Different Cultures, Different Coping Styles?

An Exploration on the Effects of Culture, Acceptance, and Social Anxiety

Chris Wong

Haverford College
Abstract

Past research had indicated that East Asians are more likely than their Caucasian counterparts to suffer from high levels of social anxiety, but do not experience the negative consequences of experienced social anxiety, such as depression and impairment in performance, to the same extent. The current study explores the differences in the manifestation of social anxiety between Caucasians and East Asians living in the United States or Canada. We anticipated that East Asians and Caucasians would differ in their levels of acceptance of experienced social anxiety, which would moderate the effects of social anxiety upon “negative outcomes”, including impairment, depression, and interpersonal problems. Consistent with expectations, it was found that East Asian participants suffered from higher levels of social anxiety, but inconsistent with expectations, they had a lower acceptance of anxiety that their Caucasian counterparts. Also consistent with the hypothesis, acceptance moderated the relationship between social anxiety and negative outcomes including depression and interpersonal problems. Acceptance did not moderate the relationship between social anxiety and impairment. It was also found that despite suffering higher levels of social anxiety, East Asian participants were not significantly more depressed than the Caucasian participants. The implications of those findings for both cross cultural psychology and acceptance-based treatments are discussed.

Keywords: social anxiety, cross cultural differences, acceptance
Introduction

Humans are social animals, meaning that the desire to form emotional connections is a fundamental human motivation (Baumeister & Leary, 1995). This makes sense on an evolutionary level, since our ancestors would have relied on their companions for protection from predators and gathering more food. A lack of companions for an early human may have meant death from predation or starvation, making social interactions and relationships with one’s group quite literally a matter of life or death (Van Vugt & Schaller, 2008). The experience of social anxiety can be seen as a trait that developed in our ancestors as they navigated complex social relationships. Even though in modern day society companionship is no longer quite as vital for human survival, experiencing social anxiety is still quite a common phenomenon.

Experienced social anxiety is a major component for Social Anxiety Disorder (SAD). SAD is defined as the individual having a persistent fear of social interactions, usually due to fear of judgement from others (American Psychiatric Association, 2013). In the United States, it is estimated that 13% of the population suffers from SAD at some point in their lives (Kessler et al., 1994), and SAD is often associated with increased suicide ideation and a higher chances of being financially dependent upon others. Roughly 69% of SAD patients are diagnosed with comorbid disorders (Schneier, Johnson, Hornig, Liebowitz, & Weissman, 1992). Furthermore, studies have shown that individuals who meet criteria for SAD reported significantly lower levels of satisfaction on all domains of life, even the domains that have no direct connection to social interactions (Eng, Coles, Heimberg, & Safren, 2005). Thus it can be concluded that SAD has a significantly harmful impact which may actually extend beyond its immediate symptoms.

The way experienced social anxiety is connected to a full-fledged SAD diagnosis is often hypothesized to be via a self-fulfilling cycle (Rapee & Heimberg, 1997). One prevailing
cognitive model of social anxiety suggests that individuals who with high levels of social anxiety usually have negative beliefs of themselves and their social skills. As such, they seek to escape social situations and lower their anxiety levels by disengaging from social interactions, either by engaging in safety behaviors, defined as coping behaviors used to reduce anxiety (Wells et al., 1995), or by physically removing themselves from the situation. However, safety behaviors often have the side effect of distracting the individual from the social interaction, and may give the impression that the individual is aloof and uninterested. This may, in turn, make others less enthusiastic about spending time with the anxious individual, thus reinforcing their social anxieties and negative self-beliefs (Rapee & Heimberg, 1997; Wells et al., 1995).

Many interpersonal model of the formation of psychopathology and distress have been proposed, either specifically directed at SAD (Alden & Taylor, 2004; Rapee & Heimberg, 1997) or examining more generalized issues such as interpersonal sensitivity and social rejection (Downey, Freitas, Michaelis, & Khouri, 1998; Madon, Willard, Guyll, & Scherr, 2011; Nelson & Klutas, 2000). Most of these models emphasize similar scenarios of a downwards spiral generated by a self-fulfilling prophecy, showing how SAD manages to generate significant levels of distress and impairment in individuals.

Social Anxiety Across Culture

A study done in 1997 by Okazaki on a Asian American and Euro-American college students demonstrated that when compared to Euro-American participants, Asian American participants report significantly higher levels of experienced social anxiety and distress, even after controlling for various other distress factors (Okazaki, 1997). Okazaki’s findings were replicated in 2010 by Schreier in a large scale cross cultural study including college students from nine different countries (Schreier et al., 2010). Schreier’s results show that East Asian
college students report the highest mean levels of social anxiety amongst all the cultural groups included in the study.

Given how East Asians seem to experience higher social anxiety, one would imagine that a formal diagnosis of SAD would have a high prevalence within East Asian countries. Unexpectedly, literature shows that it is not the case. Multiple meta-analyses on anxiety disorder have concluded that East Asian cultures have the lowest prevalence for anxiety disorders, including SAD, while North American cultures tend to have the highest prevalence of anxiety disorders (Remes, Brayne, van der Linde, & Lafortune, 2016; Wancata, Fridl, & Friedrich, 2009; Wittchen & Fehm, 2003). And while it is can be hypothesized that cultural stigmatization against seeking mental help may play a part in this phenomena, there is evidence showing that East Asian individuals may suffer less impairment from experiencing high levels of social anxiety when compared to their North American counterparts.

