# Meta-analytical comparison of correlations between fear of positive evaluation and social anxiety in individualistic and collectivistic societies

YOSHIZAWA Eri

星槎道都大学研究紀要

社会福祉学部

第3号

2022 年

# Meta-analytical comparison of correlations between fear of positive evaluation and social anxiety in individualistic and collectivistic societies

# YOSHIZAWA Eri

#### Abstract

Fear of positive evaluation (FPE) is a concept in the Bivalent Fear of Evaluation model of social anxiety (SA). Studies have demonstrated a significant positive correlation between FPE and SA and suggested possible cultural differences based on individualism vs. collectivism in the correlation. Are correlations between FPE and SA significantly different across cultures? Researchers have developed many scales to assess SA. Are there differences in correlations between these scales? I conducted a meta-analysis to answer these questions. Search engines, including Google Scholar, PubMed Central, Science Direct, CNKI, Korea Citation Index, and J-STAGE) were used to search English, Chinese, Korean, and Japanese articles. Articles that clearly showed a correlation coefficient (Pearson's r) between FPE and SA and those that used either SIAS (social interaction anxiety scale) or LSAS (Liebowitz social anxiety scale) for assessing SA were included in the meta-analysis. I conducted the analysis based on the variable effects model. Analysis results with SIAS as the dependent variable indicated that the overall effect size of the z-transformed estimate with LSAS as the dependent variable was z = .62 with no difference based on cultural groups (p = .65). Furthermore, the overall effect size estimate was z = .48 with LSAS as the dependent variable with no difference based on cultural groups (p = .06). Additionally, comparing difference estimates of effect sizes between SIAS and LSAS in each culture indicated a significant difference in the collectivistic group (p = .001). I concluded that there were no cultural differences in effect size estimates of SIAS or LSAS. There was a significant difference in the effect size estimates between the scales in the collectivistic group, suggesting that the scale measuring SA rather than culture created the difference in correlations. Limitations of this study include the small number of articles analyzed and using only university students survey collaborators in the collectivistic group. Therefore, differences in survey collaborators' characteristics might have affected the results.

#### 1. Introduction

#### Fear of Positive evaluation

Social anxiety disorder (SAD) is described as a marked or intense fear or anxiety about social situations in which others may watch a person, which is a mental disorder that afflicts many people (American Psychiatric Association, 2013). Other people feel distressed when performing in front of others, which is known as social anxiety. The Bivalent Fear of Evaluation (BFOE) model explains the mechanisms of social anxiety (Weeks & Howell, 2012). The central concepts of the model include the fear of negative evaluation (FNE), which is associated with social anxiety (e.g., Kocovski & Endler, 2000), and the fear of positive evaluation (FPE).

FNE is anticipations and worries about being evaluated negatively by others (Watson & Friend, 1969). In contrast, FPE is the sense of fear of being assessed positively in public (Heimberg, Brozovich, & Rapee, 2010). One factor in increased social anxiety by FPE is the fear that others might expect higher performance after positive evaluation (Heimberg et al, 2010). Those with high FPE doubt their abilities and cannot believe the possibility of improving their performance. As a result, they fear they may disappoint others' increased expectations even if they receive positive feedback. People with high FPE have a strong sense of anxiety and fear that their social reputation will be threatened by their inability to perform according to others' expectations. In other words, positive evaluations from others may temporarily increase a person's social reputation. However, it also raises concerns about higher evaluation standards. Such people believe that increased social reputation will cause conflicts with highly regarded community members, and they will not perform up to the heightened standards. As a result, fear of threatening one's social reputation is interpreted as social anxiety (Heimberg et al., 2010).

# The relationship between FPE and culture/ racial/ ethnic

Previous studies have reported that social anxiety has a significant positive relationship with FNE and FPE (e.g., Weeks, Heimberg, Rodebaugh, & Norton, 2008; Teale Sapach, Carleton, Mulvogue, Weeks, & Heimberg, 2015; Yap, Gibbs, Francis, & Schuster, 2016). The most commonly used FPE scale was Fear of Positive Evaluation (FPE) scale published in 2008 (Weeks, Heimberg, & Rodebaugh, 2008) and translated into Korean (Park, Oh, & Lee, 2010), Chinese (Zhong & Zhang, 2011), and Japanese (Maeda, Sekiguchi, Horiuchi, Weeks, & Sakano, 2015). Fredrick and Luebbe (2020) systematically reviewed the bivariate correlates of FPE and social anxiety symptomatology. They reported that studies with community, clinical adult, and adolescent samples had medium to large effect sizes. Moreover, a study in Taiwan (e.g., Wang, Hsu, Chiu, & Liang, 2012) reported that the relationship between FPE and social anxiety tended to be weaker than in the West. Wang et al. (2012) considered that this East Asian culture valued humility, which influences interpersonal situations.

Triandis (1995) described the characteristics of individualistic and collectivistic cultural groups.<sup>1</sup>. People in collectivistic cultures, such as East Asian cultures, have a more homogenous view of the ingroup than the out-group and more intimate and submissive social behavior toward in-group members (Triandis, 1995). Okawa, Arai, Sasagawa, Ishikawa, Norberg, Schmidt, ..., and Shimizu (2021) described a model that included four variables (FPE, FNE, social anxiety, and disqualification of positive social outcomes) and compared models of collectivistic groups

(including Korea and Japan) and individualistic groups (including Australia and the USA). The results showed that the path from FPE to social anxiety was significant in the individualistic group but not in the collectivistic group. Noton and Weeks (2009) assessed FNE and FPE in the USA and compared them among African American, Asian, Caucasian, and Hispanic/ Latino (Latina)). The results showed that the mean FNE scores of the Asian and Caucasian groups were significantly higher than those of the other two groups. In contrast, the FNE scores were not significantly different between the groups. A comparative study between Asians (Chinese) and Europeans (Anglo in Australian) reported that Asians have a higher fear of negative evaluation than Europeans (Wong & Moulds, 2014). These studies have demonstrated that cultural and racial/ethnic differences affect individuals' perceptions of others. However, more research is required on this topic.

#### Research questions and purpose

This study conducted a meta-analysis of past studies' data on collectivist and individualist groups. The two research questions of this study were:

- 1. Are there any differences in the mean effect sizes of the groups?
- 2. Does the effect size depend on the type of scale used to assess social anxiety?

