Classic vs. Contemporary Comparisons and Considerations of Shyness: Some Recollections, Replications, and Reflections on the Major Findings of the Stanford Survey on Shyness 40 Years Later

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The classic research on shyness was established when Zimbardo, Pilkonis, and Norwood (1974, 1975) reported, among their many results from the Stanford Survey on Shyness (SSS), that approximately 40% of individuals surveyed reported being shy. Forty years after this groundbreaking research, and in the spirit of the contemporary emphasis in the psychological sciences on the importance of replication research (cf., Asendorpf et al., 2013; Vazire & Lucas, 2015), the purpose of the present study was to examine some of the basic findings from this classic research forty years later in an attempt to monitor any possible changes in the personal and situational pervasiveness of shyness. More specifically, in the present study, the responses of the original groups of shy young adults (OS) who completed the SSS in the mid 1970s were compared to those of a group of contemporary shy young adults (CS) who completed the SSS after 2000. Compared to the OS, the pattern of results indicated an increase in the percentage of CS who considered themselves to be presently shy, identified themselves as dispositionally shy (i.e., past, present, and/or always shy), and say strangers and certain authority figures make them feel shy. To help understand this rise in shyness, a possible explanation linking shyness with problematic use of text-based digital communication systems and a diminished capacity for developing basic conversational skills, along with suggestions for promoting such conversational skills, is discussed. Suggestions for future research include addressing issues of replication, documentation of developmental changes, and cross-cultural considerations of the nature and underlying processes of shyness to help understand how shy individuals experience and respond to their shyness.

Key words: replication, replicability, shyness, digital communication, cross-cultural research

Within the last forty years, the contemporary literature on shyness represents a steady progression of development characterized by an increasing level of theoretical, methodological, and clinical sophistication. Early investigations into the study of shyness took a clinical approach by emphasizing psychoanalytical explanations of shyness (Hampton, 1927; Lewinsky, 1941). The
impetus for a more empirical and systematic study of shyness was provided in the mid 1970’s by Zimbardo and his colleagues with the development of the Stanford Survey on Shyness as part of the Stanford Shyness Project (Zimbardo, Pilkonis, & Norwood, 1974). Zimbardo and his colleagues investigated the self-reported degree of and personal experiences with shyness using the survey method. A major finding of this survey approach was the rather pervasive nature of the self-reported experience of shyness. Some of the major findings included 42 percent of the individuals considered themselves to be presently shy, more than 80 percent reported that they were shy at some point in their lives while only about 7 percent of the respondents reported that they had never, ever experienced feeling of shyness. Such findings created national and international attention when appearing in the Psychology Today article titled “The Social Disease Called Shyness” (Zimbardo, Pilkonis, & Norwood, 1975) and Zimbardo’s (1977) best-selling trade book titled Shyness: What It Is, What to Do About It.

This early survey work served to stimulate a more systematic approach to investing the construct of shyness. Since there was not a psychometrically established measure of shyness, early experimental research attempting to investigate the construct validity of shyness as conceptualized by Zimbardo and his colleagues used specific questions from the Stanford Survey on Shyness to select groups of individuals who were then exposed to various experimental conditions. By comparing selected groups of individuals who varied in their degree of shyness, these early experimental studies utilized actual or anticipated interactions with other individuals, while assessing various verbal and non-verbal responses and behavioral and cognitive measures. The results of these controlled studies provided evidence supporting the construct validity of shyness as a tendency to reduce social participation (Carducci & Webber, 1979; Hatvany & Zimbardo, 1977; Pilkonis, 1977a, 1977b; Souza e Silva, 1977).