In 2002, Okazaki conducted another study showing that for Asian American participants, but not white participants, experiencing a high level of social anxiety did not negatively influence how they performed on a social task (Okazaki, Liu, Longworth, & Minn, 2002). In this study, 40 Asian American and 40 white participants were given trait anxiety and experienced social anxiety measures to complete before and after a 3-minute public speaking task. The speaking task was recorded and subsequently coded for behaviors such as gaze avoidance, fidgeting, and prolonged silence. Although Asian American participants scored significantly higher on both trait anxiety and experienced social anxiety measures when compared to white participants, there were no significant group differences in the behavioral coding for the public speaking task. Furthermore, there was a significant positive correlation between self-reported
anxious emotions and impaired behavior for white participants exclusively (Okazaki et al., 2002).

Assuming that these results are generalizable to demographics beyond undergraduate students, this implies that for East Asian individuals either experienced social anxiety does not significantly impair their self-perception, or that a negative self-perception does not interfere with their social performance. Either way, the self-fulfilling prophecy model for SAD seems to be less applicable for East Asian individuals, and reports of high levels of social distress does not seem to correlate with social impairment for East Asian individuals. This reveals a lack of nuance in the current literature on SAD as it manifests across different cultures. A closer look into the cultural differences of SAD is warranted to shed more light on this phenomenon.

**Cultural Differences in Social Norms and Interactions**

There are many reasons proposed for the higher level of experienced social anxiety of participants from East Asian cultures compared to others. The primary one is the emphasis placed upon social relationships in collectivistic cultures such as Japan, China, and most other East Asian Cultures. *Collectivism* is defined as valuing group goals and group cohesion over personal goals and opinions, while *individualism* features a higher value placed upon personal independence (Shulruf, Hattie, & Dixon, 2007). As such, individuals from collectivistic cultures are more likely to define themselves by their relationship with others and the context in which they are placed, while individuals from an individualistic culture are more likely to define themselves by inherent traits that are context-independent.

In support of the theory that East Asian individuals define themselves primarily via social context, a cross-cultural study asked participants from the United States and Japan to come up with 40 statements describing themselves, the first 20 statements without context (“I am ____”)
and the second 20 statements when given a context (“At home, I am ____”). The results show when compared to US participants, Japanese participants more often defined themselves via social roles and behavioral attributes when not given a context (“I am a student”; “I am a son.”), and only turn to more abstract intrinsic descriptors (“I am diligent”; “I am lazy”) when given a context (Cousins, 1989).

Cousins theorize that these results show that Japanese individuals define their individuality within social contexts, as opposed to US individuals who define themselves independent of context and relationships; Hence while US individuals tend to act in accordance with their self-concepts independently of the social situation (“I am shy, hence I am shy in all situations”), Japanese individuals vary their behavior in accordance with the social context (“In school I am shy and subdued. With friends I am outgoing. With family I am…”; (Cousins, 1989). These findings are compatible with theories that state East Asian individuals are more likely to adapt to the social situation by “reading the air” and adjusting their behavior accordingly (Kitayama & Markus, 1991; Lau, Wang, Fung, & Namikoshi, 2014).

So in contrast to Western culture, where the explicit expression of one’s thoughts and desires, or the explicit request for what one wants from others, is seen as authentic and appropriate, those from East Asian cultures would typically view such expressions as being childish and immature (Kitayama & Markus, 1991). Rather, the “correct” way to interact with friends or acquaintance, is to gain knowledge the goals, needs, and preferences of the other through observation and to fulfill this goals without the other explicitly requesting a favor. In other words, anytime one is in a position to satisfy any of those goals, needs, or preferences, one would do so; this holds the underlying expectation that one’s own goals would be in turn fulfilled by the friend or acquaintance in time (Kitayama & Markus, 1991).
In conclusion, it is theorized that in East Asian cultures social interactions operates via mutual monitoring to ensure that each party member is contributing a roughly equal amount to the others (Kitayama & Markus, 1991). The importance of mutual monitoring in East Asian cultures have been supported in a study where participants from Japan and the United States were placed into 3-person task groups. It was found that when the group lacked opportunities for mutual monitoring and sanctioning, Japanese participants would exit from the group at a significantly higher rate than their US counterparts (Yamagishi, 1988). These findings are in line with Kitayama and Markus’ model of social interaction in East Asian cultures: for East Asian individuals, mutual monitoring is vital to the maintenance of a healthy relationship. Without an opportunity to monitor others, not only would the individual be unable to properly engage in social interactions, they would also run the risk of sinking resources into the relationship with no guarantee of later returns (Kitayama & Markus, 1991).

One consequence of the East Asian style of social interaction is low relational mobility. Relational mobility as a measure was first operationalized in 2007, and is used to refer to the perceived difficulty of moving between social groups (Yuki et al., 2007). One study on relational mobility and rejection sensitivity showed that as societies, Japan have less social mobility than the United States. In turn, this lack of social mobility correlated to Japanese participants being much more sensitive to rejection (Sato, Yuki, & Norasakkunkit, 2014; Triandis, 1989). Sato concluded that if an individual in Japan alienates their social group, it would be much more difficult for them to find a new social group to replace their old one, which would explain why Japanese participants report higher levels of rejection sensitivity and rejection based anxiety (Sato et al., 2014).
Furthermore, in 1989, before relational mobility was properly defined and operationalized, a cross-cultural meta-analysis done by Henry Triandis observed that collectivistic cultures have higher levels of outgroup bias resulting in less mobility between social groups (Triandis, 1989). Triandis supported his statement with data showing that collectivistic individuals are generally worse at meeting strangers than individualistic individuals, that the manipulation and exploitation of outgroups are particularly common in collectivistic cultures, and that collectivistic groups are more inclined to compete against outgroups even when competitiveness is shown to be mutually counterproductive (Triandis, 1989). All of this points to increased bias against out-group members in a collectivistic society, which would restrict relational mobility.