## Measures of social anxiety

The Social Interaction Anxiety Scale (SIAS) and the Social Phobia Scale (SPS) assess two different aspects of social anxiety (Mattich & Clark, 1998) and have been commonly used to examine the relationship between FPE and SA. The SIAS assesses anxiety about social interactions in pairs or groups, such as participants at social gatherings or making small talk. In contrast, the SPS (Mattich & Clark, 1998) is a 20item scale assessing anxiety about being seen in specific performance situations, such as speaking formally in front of others, eating, drinking, and writing. The first SIAS to be published consisted of 19 items. The prototype version of the SIAS contained 20 items (Mattick & Clarke, 1989<sup>2</sup>, as cited in Carleton, Thibodeau, Weeks, Teale Sapach, McEvoy, Horswill, and Heimberg, 2014). Later the item "I find it easy to make friends of my own age" (cf., Carleton et al., 2014) was removed. Some studies have adopted the 20-item version of SIAS (e.g., Kleinknecht, Dinnel, Kleinknecht, Hiruma, & Harada, 1997; Sakurai, Nagata, Harai, Yamada, Mohri, Nakano, ... & Furukawa, 2005).

Another frequently used scale is the Liebowitz Social Anxiety Scale (LSAS), the original version of which was developed by Liebowitz (1987), designed to assess social interactions and performance situations of social phobic people who feel fear and (or) avoidance. The LSAS is a 24-item scale consisting of two subscales: social anxiety with 11 items (e.g., "talking to people in authority") and performance anxiety with 13 items (e.g., "participating in small groups"). Moreover, Vagos, Salvador, Rijo, Santos, Weeks, and Heimberg (2016) assessed social anxiety using the Social Anxiety and Avoidance Scale for Adolescents (SAASA) developed in Portugal (Cunha, Pinto-Gouveia, & Salvador, 2008), which consists of six factors, including interactions in new situations and interactions with the opposite sex. Furthermore, Yoshizawa (2018) used the Social Anxiety Scale by Social Situations (SASSS) developed in Japan (Mori & Tanno, 2001), which consists of five situations causing social anxiety (presentations and speeches, distanced, heterosocial, silence, and authoritative). Additionally, the Social Appearance Anxiety Scale (SAAS; Hart, Flora, Palyo, Fresco, Holle, & Heimberg, 2008) is a 16-item scale assessing anxiety about others' negative perceptions of overall appearance, including body shape. Levinson and Rodebaugh (2012) and Weeks and Howell (2012) also used the SAAS. Also, the Social Interaction Phobia Scale (SIPS; Carleton, Collimore, Asmundson, McCabe, Rowa, & Antony, 2009) is a 14-item scale used by Carleton, Collimore, and Asmundson (2010), and Teale Sapach et al. (2015) for assessing cognitive, emotional, or behavioral symptoms of SAD. Finally, the Social Phobia and Anxiety Inventory for Children (SPAIC; Beidel, Turner, & Morris, 1995) is a 26-item scale assessing social anxiety in adolescents, with items describing social situations to which respondents respond by indicating how often they feel anxious or scared when encountering these scenarios.

The above-discussed scales have been developed to assess social anxiety. Nevertheless, their factor structures and question items differ. The author predicted that factor structure differences in social anxiety scales would affect correlations between social anxiety and FPE and FNE. Therefore, this study compared correlation coefficients between the scales. It might be difficult to estimate correlation coefficients by comparing only a small number of studies. As a result, the meta-analysis of this study focused on just two scales that were used in most studies, the SIAS and the LSAS.

# 2. Methods

## Criteria for selecting and adopting the literature

This study conducted a literature search using the phrases "fear of positive evaluation," "social anxiety," and "correlation" as search terms on the Google Scholar search engine. Articles in all languages published between 2008 and 2020 were included in the search results, which identified 335 articles. I read full texts and abstracts of articles with direct links to text files. I also read the full text of articles if the abstracts indicated that FPE and social anxiety were assessed in the study. Searches were also conducted on other databases using the identical phrases, including PubMed Central (39 articles), Science Direct (51), CNKI (5), Korea Citation Index (8), and J-STAGE (4) to identify studies published in Chinese, Korean, and Japanese, which were searched by entering terms corresponding to "social anxiety" and "fear of positive evaluation" in different languages. Finally, I consulted the list of citations in Fredrick and Luebbe (2020) to see if we had omitted any articles.

## Determining the targets of analysis

Duplicate articles in different databases were counted as one article. As a result, I analyzed 30 articles consisting of 32 data sets (Table 1) based on the following criteria.

- Articles written in Chinese, English, Japanese, or Korean, published in academic journals (including university bulletins) other than grant submissions, dissertations, theses, and conference abstracts.
- (2) Articles specifying correlation coefficients (*r*) between FPE and SA.
- (3) Studies using the SIAS and (or) LSAS to assess social anxiety.