An early major development in the construct validation of shyness was the construction and initial validation of the original 9-item Cheek and Buss Shyness Scale (Cheek & Buss, 1981), along with the subsequent 13-item (Cheek, 1983) and 20-items (Cheek & Melchior, 1985) Revised Cheek and Buss Shyness Scale (RCBS). Additional developments in this area of shyness included Buss’ early attempts to help identify the underlying dynamics and correlates of shyness while also serving to distinguish it from other related constructs in his book titled Self-Consciousness and Social Anxiety (Buss, 1980). The establishment of a psychometrically valid measure of shyness, supported by a more clear conceptualization of shyness, served to help stimulate even more systematic interest in the study of shyness by focusing on an assortment of theoretical, conceptual, and empirical issues, including the nature and structural component of shyness, different types of shyness, contributing factors to the expression of shyness (e.g., biological and cultural factors), developmental expressions of shyness across the life course, private and public expressions of shyness, related constructs to shyness, and early therapeutic approaches to dealing with shyness, to name just a few. A significant development in this regard was a summary of the major findings to date on the study of shyness appearing in the publication of an edited volume titled Shyness: Perspectives on Research and Treatment (Jones, Cheek, & Briggs, 1986), along with the
incorporation of some of these major findings into the publication of Cheek’s (1989) popular press trade book in the self-help genre titled *Conquering Shyness: The Battle Anyone Can Win*.

In recognition of the 20th anniversary of the 1975 groundbreaking publication of the *Psychology Today* article on shyness, Carducci and Zimbardo (1995) published an article in *Psychology Today* titled “Are you Shy?,” which was designed to provide to the general public a summary of the major developments in the study of shyness since the 1975 article. As was the case with the original article, this article served to raise an increase in the topic of shyness among academics, clinical professionals, the media, and the general public. A significant event to occur during this time was the first ever International Conference on Shyness and Self-Consciousness held in July 1997 at Cardiff University in Cardiff, Wales. When describing the significance of this conference in his edited book based on the conference, Crozier (2000, p. xvi), the principal organizer of the conference, notes, “The conference confirmed that there was exciting research into shyness being carried out from a range of perspectives and the intense international media interest showed that shyness is widely regarded as a fundamental and intriguing aspect of social experience.” An important consequence of this conference was an edited volume by Crozier (2000) with contributions from presenters at the conference and other researchers and clinical practitioners from around the world representing topics reflecting the theoretical, clinical, and social developments of shyness in an ever-changing world. Such topics reflecting these contemporary developments included advancements in the biological basis of shyness, the interpersonal expressions of shyness in close and social relationships, and the potential impact of the internet and other technical advancements on shyness, to name a few. Also emerging at this time was a greater emphasis on helping to distinguish the construct of shyness from other more clinically related expressions of anxiety, such as social phobia and social anxiety (cf., Crozier and Alden, 2001; Hofman & DiBartolo, 2001). These and some of the other major findings to date in the study of shyness were incorporated into the publication of Carducci’s (2000a) popular press trade book in the self-help genre titled *Shyness: A Bold New Approach*.

Entering into its third decade, the sustained interest in the study of shyness continued to evolve. A major area of development continued to be a more clear distinction between expressions of anxiety related to shyness and those characteristic of more serious psychiatric conditions, such as social anxiety and social anxiety. A major social issue associated with this evolvement was a concern regarding the medicalization of shyness (Lane, 2007; McDaniel, 2003). More specifically, in his book titled *Shyness: How Normal Behavior Became a Sickness*, Lane (2007) notes the emerging controversy regarding the medicalization of shyness by the pharmaceutical industry in its attempts to link it with more serious psychiatric conditions, such as social anxiety disorder and social phobia, as a marketing strategy in order to increase the sales of those prescription drugs based on selective serotonin reuptake inhibitors (SSRIs) by emphasizing their potential benefits to treat feelings of anxiety associated with expressions of shyness. Efforts to help refine and clarify this distinction for both conceptual (cf., Henderson & Zimbardo, 2010) and therapeutic
(Crozier & Alden, 2009; Henderson, 2011) reasons continue to evolve. Within the boundaries of more normal dimensions of personality, a more recent, although much less controversial, conceptual concern has been raised to help make the distinction between “introversion” and “shyness” by Cain’s (2013) best-selling trade book in the self-help genre titled *Quiet: The Power of Introverts in a World That Can’t Stop Talking*.