Given all the reasons listed in this section it would be easy to see why East Asian individuals would report higher levels of experienced social anxiety. Not only do social context play a major part in an individual’s self-definition (Cousins, 1989), they also require high levels of emotional sensitivity and control, since one is always monitoring others while also being monitored by one’s peers. Furthermore, East Asian individuals would have a higher level of sunk cost into their social circles compared to Western individuals due to the system of mutual goal fulfillment (Kitayama & Markus, 1991) and the lower relational mobility in collectivistic cultures (Sato et al., 2014; Triandis, 1989).

**Cultural Protective Factors against SAD**

The last section attempted to explain why East Asians report higher amounts of experienced social anxiety than their Western counterparts. This section explores why individuals from East Asian cultures maintain a significantly lower incidence of SAD, as well as an uninfluenced social performance while experiencing high levels of social anxiety and distress.
One area that has been often explored on this topic is the differences in the coping mechanisms employed by East Asian individuals. While on a surface level, East Asians seem to employ similar coping mechanisms to stress as Western individuals, studies have shown that these “similar” mechanisms often lead to extremely different outcomes.

One coping mechanism that is shared between Eastern and Western cultures is emotional suppression. Emotional suppression has been shown in Western cultures to carry with it significant negative social and psychological effects, including disrupting communications with others, decreased experience of positive emotions, and increased experience of negative emotions (Butler et al., 2003; Gross & Levenson, 1997). However, further studies have shown that these negative outcomes are muted or non-existent for individuals from an East Asian background. A study has shown that for women with bicultural values (in this case, Western values and East Asian values) emotional suppression does not lead to a decrease in responsiveness in a conversation, while women who identified with European values had significantly decreased responsiveness while suppressing emotions (Butler, Lee, & Gross, 2007).

Studies have also shown that East Asian individuals engaged in emotional suppression not only avoid the social consequences of suppression that plague their European counterparts, they may also circumvent the physiological consequences as well. A study done in 2013 showed that while presented with unpleasant stimuli and instructed to engage in emotional suppression, EEG scans show that European individuals maintain a similar level of arousal to the European non-suppression group. On the other hand, East Asian individuals who engaged in emotional suppression displayed a significant decrease in arousal when compared to the East Asian non-suppression group (Murata, Moser, & Kitayama, 2013). These findings show that when East Asian individuals engage in emotional suppression, not only do they have a much lower level of
impairment compared to their European counterparts, they also manage to decrease their levels of physiological arousal, something that Euro-American individuals fail to do.

However, emotional suppression is hardly the most effective tool for reducing one’s experienced anxiety levels. Acceptance of one’s internal experiences is another key tool to consider. In a study done by Gong in 2016, 82 Chinese students were given a job interview task with different instructions for anxiety reducing strategies (including acceptance and suppression). All participants also filled out self-reported anxiety measures at four points of time before and after the interview task. The results show that acceptance was one of the most effective strategies at reducing experienced anxiety at all points of measurement, and the most effective at reducing anxious behavior during the filmed interview task (Gong, Li, Zhang, & Rost, 2016). These findings demonstrate acceptance’s superior effectiveness at reducing both experienced anxiety and anxious behavior when compared to emotional suppression, at least for East Asian individuals.

Furthermore, acceptance on a more generalized level may also enhance other emotional regulation strategies as well. For example, another cross cultural study found that within a cultural context that accepts and normalizes emotional suppression, emotional suppression does not correlate to negative social or psychological outcomes at all (Soto, Perez, Kim, Lee, & Minnick, 2011). Hence, it could be theorized that acceptance not only functions as an anxiety reducing strategy in of itself, it can also enhance the positive effects of other coping mechanisms as well. However, current literature is lacking in regards to how prevalent acceptance is in different cultures, as well as how acceptance of social anxiety disorders would influence negatives outcomes from high social anxiety. Many theories have proposed the connections between acceptance and positive outcomes, and between acceptance and culture, but there is a
lack of empirical data specifically mapping out the relationship between the three factors. In the following sections the current literature on culture, acceptance, and negative outcomes would be explored.

Acceptance’s Role in Anxiety Reduction

Before delving any deeper into the literature on acceptance, the term “acceptance” must be defined. For the purpose of this study there’s two major areas of acceptance: Acceptance of others and self-acceptance. Acceptance of others has been defined as something extremely similar to a therapeutic acceptance, which is that of “tolerance of all aspects of the client, as manifested by the adoption of a ‘baseline’ attitude of consistent, genuine, noncritical interest” (Block-Lerner, Wulfert, & Moses, 2009). Of course, a more generalized definition of the acceptance of others would not require the amount of interest and engagement required in an accepting therapeutic relationship, but the general principles of tolerance and a “baseline” level of interest would still hold. Acceptance of self, which in this case also includes acceptance of one’s own emotions, has been defined in modern therapy as “allowing thoughts to come and go without struggling with them” (Hayes & Lillis, 2012). For the purposes of this paper, we will only be discussing self-acceptance.

The central role that acceptance may play upon anxiety reduction is highlighted in Acceptance and Commitment Therapy (ACT), which was developed by Steven Hayes as part of the “third wave” behavioral treatments for anxiety and mood disorders. One of the treatment components of ACT involves having patients observe and accept their anxieties and fears in order to live a valued life (Hayes & Lillis, 2012). According to Hayes, anxiety itself is not what causes anxiety disorders. Instead, it is the patient’s own rejection of anxiety and constant struggle
to “think the right thoughts” that causes most of the impairment and distress seen in clinical examples of anxiety disorders.

