, NP is measured by a question "I am proud of being a Korean citizen: 1 (Not At All) – 4 (Completely Proud)". SBL is measured by jointing questions "I have a sense of belonging to 'metropolitan area or province'/'city'/'town': 1 (Not At All) – 4 (Completely Proud)". The following Table 4 presents the factor loadings of each sub-questions of SBL and the Cronbach's alpha value (0.828). Table 5 summarizes the measurement of control variables.

Table 4. Sense of belonging to the local community: Factor analysis and Cronbach's α

<i>Variables</i>	<i>Factor loads</i>	<i>Ratio of variance explanation (%)</i>
Sense of belonging to the local community	Cronbach's $\alpha=0.828$	74.564
<i>Metropolitan area or province</i>	0.837	
<i>City</i>	0.900	
<i>Town</i>	0.852	

Table 5. The measurement of control variables

Name of variables	Measurement
Age	19-29: 0, 30's: 2, 40's: 3, 50's: 4, 60's: 5, over 69: 6
Gender	Male: 0, Female: 1
Education level	1 (~Elementary School), 2 (Middle School), 3 (High School), 4 (College~)
Household income (monthly)	1 (less than one million won) – 7 (over six million won)
Social status perception	0 (very low) – 10 (very high)
Political ideology	1 (very conservative) – 5 (very progressive)
National pride	1 (not at all) – 4 (completely)
Sense of belonging to the local community (Metropolitan area or province, city, town)	1 (not at all) – 4 (completely)

Source: 2020 Korea Social Integration Survey

2.6. Statistical analysis method

Baron and Kenny (1986) presented a hierarchical regression analysis model for testing mediating effects. This model separately estimates the coefficients of the independent variable on the mediating variable(s), of the mediating variable(s) on the dependent variable(s), and of the independent variable on the dependent variable. Sobel test suggested by Sobel (1982) has been used for testing whether the mediating effects are significant. However, recent statistical studies raise concerns of these models because they are based on unrealistic assumptions regarding sampling distribution of indirect effects, which mean the effects of the independent variable on the dependent variable mediated by the mediating effects (Briggs, 2006; Fritz and MacKinnon, 2007; Hayes, 2012; MacKinnon, Lockwood, and Williams, 2004; Williams and MacKinnon, 2008). Instead, they propose an alternative method developed by Preacher and Hayes (2004; 2008). The alternative method estimates the mediating effects by bootstrapping, which overcomes the limitations of methods developed by Baron and Kenny (1986), and Sobel (1982). So, the alternative method by bootstrapping is mostly used for testing the mediating effects and their significance. This study also tests the mediating effects of SWB, TIG, and TIS on the relationship between ST and TOM. The software package for this method and its principles are provided by Hayes (2012).

3. Analysis Results

3.1. Descriptive statistics

Table 6. Descriptive statistics (N=8,336)

<i>Variables</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Standard Deviation</i>
Tolerance on minorities				
<i>The disabled</i>	1	5	3.08	.889
<i>Children raised by grandparents or a single parent</i>	1	5	3.37	1.035
<i>Foreigner or international laborers</i>	1	5	2.71	.925
<i>Homosexuals</i>	1	5	1.66	.876
<i>North Korean defectors</i>	1	5	2.48	.969
Sociotropic Threat				
<i>Threat perception of overall society</i>	0	10	4.78	1.820
<i>Threat perception of city</i>	0	10	4.25	1.672
<i>Threat perception of town</i>	0	10	4.04	1.706
Subjective well-being				
<i>Daily happiness</i>	0	10	6.41	1.550
<i>Life satisfaction</i>	0	10	6.00	1.516
<i>Worthwhileness</i>	0	10	6.02	1.555

Trust in government				
<i>Central Government</i>	1	4	2.44	.687
<i>National Assembly</i>	1	4	1.93	.762
<i>Court</i>	1	4	2.33	.733
<i>Prosecution</i>	1	4	2.28	.733
<i>Police</i>	1	4	2.42	.713
<i>Local Government</i>	1	4	2.56	.687
Trust in society	1	4	2.50	.569
Age	1	6	3.47	1.710
Gender (Woman)*	0	1	.5045	.50001
Education level	1	4	3.19	.914
Household income	1	7	4.58	1.844
Social status perception	0	10	5.20	1.512
Political ideology (Progressive)	1	5	3	.847
National pride	1	4	3.07	.621
Sense of belonging to the local community				
<i>Metropolitan city or prov-</i>	1	4	2.89	.711
<i>ince</i>	1	4	2.85	.676
<i>City</i>	1	4	2.85	.693
<i>Town</i>				

*Dummy variable

The descriptive statistics are presented in the above Table 6. The average score of tolerance on homosexuals (1.66) are even less than tolerance scores of other minority groups (the disabled: 3.08. children raised by grandparents or a single parent: 3.37, foreigner or international laborers: 2.71, North Korean defectors: 2.48). This implies sexual identities are the most significant among anti-discrimination issues. It reflects the reality of national division of Korea that the second least tolerated group is North Korean defectors. It also reflects the increasing fear of refugees and Chosun-jok (Korean-Chinese migrants) that the third least tolerated group is foreigner or international laborers. People appear to feel safer about community closer to them (sociotropic threat – town: 4.04 < city:

4.25 < overall society: 4.78). All of the average scores of SWB indicators are higher than the median 5 (daily happiness: 6.41 > worthwhileness: 6.02 > life satisfaction: 6.00). On the other hand, almost every indicator of TIG is averagely lower than 2.5, the median. Trust in local government (2.56) is averagely a little higher than the median. Average scores of trust in executive branch agencies are usually higher than ones of other branch agencies (local government: 2.56 > central government: 2.44 > police: 2.42 > court: 2.33 > prosecution: 2.28 > National Assembly: 1.93). However, the average score of trust in prosecution is between judicial and legislative branches, and the lowest among executive branch agencies. This reflects that prosecution agency lost trust owing to unfair investigation and indictment, advantageous towards elites, in particular prosecutors themselves. The average scores of demographic variables are around the median because the KIPA selected the respondents from the 'Population and Housing Census' to build a balanced sample. The average scores of social status perception and political ideology are also around the median, while the average scores of NP (3.07 within a range from 1 to 4) and SBL (metropolitan area or province: 2.89, city: 2.85, town: 2.85) are some higher than the median. It reflects high sense of community among Koreans.

3.2. Regression analysis results

Table 7. Regression analysis results

	Model 1 (DV: SWB)		Model 2 (DV: TIG)		Model 3 (DV: TIS)		Model 4 (DV: TOM)		Model 5 (DV: TOM)	
	B	p	B	p	β	p	β	p	β	P
Sociotropic threat	-.19	.0000	-.09	.0000	-.02	.0034	-.01	.4089	-.02	.0312
Subjective well-being							.05	.0002		
Trust in government							.04	.0004		
Trust in society							.11	.0000		
Age	-.04	.0000	.01	.1482	.03	.0000	-.03	.0016	-.02	.0036
Gender (Woman)	.09	.0000	.09	.0000	.02	.1434	-.10	.0000	-.09	.0000
Education level	.05	.0003	-.08	.0000	-.00	.7925	-.02	.2371	-.02	.2126
Household income	.03	.0000	.02	.0029	.00	.2802	.01	.1247	.01	.0560
Social status perception	.24	.0000	.03	.0004	.03	.0000	.06	.0000	-.04	.0000
Political ideology (Progressive)	.05	.0001	.07	.0000	.06	.0000	.10	.0000	.11	.0000
National pride	.18	.0000	.11	.0000	.05	.0000	-.02	.4032	.00	.9081

Sense of belonging to the local community	.13	.0000	.11	.0000	.03	.0001	-.00	.9794	.01	.2779
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SWB: subjective well-being

TIG: trust in government

TIS: trust in society

TOM: tolerance on minorities

The author conducts regression analysis tests including the bootstrapping tests of mediating effects (the number of random samples: 5,000, confidence interval: 95% for bootstrapping). Model 1, 2, and 3 demonstrates sociotropic threat reduces the degree of subjective well-being, trust in government and society. Model 4 shows the direct effects of sociotropic threat on tolerance on minorities are not significant statistically when controlling the effects of mediating variables, while model 5 shows the negative indirect effects of ST on TOM mediated by the three mediating variables are significant (p-value: 0.0312). The insignificant direct effects but the significant indirect effects indicate that the relationship between the independent and dependent variable is possible just through the mediation of other variables. That is, ST cannot affect TOM without the mediating variables – subjective well-being, trust in government and society. The empirical findings clarify why threat perception of indefinite ones lowers tolerance on definite groups. High quality of safety management contributes to improving not only subjective well-being, trust in government and society but also tolerance on minorities through the mediation of the three mediating variables.

On the one hand, this study can be compared with Ryu and Lee (2020) because they also used the KSIS data even though their study used raw-data created in different years (2016 – 2018). They reported the significant negative effects of NP and SBL on TOM, but this study rejects the hypothetical relationship between NP, SBL and TOM. The differences between this study and Ryu and Lee (2020) might be because both studies include different control variables. While this study controls social status perception and political ideology, Ryu and Lee did not control them. In this study, social status perception and political ideology (progressive) affects TOM positively as expected. Similar to their findings, however, this study shows the significant positive effects of trust in government and society, and the significant negative effects of women on tolerance on minorities. Model 4 and 5 support the discussions of the effects of age, gender, social status perception, and political ideology of tolerance on minorities, whereas educational level affects TOM negatively but insignificantly.

4. Conclusion

This study contributes to tolerance literature in that it identifies the theoretical path where sociotropic threat affects tolerance on minorities negatively. As discussed, sociotropic threat reduces the degree of subjective well-being, trust in government and society. People cannot feel happy, satisfied, and worthwhile in risky surroundings. People cannot believe in government and society when they worry about safety. The negative judgement about safety of the society and region one lives in affects the degree of tolerance on minorities negatively. This study gives a lesson that success in safety management might be the key to improve not only individuals' quality of life but also social capital. The lesson is particularly meaningful in the Covid-19 pandemic period. The success in controlling

the pandemic may increase the degree of tolerance on minorities at individual level. This study also creates the opportunities of new research. This study initially raises a concern about the theoretical gap about the theoretical path where sociotropic threat reduces tolerance on minorities and tests the mediating effects of subjective well-being, trust in government and society. Other researchers can test the hypothesis this study makes and tests as other datasets. As well, this study makes researchers focus on threat or safety perception as a determinant of various social psychological variables.

Notes

1. This study makes use of research materials produced by the Korea Institute of Public Administration (KIPA), and has been authorized for use according to KIPA's regulations on the ownership and use of said research materials.
2. The range of respondents' age was between 19 and 69 until 2019, but the KIPA extended it to over the 70's.

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