## Coding Rules

I coded (1) the authors' name and year of

| Adulor         year         SIAS         LSAS           collectivistic group         2011         *         *           Wang et al.         2012         *         *           Lee & Hong         2013         *         *           Maeda et al.         2015         *         *           Maeda et al.         2015         *         *           Moriishi et al.         2018         *         *           Moriishi et al.         2018         *         *           Watanabe & Shirotsuki         2018         *         *           Yoshizawa         2020         *         *         *           Maeda et al.         2020         *         *         *           Yoshizawa         2020         *         *         *           Gwak et al.         2020         *         *         *           Kang & Hong         2020         *         *         *           Weeks & Norton         2008; study 2         *         *           Weeks & Rodebaugh         2008         *         *           Weeks et al.         2010         *         *           Weeks et al.         2011 | Author                |               | Scale |      |  |  |
|---|-----------------------|---------------|-------|------|--|--|
| collectivistic group       2011       *         Zhong & Zhang       2012       *       *         Wang et al.       2012       *       *         Lee & Hong       2013       *       *         Maeda et al.       2015       *       *         Maeda et al.       2015       *       *         Moriishi et al.       2018       *       *         Watanabe & Shirotsuki       2018       *       *         Watanabe & Shirotsuki       2010       *       *         Yoshizawa       2020       *       *         Hee & Nam       2020       *       *         Gwak et al.       2020       *       *         Lim & Yu       2020       *       *         Kang & Hong       2020       *       *         Individualistic group       *       *       *         Weeks & Norton       2008; study 2       *       *         Weeks & Rodebaugh       2008       *       *         Weeks et al.       2010       *       *         Levinson & Rodebaugh       2012       *       *         Levinson & Rodebaugh       2012       * <td>Author</td> <td>year</td> <td>SIAS</td> <td>LSAS</td>          | Author                | year          | SIAS  | LSAS |  |  |
| Zhong & Zhang       2011       *         Wang et al.       2012       *       *         Lee & Hong       2013       *       *         Maeda et al.       2015       *       *         Lee & Hong       2015       *       *         Moriishi et al.       2018       *       *         Nihei et al.       2018       *       *         Watanabe & Shirotsuki       2018       *       *         Yoshizawa       2020       *       *         Yoshizawa       2020       *       *         Kim       2020       *       *         Gwak et al.       2020       *       *         Idmitidualistic group       *       *       *         Weeks & Norton       2008; study 2       *       *         Weeks & Norton       2008; study 3       *       *         Valentiner et al.       2010       *       *         Weeks et al.       2010 <td>collectivistic group</td> <td></td> <td></td> <td></td>           | collectivistic group  |               |       |      |  |  |
| Wang et al.       2012       *       *         Lee & Hong       2013       *         Maeda et al.       2015       *         Lee & Hong       2015       *         Moriishi et al.       2018       *         Nihei et al.       2018       *         Watanabe & Shirotsuki       2018       *         Yoshizawa       2020       *         Hee & Nam       2020       *         Gwak et al.       2020       *         Kim       2020       *         Kang & Hong       2020       *         individualistic group       2020       *         Weeks & Norton       2008; study 2       *         Weeks & Norton       2008; study 3       *         Weeks & Norton       2008; study 3       *         Weeks & Norton       2008; study 3       *         Weeks & Rodebaugh       2010       *         Weeks et al.       2010       *         Valentiner et al.       2011       *         Weeks et al.       2011       *         Levinson & Rodebaugh       2012       *         Shuis & Boschen       2014       *   | Zhong & Zhang         | 2011          | *     |      |  |  |
| Lee & Hong       2013       *         Maeda et al.       2015       *         Lee & Hong       2015       *         Moriishi et al.       2018       *         Nihei et al.       2018       *         Watanabe & Shirotsuki       2018       *         Yoshizawa       2020       *         Yoshizawa       2020       *         Hee & Nam       2020       *         Gwak et al.       2020       *         Lim & Yu       2020       *         Kang & Hong       2020       *         Kang & Hong       2020       *         individualistic group       *       *         Weeks & Norton       2008; study 2       *         Weeks & Norton       2008; study 3       *         Weeks & Norton       2008; study 3       *         Weeks & Norton       2008; study 4       *         Weeks & Norton       2008; study 2       *         Weeks & Norton       2008; study 3       *         Valentiner et al.       2010       *         Valentiner et al.       2011       *         Levinson & Rodebaugh       2012       * </td <td>Wang et al.</td> <td>2012</td> <td>*</td> <td>*</td> | Wang et al.           | 2012          | *     | *    |  |  |
| Maeda et al.       2015       *         Lee & Hong       2015       *         Moriishi et al.       2018       *         Nihei et al.       2018       *         Watanabe & Shirotsuki       2018       *         Yoshizawa       2020       *         Yoshizawa       2020       *         Hee & Nam       2020       *         Gwak et al.       2020       *         Lim & Yu       2020       *         Kang & Hong       2020       *         Meeks & Norton       2008: study 2       *         Weeks & Norton       2008: study 3       *         Weeks & Rodebaugh       2010       *         Weeks & Rodebaugh       2011       *         Weeks et al.       2010       *         Valentiner et al.       2011       *         Weeks et al.       2012       *         Levinson & Rodebaugh       2012       *         Menatti et al.       2014       *         Menatti et al.       2015       *         Yap et al.       2016       *         Kis & Boschen       2016       *         Menatti et al.   | Lee & Hong            | 2013          | *     |      |  |  |
| Lee & Hong       2015       *         Moriishi et al.       2018       *         Nihei et al.       2018       *         Watanabe & Shirotsuki       2018       *         Yoshizawa       2020       *         Yoshizawa       2020       *         Hee & Nam       2020       *         Kim       2020       *         Gwak et al.       2020       *         Im & Yu       2020       *         Kang & Hong       2020       *         individualistic group       2020       *         Weeks & Norton       2008; study 2       *         Weeks & Norton       2008; study 3       *         Weeks & Norton       2008; study 3       *         Weeks & Norton       2008; study 3       *         Weeks et al.       2010       *         Valentiner et al.       2010       *         Valentiner et al.       2011       *         Valentiner et al.       2012       *         Shuis & Boschen       2014       *         Levinson & Rodebaugh       2012       *         Menatti et al.       2015       *         Y   | Maeda et al.          | 2015          | *     |      |  |  |
| Moriishi et al.       2018       *         Nihei et al.       2018       *         Watanabe & Shirotsuki       2018       *         Yoshizawa       2020       *         Yoshizawa       2020       *         Hee & Nam       2020       *         Gwak et al.       2020       *         Gwak et al.       2020       *         Iim & Yu       2020       *         Kang & Hong       2020       *         individualistic group       2020       *         Weeks & Norton       2008; study 2       *         Weeks & Norton       2008; study 3       *         Weeks & Rodebaugh       2008       *         Valentiner et al.       2010       *         Valentiner et al.       2011       *         Valentiner et al.       2012       *         Levinson & Rodebaugh       2012       *         Sluis & Boschen       2014       *         Menatti et al.       2015       *         Weeks       2015       *         Yap et al.       2016       *         Kipton et al.       2017       *         Birk et al.   | Lee & Hong            | 2015          | *     |      |  |  |
| Nihei et al.       2018       *         Watanabe & Shirotsuki       2018       *         Yoshizawa       2020       *         Yoshizawa       2020       *         Hee & Nam       2020       *         Gwak et al.       2020       *         Lim & Yu       2020       *         Kang & Hong       2020       *         individualistic group       *       *         Weeks & Norton       2008; study 2       *         Weeks & Norton       2008; study 3       *         Weeks & Rodebaugh       2008       *         Valentiner et al.       2011       *         Weeks et al.       2012       *         Valentiner et al.       2011       *         Weeks et al.       2012       *         Levinson & Rodebaugh       2012       *         Sluis & Boschen       2014       *         Menatti et al.       2015       *         Weeks       2015       *         Yap et al.       2016       *         Kipton et al.       2017       *         Birk et al.       2019       *  | Moriishi et al.       | 2018          |       | *    |  |  |
| Watanabe & Shirotsuki       2018       *         Yoshizawa       2020       *         Hee & Nam       2020       *         Kim       2020       *         Gwak et al.       2020       *         Lim & Yu       2020       *         Kang & Hong       2020       *         individualistic group       *       *         Weeks & Norton       2008; study 2       *         Weeks & Norton       2008; study 3       *         Weeks & Rodebaugh       2008       *         Veeks et al.       2010       *         Valentiner et al.       2011       *         Veeks et al.       2012       *         Valentiner et al.       2012       *         Levinson & Rodebaugh       2012       *         Menatti et al.       2014       *         Menatti et al.       2015       *         Yap et al.       2016       *         Kipton et al.       2016       *         Lipton et al.       2017       *         Levinson et al.       2019       *   | Nihei et al.          | 2018          |       | *    |  |  |