A common metaphor used by ACT proponents to describe anxiety this dynamic is the “tug of war” metaphor, in which the anxious individual is engaging in a never ending tug of war with their own anxiety. In the metaphor, many clinically anxious individuals strain continuously against their own anxious feelings, hoping to win it and then move on with their live in the absence of anxiety. However, the tug of war is fundamentally unwinnable, and most anxious individuals find themselves in an exhausting stalemate with their own anxiety while life moves on without them, provoking even more distress within them (Hayes & Lillis, 2012).

With that metaphor in mind, ACT proposes to its patients that they should “let go of the rope” and allow anxiety to run its course without fighting it. ACT claims that by accepting anxiety with willingness, pathologically anxious individuals can instead focus upon finding what they truly value in life, and commit themselves to living a life in accordance to those values rather than wasting time in the fight against anxiety (Hayes & Lillis, 2012). Studies have shown that ACT is efficacious in treating common mental disorders (Hacker, Stone, & MacBeth, 2016), with some studies yielding similar success rates as Cognitive Behavioral Therapy (CBT), which is held as the “Golden Standard” for treating anxiety disorders (Arch et al., 2012). While ACT’s success in treating anxiety disorders cannot be fully attributed to the effects of self-acceptance, it remains the case that self-acceptance is one of the cornerstones of ACT therapy and is likely be a crucial element in ACT’s success.

ACT is not the first psychological treatment to incorporate acceptance. A meta-analysis looking at various Western psychological treatments concluded that many of the approaches, such as Freud’s psychoanalysis and modern cognitive behavioral therapy (CBT) include aspects
of acceptance in its theory (Block-Lerner et al., 2009). Furthermore, a few other therapies such as dialectal behavioral therapy (DBT) and mindfulness-based cognitive therapy (MBCT) explicitly given acceptance a position of high import within their theories (Block-Lerner et al., 2009). Hence, acceptance can be assumed to be a major component in reducing anxiety and lessening negative life outcomes.

Based on the literature upon both acceptance and SAD, it may be that the acceptance of social anxiety can prevent the self-fulfilling prophecy that characterizes many cases of SAD. If someone accepts that social anxiety is natural, and that there is nothing abnormal in experiencing social anxiety, their experienced distress would not necessarily translate into negative self-concept, nor would it necessarily cause any impairment to their social performance. Functionally, by accepting their experienced social anxiety, the individual would prevent the self-fulfilling prophecy from happening, and prevent themselves from being impaired by social anxiety. In the next section the focus will return to East Asian society, and whether or not self-acceptance of experienced social anxiety can be seen as a key protective factor for East Asian individuals against SAD.

**Acceptance of Social Anxiety in East Asian Society**

The concept of acceptance has appeared many times throughout East Asian cultures, from the way Buddhism emphasizes acceptance and transcendence as a mean to end suffering (David, Lynn, & Das, 2013), to this quote from the Taoist work Zhuangzi: The Basic Writings: “To recognize what can’t be helped and accept it calmly as if it were fate (ming) – only a man of virtue can manage this.” (Zhuangzi & Watson, 2003). It can be seen that the acceptance of the unchangeable aspects of one’s situation and environment is seen as a desirable thing and has a major role in shaping East Asian culture through its religions and philosophies. In addition to
that, acceptance may fill in a central role for developing a protective buffer against anxiety disorders for East Asian individuals.

Acceptance of social anxiety may be the natural consequence of how social interaction is structured in East Asian collectivistic society. As mentioned above, the general consensus within cross cultural studies agree that social cohesion is much more important in East Asian societies compared to Western societies (Shulruf et al., 2007), while other studies have shown that the lack of relational mobility means that individuals from an East Asian country would have a harder time replacing relationships they lose (Sato et al., 2014; Triandis, 1989).

Furthermore, due to the system of mutual monitoring, the “proper” method of social interactions within East Asian society is far more observation-based, then expression-based. This means that in a when someone speaks to an acquaintance in East Asian cultures, the responsibility usually lies upon the listeners to observe the speaker and understand what he/she wants. This stands in contradiction to most Western societies, in which it is the speaker’s responsibility to express himself/herself in a way that can be easily understood by the listener (Kitayama & Markus, 1991). Due to this heavy reliance upon observation rather than expression, smooth social exchanges between individuals in an East Asian culture would rely more heavily upon familiarity between the interacting individuals when compared to those in Western cultures. This reliance may be one of the underlying mechanisms for the lack of relational mobility, as any social interactions between strangers would be highly rigid and uncomfortable as neither party is familiar with the mannerisms of the other.

While a well maintained social network is high valued across cultures, it may be that East Asian individuals are under much more stress to maintain their social networks due to how hard it is to replace if lost. As such, it may be seen as normal to feel high levels of social anxiety in an
East Asian culture, just as it would be seen as normal to feel high levels of anxiety while signing a house mortgage in a Western culture. If it is true that East Asian individuals see experienced social anxiety as normal, it would follow these experiences would not translate into negative beliefs about the self, stopping the self-fulfilling prophecy of SAD before it even starts.

Furthermore, in East Asian society where experienced social anxiety is highly prevalent, it may be that individuals would have an easier time finding someone in their social circle to relate to in terms of experiencing social anxiety, and enjoy more social support from their friends and family. Moreover, since experienced social anxiety is more normative within East Asian society, it would logically follow that society at large would be more accepting of experiencing social anxiety. Given this, socially anxious individuals would find social support readily assessable, preventing them from feeling guilty about being socially anxious and forming a protective buffer against SAD.

**Current Study**

The current study seeks to examine a simple model of the interactions between culture, experienced social anxiety, acceptance of experienced social anxiety, and negative outcomes such as depression, high interpersonal problems, and high impairment (As illustrated in Figure 1). Specifically, this model predicts that the acceptance of social anxiety would moderate the relationship between social anxiety and impairment, interpersonal problems, and depression, while culture will predict acceptance of social anxiety.