Programmatic research over the years has resulted in many advances being made in terms of theoretical refinements, methodological sophistication, and therapeutic developments in the study of shyness. In addition to contributing to the changes in theory, research, and treatments, another important element of programmatic research is the replication of basic findings in a particular area (Aronson, Brewer, & Carlsmith, 1985). The replication of major findings in an area of study serves to strengthen confidence in the previous results (Hendrick, 1990; Rosenthal, 1990) and guarantees that these outcomes are not linked to a particular historical context (Gergen, 1973; Hendrick, 1976, 1990). In terms of historical context, it has been forty years since Zimbardo and his colleagues conducted their initial surveys on shyness. In the spirit and the tradition of both previous (cf., Aronson, Brewer, & Carlsmith, 1985; Jegerski, 1990; Lamal, 1990; Neuliep, 1990; Rosenthal, 1990) and contemporary (cf., Asendorpf et al., 2013; Funder et al., 2014; Maxwell, Lau, and Howard 2015; Nosek, Spies, & Motyl, 2012; Varlize & Lucas, 2015; Yong, 2012;) concerns for the importance of replication and reproducibility of results in psychological science, the purpose of the present study is to reexamine some of the major findings of Zimbardo’s original shyness surveys to assess their replicability. More specifically, “Replicability means that the findings can be obtained with other random samples drawn from a multidimensional space that captures the most important facets of the research design. In psychology, the facets typically include the following: (a) individuals (or dyads or groups); (b) situations (natural or experimental); (c) operationalizations (experimental manipulations, methods, and measures); and (d) time points.” (Asendorpf et al., 2013, p. 109). While not designed to be an exact replication of Zimbardo’s initial surveys, the present study represents a partial replication (Hendrick, 1990) by utilizing critical elements for assessing replicability by incorporating what Asendorpf et al. (2013, p. 109) might consider as “the most important facets of the research design” appearing in Zimbardo, Pilkonis, and Norwood’s (1974) pioneering research in the study of shyness, including (a) individuals (i.e., groups) by using a sample of college students comparable in nature to the one used by Zimbardo, Pilkonis, and Norwood (1974); (b) situations in that the assessment of both groups took place on a college campus; (c) operationalization of measures by using specific questions from the original Stanford Survey on Shyness; and (d) time by separating the assessment of the two groups of individuals by a period of approximately 40 years.

In terms of replicability, the two principal areas of shyness to be reexamined based on the initial shyness surveys concern the personal and situational pervasiveness of shyness. More specifically, as noted previously, a major finding to the initial survey was that approximately 40 percent reported being presently shy and over 80 percent indicated that they had been shy at some point in their lives (Zimbardo, 1977; Zimbardo, Pilkonis,
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& Norwood, 1974). Additionally, the historical significance of these findings regarding the tremendous number of shy individuals and the lack of scientific knowledge about shyness served to stimulate interest in the study of shyness (Cheek, 1989; Zimbardo, 1977, 1986). Given the major impact of these findings regarding the personal pervasiveness of shyness 40 years ago, a principal concern of the present replication is to assess replicability of the percentage of those individuals who consider themselves to be presently shy and/or who have been shy in the past in a contemporary sample of shy individuals.

Another important aspect of the original survey research was to identify those situations most often associated with eliciting feelings of shyness (cf., Russell, Cutrona, & Jones, 1986; Zimbardo, 1977; Zimbardo, Pilkonis, & Norwood, 1974). In the original shyness surveys, those situations most often cited as eliciting feelings of shyness were: strangers, authorities by virtue of their knowledge or role, and one-to-one and group interactions with members of the opposite sex (Zimbardo, 1977; Zimbardo, Pilkonis, & Norwood, 1974). In an effort to assess the replicability of these findings 40 years later, another principal concern of the present replication study is to reexamine the situational pervasiveness of shyness by utilizing questions taken from the original Stanford Survey on Shyness.

Method

Participants

The OS participants were 2482 college students, gender not specified, who completed the SSS in the mid 1970s as reported in Zimbardo (1977, p. 233). The CS participants were 1439 (male n = 611, M=18.78 years of age and female n = 826, M=18.56 years of age, with two individuals not indicating their sex) college students who completed the SSS between 2000 and 2015.

Materials and Procedure

From 2000 to 2015, groups of students from introductory psychology classes completed a survey on shyness in exchange for extra credit. The items in the survey were similar to those in the original Personal Shyness section of the SSS (Zimbardo, Pilkonis, & Norwood, 1974) examining the personal (e.g., frequency and duration of feelings of shyness) and situational (e.g., types of people and situations eliciting feelings of shyness) aspects of shyness.