| Yoshizawa       2020       *         Hee & Nam       2020       *         Kim       2020       *         Gwak et al.       2020       *         Lim & Yu       2020       *         Kang & Hong       2020       *         individualistic group       2000       *         Weeks & Norton       2008; study 2       *         Weeks & Norton       2008; study 3       *         Weeks & Rodebaugh       2000       *         Weeks et al.       2010       *         Valentiner et al.       2011       *         Valentiner et al.       2011       *         Veeks et al.       2012       *         Levinson & Rodebaugh       2012       *         Sluis & Boschen       2014       *         Le Blanc et al.       2014       *         Menatti et al.       2015       *         Yap et al.       2016       *         Kodebaugh et al.       2017       *         Birk et al.       2019       *   | Watanabe & Shirotsuki | 2018          |       | *    |  |  |
| Hee & Nam       2020       *         Kim       2020       *         Gwak et al.       2020       *         Lim & Yu       2020       *         Kang & Hong       2020       *         individualistic group       2008; study 2       *         Weeks & Norton       2008; study 3       *         Weeks & Norton       2008; study 3       *         Weeks & Rodebaugh       2000       *         Valentiner et al.       2010       *         Valentiner et al.       2011       *         Valentiner et al.       2012       *         Levinson & Rodebaugh       2012       *         Sluis & Boschen       2014       *         Le Blanc et al.       2015       *         Weeks       2015       *         Kap et al.       2016       *         Kipton et al.       2016       *         Lipton et al.       2017       *         Birk et al.       2019       *   | Yoshizawa             | 2020          | *     |      |  |  |
| Kim2020*Gwak et al.2020*Lim & Yu2020*Kang & Hong2020*individualistic group2008; study 2*Weeks & Norton2008; study 3*Weeks & Rodebaugh2008*Fergus et al.2010*Walentiner et al.2011*Weeks et al.2012*Weeks et al.2012*Valentiner et al.2014*Levinson & Rodebaugh2014*Le Blanc et al.2015*Weeks2015*Kang & Diff*Lipton et al.2016*Lipton et al.2017*Birk et al.2019*   | Hee & Nam             | 2020          | *     |      |  |  |
| Gwak et al.2020*Lim & Yu2020*Kang & Hong2020*individualistic group2008; study 2*Weeks & Norton2008; study 3*Weeks & Rodebaugh2008*Fergus et al.2009*Weeks et al.2010*Valentiner et al.2012*Levinson & Rodebaugh2012*Menatti et al.2014*Le Blanc et al.2015*Yap et al.2016*Lipton et al.2017*Lipton et al.2016*Levinson et al.2017*Kang et al.2016*Kang et al.2015*Kang et al.2016*Kang et al.2016*Kang et al.2017*Kang et al.2019*  | Kim                   | 2020          | *     |      |  |  |
| Lim & Yu       2020       *         Kang & Hong       2020       *         individualistic group       2008; study 2       *         Weeks & Norton       2008; study 3       *         Weeks & Rodebaugh       2008       *         Weeks & Rodebaugh       2008       *         Weeks & Rodebaugh       2009       *         Weeks et al.       2010       *         Valentiner et al.       2011       *         Weeks et al.       2012       *         Valentiner et al.       2012       *         Levinson & Rodebaugh       2012       *         Sluis & Boschen       2014       *         Le Blanc et al.       2015       *         Kap et al.       2015       *         Kap et al.       2016       *         Kap et al.       2016       *         Lipton et al.       2017       *         Birk et al.       2019       *  | Gwak et al.           | 2020          | *     |      |  |  |
| Kang & Hong2020*individualistic group2008; study 2*Weeks & Norton2008; study 3*Weeks & Rodebaugh2008; study 3*Weeks & Rodebaugh2008*Weeks et al.2010*Walentiner et al.2011*Weeks et al.2012*Weeks et al.2012*Levinson & Rodebaugh2012*Sluis & Boschen2014*Le Blanc et al.2015*Weeks2015*Kap et al.2016*Lipton et al.2017*Birk et al.2019*   | Lim & Yu              | 2020          | *     |      |  |  |
| individualistic group<br>Weeks & Norton 2008; study 2 *<br>Weeks & Norton 2008; study 3 *<br>Weeks & Rodebaugh 2008 *<br>Fergus et al. 2009 *<br>Weeks et al. 2010 *<br>Valentiner et al. 2011 *<br>Weeks et al. 2012 *<br>Levinson & Rodebaugh 2012 *<br>Sluis & Boschen 2014 *<br>Le Blanc et al. 2014 *<br>Menatti et al. 2015 *<br>Weeks 2015 *<br>Yap et al. 2016 *<br>Rodebaugh et al. 2017 *<br>Birk et al. 2019 *   | Kang & Hong           | 2020          | *     |      |  |  |
| Weeks & Norton       2008; study 2       *         Weeks & Rodebaugh       2008; study 3       *         Weeks & Rodebaugh       2008       *         Fergus et al.       2009       *         Weeks et al.       2010       *         Valentiner et al.       2011       *         Weeks et al.       2012       *         Weeks et al.       2012       *         Levinson & Rodebaugh       2012       *         Sluis & Boschen       2014       *         Le Blanc et al.       2015       *         Weeks       2015       *         Keeks       2016       *         Lipton et al.       2017       *         Birk et al.       2017       *         Levinson et al.       2019       *  | individualistic group |               |       |      |  |  |
| Weeks & Norton       2008; study 3       *         Weeks & Rodebaugh       2008       *         Fergus et al.       2009       *         Weeks et al.       2010       *         Valentiner et al.       2011       *         Weeks et al.       2012       *         Weeks et al.       2012       *         Weeks et al.       2012       *         Levinson & Rodebaugh       2012       *         Sluis & Boschen       2014       *         Le Blanc et al.       2015       *         Weeks       2015       *         Yap et al.       2016       *         Rodebaugh et al.       2017       *         Birk et al.       2019       *   | Weeks & Norton        | 2008; study 2 | *     |      |  |  |
| Weeks & Rodebaugh       2008       *         Fergus et al.       2009       *         Weeks et al.       2010       *         Valentiner et al.       2011       *         Weeks et al.       2012       *         Weeks et al.       2012       *         Levinson & Rodebaugh       2012       *         Sluis & Boschen       2014       *         Le Blanc et al.       2015       *         Weeks       2015       *         Vap et al.       2016       *         Rodebaugh et al.       2017       *         Birk et al.       2019       *  | Weeks & Norton        | 2008; study 3 | *     |      |  |  |
| Fergus et al.       2009       *         Weeks et al.       2010       *         Valentiner et al.       2011       *         Weeks et al.       2012       *       *         Levinson & Rodebaugh       2012       *       *         Sluis & Boschen       2014       *       *         Le Blanc et al.       2015       *       *         Weeks       2015       *       *         Weeks       2015       *       *         Lipton et al.       2016       *       *         Birk et al.       2017       *       *         Levinson et al.       2019       *       *  | Weeks & Rodebaugh     | 2008          | *     |      |  |  |
| Weeks et al.2010*Valentiner et al.2011*Weeks et al.2012*Levinson & Rodebaugh2012*Sluis & Boschen2014*Le Blanc et al.2014*Menatti et al.2015*Yap et al.2016*Lipton et al.2017*Birk et al.2019*   | Fergus et al.         | 2009          | *     |      |  |  |
| Valentiner et al.2011*Weeks et al.2012*Levinson & Rodebaugh2012*Sluis & Boschen2014*Le Blanc et al.2014*Menatti et al.2015*Weeks2015*Yap et al.2016*Lipton et al.2017*Birk et al.2019*  | Weeks et al.          | 2010          | *     |      |  |  |
| Weeks et al.2012**Levinson & Rodebaugh2012*Sluis & Boschen2014*Le Blanc et al.2014*Menatti et al.2015*Weeks2015*Yap et al.2016*Lipton et al.2017*Birk et al.2019*Levinson et al.2019*   | Valentiner et al.     | 2011          | *     |      |  |  |
| Levinson & Rodebaugh2012*Sluis & Boschen2014*Le Blanc et al.2014*Menatti et al.2015*Weeks2015*Yap et al.2016*Lipton et al.2017*Birk et al.2019*Levinson et al.2019*   | Weeks et al.          | 2012          | *     | *    |  |  |
| Sluis & Boschen       2014       *         Le Blanc et al.       2014       *         Menatti et al.       2015       *         Weeks       2015       *         Yap et al.       2016       *         Lipton et al.       2017       *         Birk et al.       2019       *  | Levinson & Rodebaugh  | 2012          | *     |      |  |  |
| Le Blanc et al.2014*Menatti et al.2015*Weeks2015*Yap et al.2016*Lipton et al.2017*Birk et al.2019*Levinson et al.2019*  | Sluis & Boschen       | 2014          | *     |      |  |  |
| Menatti et al.2015*Weeks2015*Yap et al.2016*Lipton et al.2016*Rodebaugh et al.2017*Birk et al.2019*Levinson et al.2019*   | Le Blanc et al.       | 2014          | *     |      |  |  |
| Weeks2015*Yap et al.2016*Lipton et al.2016*Rodebaugh et al.2017*Birk et al.2019*Levinson et al.2019*  | Menatti et al.        | 2015          | *     |      |  |  |
| Yap et al.2016*Lipton et al.2016*Rodebaugh et al.2017*Birk et al.2019*Levinson et al.2019*  | Weeks                 | 2015          | *     |      |  |  |
| Lipton et al. 2016 *<br>Rodebaugh et al. 2017 *<br>Birk et al. 2019 *   | Yap et al.            | 2016          |       | *    |  |  |
| Rodebaugh et al.2017*Birk et al.2019*Levinson et al.2019*   | Lipton et al.         | 2016          | *     |      |  |  |
| Birk et al. 2019 *<br>Levinson et al. 2019 *  | Rodebaugh et al.      | 2017          | *     |      |  |  |
| Levinson et al. 2019 *  | Birk et al.           | 2019          |       | *    |  |  |
|   | Levinson et al.       | 2019          | *     |      |  |  |