Three hypotheses will be tested:

(1) Participants from East Asian cultures will be more accepting of social anxiety compared to participants from Euro-American cultures.
(2) Experienced social anxiety will predict higher levels of “negative outcomes”, including impairment, depression, and interpersonal problems.

(3) Acceptance of social anxiety will moderate the relationship between experienced social anxiety and negative outcomes such that higher levels of acceptance would weaken this association.

Methods

Procedure & Participants

Participants were recruited from Amazon Mechanical Turk’s service and asked to complete a set of self-report measures administered using Qualtrics software. The sample included 670 adults living in the United States or Canada. 5 participants were then excluded from the final analysis due to completing the survey in less than 120 seconds (2 minutes). While attention check items were implemented upon launch of the survey, they were soon found to be of questionable validity, and were quickly excluded from the study. All participants were compensated 50 cents upon completion of the survey.

Measures

Social Interaction and Anxiety Scale (SIAS). The SIAS is a 20 item scale measuring social anxiety. Items included statements such as “When mixing socially, I am uncomfortable”, which participants rate on a Likert scale of 0 (“Not at all”) to 4 (“Extremely characteristic”) (Mattick & Clarke, 1998). In 1997, a review upon the validity of SIAS was conducted. The results find that SIAS has a high sensitivity to SAD and, unlike many other measures for social anxiety, it can differentiate between SAD and other anxiety disorders such as agoraphobia and panic disorder (Brown et al., 1997). Furthermore, the SIAS has high internal consistency.
(Cronbach’s alpha > 0.90) and a high test-retest reliability (r > 0.91) (Mattick & Clarke, 1998; Peters, Sunderland, Andrews, Rapee, & Mattick, 2012).

**Social Anxiety- Acceptance and Action Questionnaire (SA-AAQ).** The SA-AAQ is a 19 item scale including statements such as “Despite feeling socially anxious at times, I am in control of my life”; which participants rate on a Likert scale between 1 (“Never true”) to 7 (“Always true”). The measure was developed in 2010 by MacKenzie and Kocovski, and is intended to measure acceptance of social anxiety symptoms. Upon creation of the measure, the SA-AAQ was also tested for internal reliability and demonstrated a reasonable high level of reliability (Cronbach’s alpha = 0.94), (MacKenzie & Kocovski, 2010).

Furthermore, the SA-AAQ is a valid measure for acceptance of social anxiety symptoms, and is far more sensitive to acceptance of social anxiety than most other self-acceptance measures. Analysis also showed that the SA-AAQ had a much lower correlation to measures of social anxiety compared to the correlations within the various social anxiety measures, showing that the SA-AAQ is not merely a measure of social anxiety (MacKenzie & Kocovski, 2010).

**Sheehan Disability Scale (SDS)** The SDS was developed by Sheehan and is meant to measure an individual’s impairment in terms of work, social, and family life (Sheehan, 1983). Participants are asked to rate on a scale of 0-10 how much their symptoms have disrupted their work/academics, social life, and family life. Two additional more items ask how many days in the last week was the person underproductive or absent from school or work due to their symptoms.

While originally designed to measure impairment levels for psychiatric disorders such as SAD, depression, panic disorder, and alcohol dependence (Sheehan, 1983), SDS have also been tested to measure impairments levels from other disorders, such as bipolar disorder (Arbuckle et
al., 2009), ADHD (Coles, Coon, DeMuro, McLeod, & Gnanasakthy, 2014), and pathological gambling (Hodgins, 2013). Within those studies, SDS has shown a high level of internal reliability (Cronbach’s = 0.79 - 0.91) (Coles et al., 2014).

**Inventory of Interpersonal Problems (IIP)** There are three versions of the IIP: The full length IIP, with 127 items, the IIP-64, with 64 items, and the IIP-32, with 32 items. All of the three includes items such as “It is hard for me to feel close to others” and “It is hard for me to give a gift to another” that participants would have to rate on a Likert scale between 0 (“Not at all”) to 4 (“Extremely”) (Alden & Taylor, 2004; Horowitz, Rosenberg, Baer, Ureño, & Villaseñor, 1988; Soldz, Budman, Demby, & Merry, 1995) The current study would be using the IIP-32.

Interpersonal problems as measured by the IIP-32 are divided into 8 subscales, with 4 items attributed to each subscale: (1) Domineering/Controlling (Cronbach’s alpha = 0.73); (2) Vindictive/Self-centered (Cronbach’s alpha = 0.77); (3) Cold/Distance (Cronbach’s alpha = 0.85); (4) Socially inhibited (Cronbach’s alpha = 0.86); (5) Nonassertive (Cronbach’s alpha = 0.87); (6) Exploitable (Cronbach’s alpha = 0.81); (7) Overly Nurturing (Cronbach’s alpha = 0.75); and (8) Intrusive/Needy (Cronbach’s alpha = 0.70) (Hopwood, Pincus, DeMoor, & Koonce, 2008).

In 2008 Hopwood et al. conducted a brief study comparing the effectiveness of IIP-32 when compared to the IIP-64, a longer version of the IIP, in American college students. Apart from a lower internal consistency, which was expected due to the brevity of the scales, the IIP-32 performed just as well as the IIP-64 when it came to validity and reliability in college students (Hopwood et al., 2008).
Beck’s Depression Inventory 2nd Edition (BDI-II). The Beck’s Depression Inventory (BDI) was first developed in 1961, with the second edition (BDI-II) being published in 1971 (Beck, Steer, & Carbin, 1988). The second edition includes 21 items measuring various aspects of depression, including negative affect, absence of positive affect, and anhedonia. In 1988, Beck conducted a meta-analysis upon the BDI and the BDI-II, concluding that the BDI-II has a high validity, reliability (Cronbach’s alpha = 0.73-0.92), and sensitivity towards differentiating psychiatric and non-psychiatric patients (Beck et al., 1988).