Results

Personal Pervasiveness of Shyness

To examine the personal pervasiveness of shyness, the responses of individuals in the OS and CS who consider themselves to be presently shy and those identified as dispositionally shy were compared. In response to the question “Do you consider yourself to be a shy person?” the results indicated a significantly greater ($\chi^2=4.76, p<.05, \phi=.035$) percentage said “yes” in the CS (45.2% [n = 651/1439]) than in the OS (42% [n = 1042/2482]). When comparing the pervasiveness of those individuals classified as “dispositionally shy” (i.e., past, present, and/or always shy), the results indicated a significantly greater ($\chi^2=79.48, p<.001, \phi=.142$) percentage in the CS (85.0% [n = 1264/1439]) than the OS (73% [n = 1811/2482]).

Situational Pervasiveness of Shyness

To examine the situational pervasiveness of shyness, the responses of individuals in the OS and CS for the types of people who elicit feelings of shyness were compared. Table 1 presents a
comparison between the percentage of the types of people who elicit the feeling of shyness in the OS and CS. As seen in the first column of Table 1, the overall pattern of results indicated that these distinct types of people eliciting the highest percentages of feeling of shyness were strangers; persons of the opposite sex, both in a group and in one-to-one interactions; and authorities, both by virtue of their knowledge and their role. When comparing the percentages of OS and CS for these five distinctive types of people, the pattern of results indicates the CS reported significantly greater percentages for strangers and authorities (by virtue of their role) while the OS reported a significantly greater percentage than the CS for persons of the opposite sex in a group. Although significant, the magnitude of the effect sizes for all these differences was considered to be small. There were no significant differences in the percentage reported by the OS and CS for authorities (by virtue of their knowledge) and person of the opposite sex, one-to-one. For the remaining six types of people listed in Table 1, the pattern of results indicated that the OS reported a significantly greater percentage than the CS for other relatives, children, and parents while the CS reported a greater percentage that the OS for a person of the same sex, one-to-one. Although significant, the magnitude of the effect sizes for all these differences was also considered to be small. There were no significant differences between the OS and CS for elderly people and friends.

To assess the overall degree of similarity among these rankings, a Kendall’s tau-b rank-order correlational analysis was conducted to assess the overall degree of association between the rankings of the 11 types of people who elicit feelings of shyness provided by those individuals in the OS and CS. The results indicated a significant rank-order correlation ($\tau (11) = .89, p < .001$) between the two sets of ratings.

### Table 1  Percentage of Types of People Who Elicit Feeling of Shyness for OS and CS Participants

<table>
<thead>
<tr>
<th>Types of people make you feel shy:</th>
<th>OCS</th>
<th>OS$^a$</th>
<th>CS$^b$</th>
<th>$\chi^2$</th>
<th>$\phi^d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strangers</td>
<td>76.5</td>
<td>70 (730)</td>
<td>83 (545)</td>
<td>40.20***</td>
<td>.151</td>
</tr>
<tr>
<td>Persons of the opposite sex, in a group</td>
<td>58.0</td>
<td>64 (667)</td>
<td>52 (339)</td>
<td>23.68***</td>
<td>.118</td>
</tr>
<tr>
<td>Authorities (by virtue of their knowledge—intellectual superiors, experts)</td>
<td>55.0</td>
<td>55 (573)</td>
<td>55 (360)</td>
<td>0.03</td>
<td>.004</td>
</tr>
<tr>
<td>Persons of the opposite sex, one-to-one</td>
<td>48.0</td>
<td>48 (500)</td>
<td>48 (313)</td>
<td>0.01</td>
<td>.002</td>
</tr>
<tr>
<td>Authorities (by virtue of their role—police, teacher, superior at work)</td>
<td>45.0</td>
<td>40 (416)</td>
<td>50 (326)</td>
<td>16.78***</td>
<td>.099</td>
</tr>
<tr>
<td>Other relatives</td>
<td>19.0</td>
<td>21 (219)</td>
<td>17 (96)$^d$</td>
<td>4.82*</td>
<td>.055</td>
</tr>
<tr>
<td>A person of the same sex, one-to-one</td>
<td>17.0</td>
<td>14 (146)</td>
<td>20 (132)</td>
<td>11.46***</td>
<td>.082</td>
</tr>
<tr>
<td>Elderly people (much older than you)</td>
<td>12.5</td>
<td>12 (125)</td>
<td>13 (84)</td>
<td>0.30</td>
<td>.013</td>
</tr>
<tr>
<td>Friends</td>
<td>12.0</td>
<td>11 (115)</td>
<td>13 (82)</td>
<td>0.95</td>
<td>.024</td>
</tr>
<tr>
<td>Children (much younger than you)</td>
<td>8.0</td>
<td>10 (104)</td>
<td>6 (39)</td>
<td>8.25**</td>
<td>.069</td>
</tr>
<tr>
<td>My parents</td>
<td>6.5</td>
<td>8 (83)</td>
<td>5 (29)</td>
<td>7.99**</td>
<td>.069</td>
</tr>
</tbody>
</table>