Table 1. List of previous studies and scales used in the meta-analysis.

publication, (2) the number of participants (*N*), (3) Pearson's correlation (*r*; FPE and SA), (4) the developmental stage of participants (adult, college, college & adult, adolescence and not specified), (5) mean age, (6) majority race or ethnicity (highest and second highest percentages of participants, and their total percentages), (7) research field.<sup>3</sup>, (8) the social anxiety scale (SIAS, or LSAS), (9) Title, (10) journal name, volume, and page. Multiple datasets in a single paper (multiple studies or different samples) were coded separately. Surveys conducted in cities in the US and Australia were classified into the individualistic group and those conducted in China (including Taiwan), Japan, and Korea into the collectivistic groups.

#### Estimating effect sizes<sup>4</sup>

The correlation coefficient (r) of each study was z-

transformed (Fisher's), and the variance of z ( $V_z$ ) was calculated for each study. I adopted a random-effects model to calculate standard errors and weights. I calculated the mean effect sizes, variances, and standard errors and estimated the 95% confidence intervals. Finally, the differences in effect sizes between the sample groups (individualistic group vs. collectivistic group) or scale groups (SIAS vs. LSAS) were examined using subgroup analysis.

#### 3. Results and Discussion

I calculated the mean effect sizes, variances, standard errors, 95% confidence intervals, and  $I^2$  statistics (Higgins, Tompson, Deeks, & Altman, 2003) using the *z*-transformed values of each group for each social anxiety scale. In addition, a test of significance

|                 | 1  | Mean effect size |      | 0.0  | 050/ 07 | *2     | 0                      | 10 |      |
|-----------------|----|------------------|------|------|---------|--------|------------------------|----|------|
|                 | R  | Z                | Vz   | SE   | 95% CI  | 1-     | Q between study groups | df | p    |
| SIAS            |    |                  |      |      |         |        |                        |    |      |
| ALL             | 26 | .615             | .001 | .023 | .569661 | 76.695 |                        |    |      |
| collectivistic  | 15 | .627             | .001 | .035 | .557696 | 78.820 | 0.202                  | 1  | .653 |
| individualistic | 11 | .605             | .001 | .031 | .544667 | 75.929 |                        |    |      |
| LSAS            |    |                  |      |      |         |        |                        |    |      |
| ALL             | 7  | .476             | .001 | .033 | .409542 | 81.154 |                        |    |      |
| collectivistic  | 4  | .457             | .001 | .035 | .387526 | 42.512 | 3.419                  | 1  | .064 |
| individualistic | 3  | .680             | .013 | .115 | .544906 | 78.523 |                        |    |      |

Table 2. Mean effect sizes between FPE and each social anxiety scale and Q-value between study groups (collectivistic and individualistic).