However, Beck did find that some demographic characteristics, such as gender, race, and education, significantly influence the intensity of depression as measured by the BDI-II (Beck et al., 1988). However, these demographic influences over BDI’s results have been quite steady throughout the usage of the BDI, showing that the differences in results should be interpreted as gender and cultural differences in experienced depression, rather than any failings on the part of the measure itself (Beck et al., 1988).

Results

Preliminary Analysis

The final sample included 296 Caucasian participants (130 Male; 171 Female) and 369 East Asian participants (198 Male; 171 Female). Within the East Asian participants, there were 143 first generation immigrants, and 226 second generation immigrants. The mean age of the entire final participant sample was 35 years old, the mean age of Caucasian participants were 40 years old, and the mean age of the East Asian participants were 30 years old.

Table 1 shows the means, SD, and range for all variables measured. The data indicate that a high amount of the participants would qualify for some level of social phobia diagnosis (32 < SIAS score < 42), and some of them would also be deemed as suffering from traditional social
anxiety (SIAS score > 42). Most of the participants did not score high on the BDI-II, although there 103 of the participants scored within the range of “major depression” in the BDI-II (29< BDI score < 63).

A series of t-tests was conducted between the Caucasian and East Asian participants on the SIAS, SDS, IIP-32, and BDI-II scores (See Table 2). As expected, East Asians (M = 35.75, SD = 17.91) scored higher than Caucasians (M = 31.84, SD = 20.65) on our measure of social anxiety, \( t (663) = -2.571, p < 0.01 \). Unexpectedly, the East Asian group (SDS: M = 12.01, SD = 7.19; IIP: M = 50.33, SD = 26.73) experienced higher disability and interpersonal problems than the Caucasian (SDS: M = 9.81, SD = 7.75; IIP: M = 40.15, SD = 29.69), SDS: \( t (661) = -3.777, p < 0.01 \); IIP-32 \( t (663) = -5.103, p < 0.01 \). There was no significant difference in depression between the two groups. Within the East Asian sample, years stayed in the US or Canada did not affect the relationship between the SIAS score and any of the output variables (SDS, IIP-32, BDI-II).

**Partial Correlation between Culture and Acceptance**

We used a partial correlation to determine if culture predicted of SA-AAQ scores, controlling for baseline levels of social anxiety. Unexpectedly, being from an East Asian culture was negatively correlated with SA-AAQ score (\( r = -0.193, n = 665, p < 0.01 \)).

**Main effect for Social Anxiety and Moderation effect of Acceptance**

We used a multiple regression framework to find out whether acceptance of social anxiety moderated the relationship between social anxiety and negative outcomes. Our model included the main effects of social anxiety and acceptance of social anxiety, as well as an interaction term, which was calculated by centering the SIAS and SA-AAQ scores and creating
the cross product. This main effects and the cross product was then entered into separate regression models for the SDS, SDS social scale, IIP-32, and BDI-II.

For the SDS, the results indicated that the main effects of the two predictors had significant effects upon SDS ($\Delta R^2 = 0.703$, $\Delta F(2, 632) = 0.748$, $p = 0.478$), with both social anxiety ($B = 0.271$, $r = 0.695$, $p < 0.01$) and acceptance of social anxiety ($B = -0.471$, $p < 0.01$) having a significant effect. However, contrary to expectations, the interaction variable led to no significant variance ($\Delta R^2 = 0.00$, $\Delta F(1, 631) = 0.505$, $B = 0.00$, $t = -0.71$, $p = 0.478$), with the similar results being found for the SDS social scale ($\Delta R^2 = 0.00$, $\Delta F(1, 627) = 0.075$, $B = -4.359E-005$, $t = -0.274$, $p = 0.784$). (For stats on SDS, see Table 3)

For interpersonal problems, the main effect of the two predictors had a significant effect ($\Delta R^2 = 0.834$, $\Delta F(2, 636) = 726.12$, $p < 0.01$), with both social anxiety ($B = 10.32$, $r = 0.757$, $p < 0.01$) and acceptance of social anxiety ($B = -0.915$, $r = 0.702$, $p < 0.01$) having a significant effect. While the interaction between the two predictors led to significant variance for the IIP-32 scores ($\Delta R^2 = 0.004$, $\Delta F(1, 635) = 7.948$, $B = 0.004$, $t = 2.819$, $p = 0.005$), the direction of the moderation effect was opposite to what was hypothesized (Chart 1) (Stats on Table 4)

For the BDI-II scores, the main effect of the two predictors had a significant effect ($\Delta R^2 = 0.337$, $\Delta F(2, 636) = 161.559$, $p < 0.01$), with both social anxiety ($B = 0.349$, $r = 0.514$, $p < 0.01$) and acceptance of social anxiety ($B = -0.347$, $r = 0.533$, $p < 0.01$) having a significant effect on depression. The interaction effect between the two predictors also led to significant variance in the theorized direction for the BDI scores ($\Delta R^2 = 0.09$, $\Delta F(1, 635) = 8.455$, $B = -0.96$, $t = -2.908$, $p = 0.04$) (Chart 2) (Stats on Table 5)

Discussion

Main Findings
We found mixed support for our hypotheses. Contrary to what was hypothesized, East Asian participants demonstrated significantly less acceptance of social anxiety compared to their Caucasian counterparts. As expected, social anxiety was associated with higher impairment, interpersonal problems, and depression for both Caucasian and East Asian participants, and acceptance was associated with less severity on all of these outcomes. Also as expected, acceptance of social anxiety moderated the relationship between social anxiety and interpersonal problems, and the relationship between social anxiety and depression. Acceptance also moderated the relationship between social anxiety and interpersonal problems, but in an unanticipated direction. No significant moderation effect was found for the relationship between social anxiety and impairment.