Note. OCS is the average percentage of the OS and CS percentages for each of the different categories of people who elicit feelings of shyness. The number of participants for each percentage is given in parentheses.

$^a$Percentages for or OS based on $n = 1042$. $^b$Percentages for CS based on $n = 651$. $^c$Percentages of CS based on $n = 581$. $^d$Effects size measure, Phi ($\phi$), for the goodness of fit in 2 $\times$ 2 contingency tables is equivalent to the correlation coefficient $r$, which is a measure of effect size (Lipsey & Wilson, 2001). With $df = 1$, a $\phi$ value of .1 is considered a small effect, .3 a medium effect, and .5 a large effect, respectively.

*p < .05, **p < .005, ***p < .001
Discussion

Forty years ago, Zimbardo and his colleagues (Zimbardo, Plikonis, & Norwood, 1974, 1975) stimulated the academic and popular interest in the study of shyness by reporting that approximately 42 percent of individuals in the OS reported being shy. This reported statistic served as a baseline for the previously undocumented pervasiveness of this personality dimension. The principal purpose of the present study was an attempt to assess the reproducibility of this major finding, along with other key findings, of this historical research by comparing the responses of those individuals upon which these original results were based with a comparable sample of individuals. Using these basic results as a baseline of comparison, a secondary purpose of the present study was to identify any possible changes in the personal and situational pervasive of shyness four decades later.

Overall Comparisons of CS and OS

Overall, the pattern of results suggests that the percentage of individuals who indicated that they were presently shy showed a small but significant increase for those in the CS than the OS. In similar manner, the percentage of individuals who identified themselves as “dispositionally shy” showed a significant increase of 12 percent for those in the CS than the OS. The overall pattern of results in Table 1 suggests that when comparing the rankings of and differences between the responses of the OS and the CS, the same types of people who tend to elicit feels of shyness has not changed over that past four decades. The three exceptions to this pattern among those types of people eliciting feelings of shyness with percentages greater than 40 percent include significant increases for the categories of strangers and authorities by virtue of the role (police, teacher, superior at work) and a decrease for persons of the opposite sex in a group when comparing the CS with the OS.