Table 3. Mean effect sizes between FPE and each social anxiety scale for each cultural group, and Q-value between study groups (SIAS and LSAS).

|                 | L  | Mean effect size |      | CE   |         | <b>r</b> 2 | 0                      | 10 | ,    |
|-----------------|----|------------------|------|------|---------|------------|------------------------|----|------|
|                 | R  | Z                | Vz   | SE   | 95% CI  | 1-         | Q between study groups | a) | р    |
| collectivistic  |    |                  |      |      |         |            |                        |    |      |
| ALL             | 15 | .548             | .001 | .026 | .496599 | 84.865     |                        |    |      |
| SIAS            | 11 | .627             | .001 | .036 | .557697 | 80.745     | 10.574                 | 1  | .001 |
| LSAS            | 4  | .456             | .002 | .038 | .381532 | 56.885     |                        |    |      |
| individualistic |    |                  |      |      |         |            |                        |    |      |
| ALL             | 18 | .610             | .001 | .031 | .550670 | 78.607     |                        |    |      |
| SIAS            | 15 | .605             | .001 | .031 | .543667 | 77.533     | 0.369                  | 1  | .543 |
| LSAS            | 3  | .681             | .014 | .120 | .446915 | 85.682     |                        |    |      |

was conducted on the evaluated *Q* statistic between the study groups (Table 2).

SIAS: The overall mean effect size was z = .615(collectivistic group; z = .627, individualistic group; z = .605). The difference in effect sizes between the collectivistic and the individualistic groups was not significant ( $Q_b = 0.202$ , df = 1, p = .653).

LSAS: The overall mean effect size was z = .476(collectivistic group; z = .457, individualistic group; z = .680). The difference in effect size between the two groups was not significant. However, there was a significant trend ( $Q_b = 3.419$ , df = 1, p = .064).

These results indicated that cultural differences assessed by the two scales were not significant; however, the LSAS had a significant trend. Then, I tested the significance of effect size differences between the scales in each cultural group (Table 3).

Collectivistic group: The overall mean effect size was z = .548 (SIAS; z = .627, LSAS; z = .456). There was a significant difference in effect sizes between SIAS and LSAS ( $Q_b = 10.574$ , df = 1, p = .001).

Individualistic group: The overall mean effect size was z = .610 (SIAS; z = .605, LSAS; z = .681). There was

no significant difference in effect sizes between two scales ( $Q_b = 0.369$ , df = 1, p = .543).

The correlation between FPE and SA in the literature examined in this study suggests that the effect of the scale used for assessing social anxiety and culture was significant. However, only seven studies in both cultural groups used LSAS, which is too few to base firm conclusions. It is suggested that a future meta-analysis should analyze more studies.

Moreover, only one scale has been developed to assess FPE (Weeks et al., 2008), whereas multiple scales assess social anxiety, including the SIAS, SPS, LSAS, SAASA (Cunha et al., 2008), SAAS (Hart et al., 2008), SIPS (Carleton et al., 2009), and others. The possibility that correlations might differ according to the social anxiety scale that is used is a new issue for future research.

## Conclusion and Limitation

This review compared cultural differences in correlation coefficients between FPE and social anxiety, and similar to previous studies (e.g., Wang et al., 2012; Okawa et al., 2021), no cultural differences 星槎道都大学研究紀要 社会福祉学部 第3号 2022

were indicated. The results of the SIAS indicated that the  $I^2$  statistic was above .75 in both groups, suggestive of an effect that is not explainable by cultural differences. Moreover, the results of the collectivistic group were constrained by further limitations, including inadequate literature collection, inability to search or browse non-English articles, and the lack of papers describing SAD patients. Furthermore, only a few non-English studies assessed FPE in ASD patients. Therefore, more studies should be conducted in on ASD patients in the future.

#### Reference

- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders (5th ed).* VA: American Psychiatric Publishing.
- Beidel, D. C., Turner, S. M., & Morris, T. L. (1995). A new inventory to assess childhood social anxiety and phobia: the social phobia and anxiety inventory for children. *Psychological Assessment*, 7, 73-79.
- Birk, S. L., Horenstein, A., Weeks, J., Olino, T., Heimberg, R., Goldin, P. R., & Gross, J. J. (2019). Neural responses to social evaluation: The role of fear of positive and negative evaluation. *Journal of Anxiety Disorders*, 67, 102–114.
- Carleton, R. N., Collimore, K. C., Asmundson, G. J., McCabe, R. E., Rowa, K., & Antony, M. M. (2009). Refining and validating the social interaction anxiety scale and the social phobia scale. *Depression and Anxiety*, 26(2), E71–E81.
- Carleton, R. N., Collimore, K. C., & Asmundson, G. J. (2010). "It's not just the judgements—It's that I don't know": Intolerance of uncertainty as a predictor of social anxiety. *Journal of Anxiety Disorders*, 24(2), 189–195.
- Carleton, R. N., Thibodeau, M. A., Weeks, J. W., Teale Sapach, M. J., McEvoy, P. M., Horswill, S. C., & Heimberg, R. G. (2014). Comparing short forms of the Social Interaction Anxiety Scale and the Social Phobia Scale. *Psychological Assessment*, 26 (4), 1116–1126.
- Cunha, M., Pinto-Gouveia, J. P., & Salvador, M. C. (2008). Social fears in adolescence—The social anxiety and avoidance scale for adolescents. *European Psychologist*, 13, 197–213.

- Fergus, T. A., Valentiner, D. P., McGrath, P. B., Stephenson, K., Gier, S., & Jencius, S. (2009). The Fear of Positive Evaluation Scale: Psychometric properties in a clinical sample. *Journal of Anxiety Disorders*, 23(8), 1177–1183.
- Fredrick, J. W., & Luebbe, A. M. (2020). Fear of positive evaluation and social anxiety: A systematic review of trait-based findings. *Journal of Affective Disorders*, 265, 157–168.
- Gwak, S. R., Sung, D. W., & Kim, E. J. (2020). The Relationship between Fear of Positive and Negative Evaluation and Social Anxiety Symptoms of College Students: The Mediating Role of Disqualification on Positive outcomes and Catastrophizing on Negative outcomes of Social Events. The Korean Journal of Applied Developmental Psychology, 9(1), 1-17.
- Hart, T. A., Flora, D. B., Palyo, S. A., Fresco, D. M., Holle, C., & Heimberg, R. G. (2008). Development and examination of the social appearance anxiety scale. *Assessment*, 15(1), 48–59.
- Hee, K. Y., & Nam, K. J. (2020). The Relationship between Fear of Positive Evaluation and Social Anxiety of University Student: The Moderating Effects of the Internalized Shame, Negative Selfconcept. *The Korea Journal of Youth Counseling*, 28(1), 199–220.
- Heimberg, R. G., Brozovich, F. A., & Rapee, R. M. (2010).
  A cognitive behavioral model of social anxiety disorder: Update and extension. In S. G. Hofmann,
  & P. M. DiBartolo (Eds.) Social anxiety: Clinical, Developmental and Social Perspectives, second edition. (pp. 395–422). London: Academic Press.
- Higgins, J. P., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003). Measuring inconsistency in metaanalyses. *BMJ*, 327(7414), 557–560.
- Kang, M. J. & Hong, J. S. (2020). The Relationship between Public Self-consciousness and Social Anxiety among College Students: The Mediating Effects of Fear of Negative and Positive Evaluation and Disqualification of Positive Social Outcomes. *The Korean Journal of School Psychology*, 17(3), 333–356.
- Kocovski, N. L., & Endler, N. S. (2000). Social anxiety, self - regulation, and fear of negative evaluation. *European Journal of Personality*, 14(4), 347–358.
- Kim, K. N. (2020). Factors Affecting Social Interaction