The finding that East Asian participants were significantly less accepting of experienced social anxiety than Caucasian participants directly contradicted our first hypothesis. It could be that East Asians employ other coping strategies in regards to their higher social anxiety, such as repression. Furthermore, this finding does not contradict the fact that East Asian cultures place more stress upon acceptance than Western cultures; simply because a culture places more value in a particular attribute does not mean that individuals from said culture would possess this attribute at higher levels than those from other cultures.

The finding that experienced social anxiety has a positive correlation with impairment, interpersonal problems, and depression is congruent with our hypotheses and existing literature, as is the finding that acceptance moderates the effects of social anxiety upon depression. While acceptance did have a moderator effect upon interpersonal problems, the moderator effect was opposite to what we hypothesized. However, it should be noted that the main effect of social anxiety and acceptance upon interpersonal problems was still significant, and that while
AN EXPLORATION ON THE EFFECTS OF CULTURE, ACCEPTANCE AND SOCIAL ANXIETY

individuals with higher levels of acceptance and higher levels of anxiety experienced a larger increase in interpersonal problems compared to the non-accepting participants, they still suffer from lower levels of interpersonal problems.

We failed to find a significant moderation effect for acceptance of social anxiety upon the relationship between experienced social anxiety and impairment of social life. This finding is seemingly contradictory to ACT literature, as ACT predicts that acceptance of social anxiety should alleviate the negative outcomes of social anxiety. However, this may imply that, within the context of ACT, acceptance of social anxiety may increase global functioning by decreasing symptoms of comorbid disorders, rather than tackling the primary symptoms first hand.

It may be that acceptance of experienced social anxiety does not directly influence impairment stemming from social anxiety, but rather lessens the general negative outcomes from social anxiety by decreasing comorbid symptoms. The finding that acceptance of social anxiety has a significant moderation effect upon interpersonal problems and depression supports this view, as acceptance of social anxiety lessened the effects of depression. This explanation is also congruent with the findings that ACT has a similar rates of treatment success as CBT; it can be reasonably speculated that the reduction of comorbid symptoms for SAD would entail a certain degree of success in treatment.

Additional Findings

Our findings that East Asians scored significantly higher on interpersonal problems and impairment was inconsistent with past research, which suggests that despite significantly higher levels of self-reported social anxiety, East Asians have similar levels of negative outcomes compared to their Caucasian counterparts. However, this finding does not directly contradict the findings and implications of the experiments literature, such as experiments run by Gong, Butler,
and Okazaki (Butler et al., 2007; Gong et al., 2016; Okazaki et al., 2002). All three of these experiments measured variations on short-term social performances in a specific laboratory task. In these studies, participant’s performances are rated and coded by raters who have presumably never met these participants in the past. As such, while these experiments would be able to indicate how well participants performed social tasks under stress, they may not provide a good representation of how well the participants would perform when interacting with more long-term friends and acquaintances while experiencing social anxiety.

Although the data indicates that East Asian participants suffer from a significantly higher level of social impairment and interpersonal problems than their Caucasian counterparts, it should also be noted that they did not score significantly different on the BDI. Hence this may indicate that we should view the past findings in which East Asians were found to have higher levels of social anxiety and lower SAD diagnoses in a different light. Due the significantly higher levels of interpersonal problems and impairment reported by our East Asian participants, it can be speculated that a lack of impairment is not the major reason for a lack of SAD diagnoses. Instead, our findings imply that while East Asians suffer from a higher level of impairment and interpersonal problems due to social anxiety, they may not suffer as much distress, as indicated by the lower depression score while controlling for social anxiety. It may be that East Asians simply do not feel as distressed by social anxiety, and hence do not feel the need to seek a diagnosis and treatment.

**Strengths and Limitations**

The current study is one of the first to look into the effects of self-acceptance of symptoms as a moderator to impairment. It is also one of the first to look at the cross-cultural differences in social anxiety and attempt to explain it via acceptance. The findings have shed a
bit of light upon how culture interacts with acceptance of social anxiety, and upon some of the
details of how acceptance alleviates the deleterious effects of social anxiety.

Limitations of this study include the typical issues of online anonymous self-report
studies. Due to the fact that the surveys were filled in online anonymously, it is unclear whether
participants would be completely honest in their responses. Furthermore, as with many self-report
studies, unconscious biases and self-serving biases may have been a confounding factor as well. Cultural bias was also not controlled for during data analysis, which may have been another
confounding factor.

Implications and Future Research Directions

The findings for this research raises interesting implications in regards to the effects of
acceptance and cross-cultural differences in social anxiety. In terms of acceptance, our findings
for the moderation effect of acceptance would seem to indicate that acceptance as a coping
strategy against social anxiety does not influence direct impairments suffered via social anxiety
itself, but significantly decreases comorbid symptoms such as depression, acting like “damage
control” in regards to stressors.