The Rise of Shyness

Over the past 40 years, interest by researchers and the general public in the nature of and concern for shyness has risen considerably, along with changes in attitudes about shyness. In an attempt to account for this dramatic change in the attention paid to shyness in the United States between 1950 to 1995, McDaniel (2003) examines such factors as politics, gender, race, and class identities, along with such major cultural and societal transformations as the women’s movement and sexual revolution. Although noting many possible explanations for the shift in the interest in shyness, due to the time period during which McDaniel conducted her research, one obvious omission for this assortment of potential influences is the tremendous technological transformation associated with the presence of the Internet. More specifically, previous research has identified shyness as an individual-difference factor associated with Internet use (Carducci, Klapkaak, & Stephenson, 1999; Chak & Leung, 2004; Roberts, Smith, & Pollack, 2000). Working with their deficiency in interpersonal communication skills (e.g., Cheek & Buss, 1981; Manning & Ray, 1993; Pilkonis, 1977a), principal features of the text-based communication nature of the Internet, including the ability to have the time to prepare and revise one’s responses in an anonymous manner, offers shy individuals the opportunity to interact with others in a less threatening social environment (Roberts, Smith, & Pollack, 2000; Van Zalk, Van Zalk, Kerr, & Stattin, 2014). However, others (Carducci, 2000a, 2000b; Carducci & Zimbardo, 1995; Henderson &
Zimbardo, 1998; Zimbardo, 2015) also note that such changes in technology are affecting the nature of interpersonal communication so that we are experiencing more structured electronic interactions and less spontaneous social interactions where the opportunity to develop and practice critical interpersonal skills (e.g., the process of negotiation, making small talk, reading body language and facial cues), which are important for making new friends and fostering more intimate relationship, tend to occur. In support of such reasoning, research examining the influence of electronic communication devices has linked excessive and problematic use of the internet (Caplan, 2007; Casale & Fioravanti, 2011; Davis, 2001; Huan, Ang, & Chye, 2014) and mobile phones (Karabacak & Oztunc, 2014) with feelings of shyness, as well as such related social experiences as loneliness and social anxiety. Consistent with these consequences of excessive internet use and proposed interpersonal difficulties, previous research reported that the principal self-identified problems experienced by shy individuals involved interacting with others in casual (e.g., approaching and striking up a conversation with someone new at a coffee shop) and more structured (e.g., dating) social settings for both those in the U.S.A. (Carducci, Ragains, Kee, Johnson, & Duncan, 1997) and Italy (Carducci & Bocchiaro, 2012).

The loss of such conversational skills may help to account for the significant increase in the percentage of CS who report that strangers and individuals in position of authority by virtue of their roles, such as the police, teachers, and superiors at work, make them feel shy. More specifically, this may occur because encounters with such individuals are more likely to take place during face-to-face spontaneous social interactions in the real world than during the more anonymous and structured social interactions in the virtual world. On the other hand, the open access to knowledge and information as a principal feature of the Internet available to the CS may also help to account for a lack of a corresponding increase of the percentage of individuals in position of authority by virtue of their knowledge, such intellectual superiors, experts, who make them feel shy compared to the OS.

The Response to Shyness

While the results seem to suggest an increase in the pervasiveness of shyness, previous research also suggests that approximately two thirds of shy individuals (68%, n=344/505) believe that their shyness can be overcome, and that almost all shy individuals (81.2%, n=410/505) are willing to work seriously at overcoming it (Carducci, Stubbins, & Bryant, 2008). In support of such reasoning, Carducci (2000c) has documented a variety of self-selected strategies (e.g., liquid extraversion, electronic extraversion, self-help books, therapy), along with their limitations (e.g., showing up to a party, not taking any action), used by shy individuals to deal with their shyness. When examining efforts to cope with feelings of shyness, a consistent finding is that the most-frequently self-selected strategy utilized by shy individuals to deal with shyness was labeled “forced-extraversion,” which is characterized by shy individuals going to social situations in an effort to meet new individuals and make friends but associated with the limitation of shy individuals reporting having difficulty starting and maintaining conversations. The consistency of this finding has been replicated with samples of both adults (Carducci, 2000c; Carducci & Bocchiaro, 2011) and elderly (Carducci & Barrett, 2016) indi-
individuals and teens (Carducci, Elbedour, & Alsubie, 2015) from different cultures.

In response to the motivational efforts of individuals who utilize forced extraversion to deal with feelings of shyness, and help to minimize the problem associated with this strategy of not knowing how to initiate and maintain conversations with others in spontaneous social interactions, a variety of supportive programs based on the affective, cognitive, and behavioral components of shyness have been proposed (cf., Crozier & Alden, 2009). More specifically, in response to such limitations, and in an attempt to deal with the loss of opportunity to develop and practice social skills in spontaneous social interactions, self-directed programs for promoting the acquisition and development of conversational social skills tend to focus on strategies for approaching others, techniques for initiating and maintaining conversation, and procedures for entering on-going conversations for the purpose of increasing informal (e.g., friendship and dating) and formal (e.g., professional) interpersonal networks and fostering greater social involvement (e.g., campus and civic organizations) (cf., Carducci, 1999, 2005, 2015). Expanding on the development of fundamental conversational skills, more structured clinical programs typically involve using cognitive modification to identify what situations produce the most critical self-evaluations and structured role-playing exercises within the context of systematic desensitization to reduce anxiety while teaching appropriate behavioral responses and building self-confidence in those situations (Henderson, 2007, 2014; Henderson & Zimbardo, 2010).