Anxiety of Nursing Students. *Journal of the Korea Academia-Industrial cooperation Society*, 21 (6), 417-424.

- Kleinknecht, R. A., Dinnel, D. L., Kleinknecht, E. E., Hiruma, N., & Harada, N. (1997). Cultural factors in social anxiety: A comparison of social phobia symptoms and Taijin Kyofusho. *Journal of Anxiety Disorders*, 11(2), 157–177.
- Le Blanc, A. L., Bruce, L. C., Heimberg, R. G., Hope, D. A., Blanco, C., Schneier, F. R., & Liebowitz, M. R. (2014). Evaluation of the psychometric properties of two short forms of the social interaction anxiety scale and the social phobia scale. *Assessment*, 21(3), 312–323.
- Lee, G. A. & Hong, H. Y. (2013). The Mediating Effects of Fear of Negative and Positive Evaluation on the relation between Public self-consciousness and Social Anxiety in University Students. *Korea Journal of Counseling*, 14(4), 2271–2290.
- Lee, K. H. & Hong, H. Y. (2015). The influence of perceived Parental Psychological control on Social Anxiety of University Students: The Mediating Effects of Fear of Positive Evaluation and Fear of Negative Evaluation. *Youth facilities and environment*, 13(4), 101–114.
- Levinson, C. A., & Rodebaugh, T. L. (2012). The role of negative social evaluation fears. *Eating Behaviors*, 13(1), 27–35.
- Levinson, C. A., Sala, M., Murray, S., Ma, J., Rodebaugh, T. L., & Lenze, E. J. (2019). Diagnostic, clinical, and personality correlates of food anxiety during a food exposure in patients diagnosed with an eating disorder. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 24(6), 1079–1088.
- Liebowitz, M. R. (1987). Social phobia. D. F. Klein (Ed.) Anxiety (Modern Problems in Pharmacopsychiatry vol. 22) (pp.141–173). Basel: Karger.
- Lim, M. J., & Yu, K. (2020). The Influence of Fear of Negative and Positive Evaluation and Self-Concealment on College Student's Social Anxiety: The Moderated Mediation Effect of Emotional Support. *The Korean Journal of Counseling and Psychotherapy*, 32(1), 365–389.
- Lipton, M. F., Weeks, J. W., & De Los Reyes, A. (2016). Individual differences in fears of negative versus positive evaluation: Frequencies and clinical

correlates. *Personality and Individual Differences*, 98, 193–198.

- Maeda, K., Sekiguchi, M., Horiuchi, S., Weeks, J. W., & Sakano, Y. (2015). Reliability and validity of a Japanese version of the Fear of Positive Evaluation Scale. *Anxiety Disorder Research*, 6(2), 113-120.
- Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour Research and Therapy*, 36, 455–470.
- Menatti, A. R., DeBoer, L. B. H., Weeks, J. W., & Heimberg, R. G. (2015). Social anxiety and associations with eating psychopathology: Mediating effects of fears of evaluation. *Body Image*, 14, 20–28.
- Mori, I., & Tannno, Y. (2001). Development and Validation of Social Anxiety scale by Social Situations. *The Japanese Journal of Health Psychology*, 14(1), 23–31.
- Moriishi, C., Yamashita, A., Maeda, S., Ogishima, H., & Shimada, H. (2018). Effect of functional aspects of fear of evaluations on social anxiety symptoms. *Waseda Journal of Clinical Psychology*, 18 (1), 51–57.
- Nihei, M., Arai, H., Maeda, K., Aoki, S., Tsuchiyagaito, A., Iwano, S., ... & Sasano, Y. (2018). Reassessment of Factor Structure, Reliability, and Validity of the Short Fear of Negative Evaluation Scale for the Japanese. *Anxiety Disorder Research*, 10(1), 54–63.
- Norton, P. J., & Weeks, J. W. (2009). A multi-ethnic examination of socio-evaluative fears. *Journal of* anxiety disorders, 23(7), 904–908.
- Okawa, S., Arai, H., Sasagawa, S., Ishikawa, S. I., Norberg, M. M., Schmidt, N. B., Kwon, J. H., Rapee, R. M., & Shimizu, E. (2021). A Cross-Cultural Comparison of the Bivalent Fear of Evaluation Model for Social Anxiety. *Journal of Behavioral* and Cognitive Therapy. (online journal) https: //doi.org/10.1016/j.jbct.2021.01.003
- Park, S. J., Oh, K. S., and Lee, J. A. (2010). Validation and Clinical Efficacy of the Korean Fear of Positive Evaluation Scale. *Korean Journal of Clinical Psychology*, 29(1), 205–221.
- Rodebaugh, T. L., Levinson, C. A., Langer, J. K., Weeks, J. W., Heimberg, R. G., Brown, P. J., ... & Liebowitz, M. R. (2017). The structure of vulnerabilities for

social anxiety disorder. *Psychiatry Research*, 250, 297–301.