However, this also raises the problem when one takes into account that acceptance of
social anxiety moderated the effects of social anxiety upon interpersonal problems (albeit in the
opposite direction from our hypothesis) but not the self-reported levels of impairment in social
life. Problems in one’s interpersonal relationship is one of the most salient aspects of an impaired
social life, but our data seems to imply a significant difference between measured by the SDS
social life item, and interpersonal problems, as measured by the IIP-32. A more in depth study
upon the differences between these two measures should be conducted.
Assuming that the difference in moderation effect is not a byproduct of the measures themselves, these findings may point at future research upon the exact effects of acceptance based therapy for anxiety disorders. If acceptance as a coping strategy has no significant effect on direct impairment, but improves global functioning and decreases distress by alleviating comorbid symptoms, one may wonder what this implies for the application of acceptance-based therapies in a clinical setting. Future research on the exact effects of acceptance upon anxiety disorders is needed.

On the cultural front, the data from this study indicates that despite suffering from a significantly high level of social anxiety, East Asian individuals do not differ significantly from their Western counterparts in terms of depression. This indicates that while individuals from East Asian cultures do not have a complete protective buffer as implied by the cross cultural meta-analyses, there is still a protective factor that lessens the impact of experienced social anxiety upon depression. Whether this protective factor is only for depression, or can be extended to other common comorbid symptoms is yet to be seen.

Furthermore, the current study only gathered East Asian immigrants who can read English as participants, so it would be questionable whether any conclusions and speculations gathered from the data can be applied for non-immigrants currently living in an East Asian society. Future studies should aim to explore the cross-cultural effects in terms of long term distress and impairment in Caucasians, immigrants from East Asian cultures, and individuals from East Asian cultures living in East Asia.

**Concluding Comment**

While the present study did not establish a connection between culture and acceptance of social anxiety as hoped, it still shed further light upon the SAD diagnosis through a cross cultural
perspective, especially balancing the emphasis upon “distress” vs “impairment” when it comes to the SAD diagnosis. Additionally, this study is amongst the first to explore the specific effects of self-acceptance of experienced social anxiety upon negative outcomes. Despite the well-established literature surrounding the effects of acceptance upon generalized anxiety and other negative emotions, most of the literature is focused upon societal acceptance or peer acceptance. Studies of self-acceptance have increased with the advent of ACT, but most of those studies are focused upon the effects of acceptance upon anxiety disorders in general. Literature is lacking on the effects of acceptance of experienced social anxiety upon SAD, an empty spot that the author hope would soon be filled.
References


https://doi.org/10.1001/archpsyc.1994.03950010008002


Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. Editor’s note: This article was written before the development of some contemporary measures of social phobia, such as the Social Phobia and Anxiety Inventory (Turner et al., 1989). We have invited this article for publication because of the growing interest in the scales described therein. S.T. *Behaviour Research and Therapy, 36*(4), 455–470. https://doi.org/10.1016/S0005-7967(97)10031-6


Appendix

Figure 1:
Table 1: Statistics for all collected variables

<table>
<thead>
<tr>
<th></th>
<th>Social Anxiety</th>
<th>Acceptance</th>
<th>Impairment</th>
<th>Interpersonal Problems</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>34.02</td>
<td>85.18</td>
<td>11.03</td>
<td>45.80</td>
<td>13.37</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>19.26</td>
<td>20.14</td>
<td>7.52</td>
<td>26.26</td>
<td>13.10</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>80.00</td>
<td>102.00</td>
<td>30.00</td>
<td>128.00</td>
<td>58.00</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>.00</td>
<td>25.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>80.00</td>
<td>127.00</td>
<td>30.00</td>
<td>128.00</td>
<td>58.00</td>
</tr>
</tbody>
</table>

Note: SD = Standard Deviation

Table 2: T-test results between Culture

<table>
<thead>
<tr>
<th></th>
<th>Caucasian</th>
<th>East Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Social Anxiety</td>
<td>31.84</td>
<td>20.65</td>
</tr>
<tr>
<td>Impairment</td>
<td>9.81</td>
<td>7.75</td>
</tr>
<tr>
<td>Interpersonal Problems</td>
<td>40.15</td>
<td>29.69</td>
</tr>
<tr>
<td>Depression</td>
<td>12.44</td>
<td>0.74</td>
</tr>
</tbody>
</table>

**p < 0.01

Note: M = Mean, SD = Standard Deviation
Table 3: Predictor variables for impairment

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Anxiety</td>
<td>0.271</td>
<td>0.695**</td>
</tr>
<tr>
<td>Acceptance</td>
<td>-0.29</td>
<td>0.777**</td>
</tr>
<tr>
<td>Social Anxiety x Acceptance</td>
<td>0.00</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

**p ≤ .001

Table 4: Predictor variables for interpersonal problems

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Anxiety</td>
<td>1.032</td>
<td>0.757**</td>
</tr>
<tr>
<td>Acceptance</td>
<td>-0.915</td>
<td>0.702**</td>
</tr>
<tr>
<td>Social Anxiety x Acceptance</td>
<td>0.004</td>
<td>0.836**</td>
</tr>
</tbody>
</table>

**p ≤ .001

Table 5: Predictor variables for depression

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Anxiety</td>
<td>0.349</td>
<td>0.514**</td>
</tr>
<tr>
<td>Acceptance</td>
<td>-0.347</td>
<td>0.533**</td>
</tr>
<tr>
<td>Social Anxiety x Acceptance</td>
<td>-0.03</td>
<td>0.588**</td>
</tr>
</tbody>
</table>

**p ≤ .001
AN EXPLORATION ON THE EFFECTS OF CULTURE, ACCEPTANCE AND SOCIAL ANXIETY

CHART 1

- High acceptance
- Low acceptance

INTERPERSONAL PROBLEMS

SOCIAL ANXIETY

LOW SOCIAL ANXIETY

HIGH SOCIAL ANXIETY

CHART 2

- High Acceptance
- Low Acceptance

DEPRESSION

SOCIAL ANXIETY

LOW SOCIAL ANXIETY

HIGH SOCIAL ANXIETY