Limitations and Suggestions for Future Research

Issues of Replication

One limitation of the present study is that samples comprising both the OS and CS were based on college students who typically range in age from 18 to 22 years. Another limitation was the measure of shyness used to assess the responses in both the OS and CS samples. As noted previously, such a measure was based on a select set of items taken from the original Stanford Survey on Shyness as part of the Stanford Shyness Project (Zimbardo, Pilkonis, & Norwood, 1974) for which no information was collected and reported to document its psychometric properties. However, given that the principal purpose of the present study was to create an exact replication of the original shyness research by Zimbardo, Pilkonis and Norwood (1974) 40 years ago, such an effort necessitated the use of a similar sample and the same measures used in the present study. To address such concerns, future research focusing replication research in the study of shyness on might consider making direct comparisons of some of the early research employing a more valid measure of shyness (cf., Cheek & Buss, 1981) with subsequent and more contemporary research to examine in a more reliable manner changes in the nature of shyness over the last three decades. In addition, those contemplating future research attempting to monitor changes in the pervasiveness of shyness over time should begin to consider developing collaborative strategies involving procedures for increasing research transparency. In support of such efforts to increase research transparency for the purpose of facilitating replication research in the future, Asendorph et al. (2013) note, “There is a broad range of options: repositories housed at the author’s institution or personal
website, a website serving a group of scientists with a shared interest, or a journal website (section on Implementation)” (p. 213). In this regard, the authors of the present study will make available upon request the data set used in the present study representing the responses of those individuals comprising the CS.

Documentation of Developmental Changes

Although noting an increase in the expression of shyness over the past 40 years by comparing the responses of the OS and CS, an additional limitation of the present study is that it does not address directly the issue of developmental changes in shyness over time, which could only be assessed using a longitudinal method. In this regard, limited longitudinal research employing a variety of measures of shyness has provided somewhat inconsistent results. Short-term longitudinal studies during childhood of both teacher- and parent-ratings between ages 4 and 10 (Eisenberg, Shepard, Fabes, Murphy, & Guthrie, 1998) and during childhood and young adulthood of parent-ratings between ages 4 and 23 (Dennissen, Asendorpf, & van Aken, 2008; Hutteman, Denissen, Asendorpf, & van Aken, 2009) report decreases in shyness while other research reports an increase in shyness from ages 1.5 to 12.5 years of age (Karevold, Coplan, Stoolmiller, & Mathiesen, 2011; Karevold, Ystrom, Coplan, Sanson, & Mathiesen, 2012). Still other research employing different measures of shyness for individuals during early childhood (mother ratings at ages 18 months to 5 years), middle childhood (mother’s ratings combined with psychologists’ ratings at ages 6 and teacher’s ratings at age 10), adolescence (mothers’ rating of interactions with unfamiliar peers and adults from ages 12 to 16), and adulthood (objective self-report shyness inventory at 37) over a 30-year period reports late-developing shyness is more stable throughout adulthood than early-developing shyness (Kerr, 2000). Given the assortment of samples, measures, and time periods, to improve the quality of replication research and replicability in psychology, researchers contemplating future research attempting to monitor changes in shyness should consider the wide range of recommendations provided by Asendorpf et al. (2013).