- Sakurai, A., Nagata, T., Harai, H., Yamada, H., Mohri, I., Nakano, Y., ... & Furukawa, T. A. (2005). Is "relationship fear" unique to Japan? Symptom factors and patient clusters of social anxiety disorder among the Japanese clinical population. *Journal of Affective Disorders*, 87(1), 131-137.
- Sluis, R. A., & Boschen, M. J. (2014). Fear of evaluation in social anxiety: Mediation of attentional bias to human faces. *Journal of Behavior Therapy and Experimental Psychiatry*, 45(4), 475-483.
- Takano, Y. & Osaka, E. (1997). "Japanese collectivism" and "American individualism": Reexamining the dominant view. *The Japanese Journal of Psychology*, 68(4), 312-327.
- Teale Sapach, M. J., Carleton, R. N., Mulvogue, M. K., Weeks, J. W., & Heimberg, R. G. (2015). Cognitive constructs and social anxiety disorder: Beyond fearing negative evaluation. *Cognitive Behaviour Therapy*, 44(1), 63–73.
- Triandis, H. C. (1995). *Individualism and collectivism*. CO: Westview Press.
- Vagos, P., Salvador, M. D. C., Rijo, D., Santos, I. M., Weeks, J. W., & Heimberg, R. G. (2016). Measuring evaluation fears in adolescence: Psychometric validation of the Portuguese versions of the Fear of Positive Evaluation Scale and the Specific Fear of Negative Evaluation Scale. *Measurement and evaluation in counseling and development*, 49(1), 46–62.
- Valentiner, D. P., Skowronski, J., Mcgrath, P., Smith, S., & Renner, K. (2011). Self-verification and social anxiety: preference for negative social feedback and low social self-esteem. *Behavioural and Cognitive Psychotherapy*, 39, 601-617.
- Wang, W. T., Hsu, W. Y., Chiu, Y. C., & Liang, C. W. (2012). The hierarchical model of social interaction anxiety and depression: The critical roles of fears of evaluation. *Journal of Anxiety Disorders*, 26(1), 215–224.
- Watanabe, M., & Shirotsuki, K. (2019). Re-examination of Reliability and Validity of the Video Interpretation Questionnaire. *The annual bulletin* of Musashino University Institute of Human Sciences, (8), 19-34.
- Watson, D., & Friend, R. (1969). Measurement of social-

evaluative anxiety. *Journal of consulting and clinical psychology*, 33(4), 448–457.

- Weeks, J. W. (2015). Replication and extension of a hierarchical model of social anxiety and depression: Fear of positive evaluation as a key unique factor in social anxiety. *Cognitive Behaviour Therapy*, 44(2), 103–116
- Weeks, J. W., Heimberg, R. G., & Rodebaugh, T. L. (2008). The Fear of Positive Evaluation Scale: Assessing a proposed cognitive component of social anxiety. *Journal of anxiety disorders*, 22(1), 44–55.
- Weeks, J. W., Heimberg, R. G., Rodebaugh, T. L., Goldin, P. R., & Gross, J. J. (2012). Psychometric evaluation of the Fear of Positive Evaluation Scale in patients with social anxiety disorder. *Psychological assessment*, 24(2), 301–312.
- Weeks, J. W., Heimberg, R. G., Rodebaugh, T. L., & Norton, P. J. (2008). Exploring the relationship between fear of positive evaluation and social anxiety. *Journal of Anxiety Disorders*, 22 (3), 386-400.
- Weeks, J. W., & Howell, A. N. (2012). The bivalent fear of evaluation model of social anxiety: Further integrating findings on fears of positive and negative evaluation. *Cognitive Behaviour Therapy*, 41(2), 83-95.
- Weeks, J. W., Jakatdar, T. A., & Heimberg, R. G. (2010). Comparing and contrasting fears of positive and negative evaluation as facets of social anxiety. *Journal of Social and Clinical Psychology*, 29(1), 68–94.
- Wong, Q. J., & Moulds, M. L. (2014). An examination of the measurement equivalence of the brief fear of negative evaluation scale across individuals who identify with an Asian ethnicity and individuals who identify with a European ethnicity. Assessment, 21(6), 713-722.
- Yamada, T. & Inoue, S. (2012). meta bunseki nyumon: shinri kyoikukenkyu no keitoteki rebyu no tame ni. Tokyo: University of Tokyo Press. (In Japanese.)
- Yap, K., Gibbs, A. L., Francis, A. J., & Schuster, S. E. (2016). Testing the bivalent fear of evaluation model of social anxiety: The relationship between fear of positive evaluation, social anxiety, and perfectionism. *Cognitive behaviour therapy*, 45(2), 136-149.

- Yoshizawa, E. (2018). Survey on fear of evaluation and self-oriented perfectionism on social anxiety in high school and university students. *Japanese Journal of Research on Emotions*, 25(2), 36–43.
- Yoshizawa, E. (2020). Effects of approval motivation and fear of evaluation on social anxiety. *Japanese Journal of Social Psychology*, 36(1), 10–15.
- Zhong, Y. J. & Zhang, J. F. (2011). The Mediating effects of Fear of Negative and Positive Evaluation on the relation between Self-Esteem and Social Anxiety for College Students. *Psychological Development and Education*, 27(5), 506-512.

Note.

- 1. Takano and Osaka (1997) cast doubt on the dominant view that American culture is individualistic and Japanese culture is collectivistic.
- 2. Mattick and Clarke (1989) is an unpublished manuscript.
- 3. The information about the first author's affiliation was used for coding the data if the place of research (country or city) was not described in the paper.
- 4. These calculations referred to Yamada and Inoue (2012).

# 肯定的評価への恐れと社交不安の相関を対象とした 個人主義と集団主義間のメタ分析による比較

# 吉 澤 英 里

# 要約

FPE (Fear of positive evaluation) は、社会不安 (SA)の Bivalent Fear of Evaluation modelの概念の一つである。 先行研究では、FPE と SA の間に有意な正の相関があり、この相関には個人主義と集団主義に基づく文化的差異があ る可能性が示唆されている。FPE と SA の相関には有意な文化的差異があるのだろうか? SA を測定するために多 くの尺度が開発されたが、尺度によって相関関係の違いはあるのだろうか? この疑問に答えるため、メタ分析を行っ た。検索エンジン(Google Scholar, PubMed Central, Science Direct, CNKI, Korea Citation Index, J-STAGE) で、英語、中国語、韓国語、日本語の論文を検索した。FPE と SA の相関係数(Pearson's r)が明確に示された論文、 および SA の測定に SIAS または LSAS のいずれかを使用した論文を分析対象とし、変量効果モデルに基づいて行っ た。SIAS を従属変数とした結果、z 変換した推定値の全体の効果量は z=.62 であり、文化的差異はなかった (p=.65)。 また、LSAS を従属変数とした場合の全体的な効果量の推定値は z=.48 で、文化的差異はなかった (p=.06)。さらに、 SIAS と LSAS の効果量の差の推定値を各文化グループで比較すると、集団主義グループで有意差があった (p=.001)。 以上より、SIAS および LSAS の効果量推定値には、いずれも文化的差異はないと結論づけた。ただし、集団主義グルー プでは各尺度の効果量推定値に有意差があり、文化ではなく SA を測定する尺度が相関の差を生み出したことが示唆 された。本研究の限界は、分析した論文数が少ないことと、集団主義グループの調査協力者が大学生のみだったことで ある。ゆえに、調査協力者の特性の違いが分析結果に影響した可能性が疑われる。