Cross-Cultural Considerations

Still another important area of future investigation in the study of shyness deserving additional attention is cross-cultural research. Both early and more recent discussions of the research examining its cross-cultural considerations have identified shyness as an expression of personality in cultures around the world (cf., Zimbardo, 1977; Carducci, 2013), with culturally specific estimates of its self-reported pervasiveness ranging from 31 percent in Israel to 57 percent in Japan and 55 percent in Taiwan to a more moderate rate of approximately 40 percent of participants in the U.S.A. who reported experiencing shyness is similar to those participants surveyed in Canada, Germany, India, and Mexico (Henderson, Zimbardo, & Carducci, 2001). Cross-cultural comparisons of shyness tend to focus on differences between Western (i.e., U.S.A.) and Eastern (i.e., Asian) countries (cf., Jackson, Flaherty, & Kosuth, 2000; Page & Zarco, 2001; Paulhus, Duncan, & Yik, 2002) and report more shyness in Eastern cultures (approximately 60%) than in Western cultures (approximately 40%) (Paulhus, Duncan, & Yik, 2002, p. 443). A similar pattern of results has emerged for cross-cultural consideration of Asian and Western samples for other shyness-related constructs such as social anxiety, introversion, communication
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anxiety, and unassertive (Paulhus, Duncan, & Yik, 2002, p. 443). The East–West difference in the rates of shyness seems to persist for students of Asian heritage and European heritage following their migration to the West (Paulhaus, Duncan, & Yik, 2002, pp. 445–446).

Going beyond the documentation of simple comparisons of the pervasiveness of shyness between different cultures, future research examining cross-cultural considerations of shyness should also attempt to replicate some of the other basic findings regarding the personal and situations pervasiveness of shyness noted in previous research (cf., Barrett & Carducci, 2016; Carducci, Stubbins, & Bryant, 2008) and to extend to the findings of previous research examining how shy individuals perceive the causes of their shyness (cf., Carducci & King, 2008), documenting in what areas shy individuals view their shyness is as a source of a problem in their lives, and identifying the self-selected strategies used by shy individuals to deal with their shyness (cf., Carducci, 2000c; Carducci & Barrett, 2016). Such additional research will help to provide a more complete assessment and description of the expression of shyness in a cultural context. However, in addition to identifying such expressions of shyness, a more in-depth and complete understanding of the underlying nature and dynamics of shyness in a cultural context must also require future research to include the development of possible explanations to account for the extent to which cultural norms manifest themselves differently to influence these psychological and social processes associated with how shy individuals perceive, account for, and respond to their shyness. As the framework for such reasoning, Sato, Matsuda, and Carducci (in press), based on American cultural anthropologist Ruth Benedict’s The Chrysanthemum and the Sword: Patterns of Japanese Culture (1946), discuss how personal values reflecting cultural characteristics can help to enhance our understanding of the experience of shyness. More specifically, Benedict (1946), describes how shyness in the Japanese culture is characterized by reflecting a “culture of shame.” In such a culture, the experience of shyness is based on focusing on the consequences of an individual’s actions as evaluated by others with reference to violations of one’s cultural values (e.g., What do others think of me?). In contrast, shyness in the American culture is characterized by reflecting a “culture of sin.” In this culture, the experience of shyness is based on focusing on the consequences of an individual’s actions as evaluated according to violations on one’s personal values (e.g., What do I think of myself?). Consistent with this critical distinction in the conceptualizations of cultural factors associated with shyness is the tendency for Asian individuals to be more sensitive to rejection (Yamaguchi, Kuhlman, & Sugimori, 1995) and more self-critical (Kitayma, Markus, Matsumoto, & Noraskkunkit, 1997) than American individuals. Thus, such a distinction has implications for helping to understand how individuals from different cultures incorporate their respective cultural norms and values to create the experience of shyness that seems to be similar in its global pervasiveness but different based on its specific cultural context.

References


Carducci, B. J. (2015). Don’t be shy about helping shy individuals deal with their Shyness: Guidelines for creating a shyness workshop. In B. J. Carducci (Chair), *Qualitative perspectives to offering support to individuals experiencing anxiety associated with PTSD and shyness*. Invited symposium conducted at the meeting of 14th European Congress of Psychology, Milan, Italy.


Carducci, B. J., & Bocchiaro, P. (2012). *Dove si trova la timidezza un problema: Where shy Sicilians students say their shyness is a problem*. Poster presentation at the 2012 Meeting of the American Psychological Association Orlando, FL.


Psychology Today, 28, 34–41, 64, 66, 68, 70, 78, 82.


Zimbardo, P. G. (2015). Where have all the guys gone?: Saving the next generation from isolated existences. In B. J. Carducci (Chair), *The demise of guys (DoGs): The problem and possible solutions—coming to the rescue of young dogs.* Invited symposium conducted at the meeting of the 14th European Congress of Psychology, Milan, Italy.


—2017.12.15受付，2018.2.6受理—