AN INVESTIGATION OF TAIWANESE NORMS FOR THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE: FORM C (MANDARIN CHINESE TRANSLATION) — SHSS:C (MCT)

By

JEREMY BLAIR ROARK

A dissertation submitted in partial fulfillment of
the requirements for the degree of

DOCTOR OF PHILOSOPHY

WASHINGTON STATE UNIVERSITY
College of Education

August 2009

To the Faculty of Washington State University:

The members of the Committee appointed to examine the dissertation of JEREMY BLAIR ROARK find it satisfactory and recommend that it be accepted.

_____

Chair: Arreed Barabasz, Ed.D., Ph.D., A.B.P.P.

_____

Marianne Barabasz, Ed.D.

_____

Dennis Warner, Ph.D.

_____

Omar Sánchez-Armáss, Ph.D.

ACKNOWLEDGEMENT

It is with much gratitude that I write this section of my dissertation. In reflecting on the process that has been my dissertation I wish to thank the many people who have encouraged, helped, and supported me along the way.

To my advisor Arreed Barabasz and my committee members Marianne Barabasz, Dennis Warner, and Omar Sánchez-Armáss I wish to express my gratitude for their guidance and support. To Arreed especially for his belief in me, his direction and timely motivational nudging, to Omar for his willingness to consult on procedural matters and answer the barrage of statistical questions I had, and to Marianne and Dennis for their general and personal support, for their patience for what I imagine to have been the painstaking process of review of draft after draft and for the very helpful content and editorial comments and suggestions that came up as a result, I thank them all from the bottom of my heart.

To my wife, Isabella H. Lin-Roark, who helped me so much in translation, administration, and constant support throughout my entire graduate school career, who stood by my side to face, with me, the many personal and professional challenges I have gone through in our lives together, I cherish her more than I can ever describe.

To the additional administrators, 蔡東杰, 周立修, 周梅如, 林易岳, 范樂群, 盧姿里, 楊麗鈴, 張馨妃, 孫柏鈞, 鄧景云, 陳茂雄and 高振傑 for their most appreciated contributions, I thank them all for their assistance. To Gene Lai, 許佩玲, 劉純之, and 利菊秀 for their help and support in recruiting participants. I could not have completed data collection without them. To my additional family and friends from Taiwan both old and new, who, since the first day I arrived in my second home back in 1995, have always been ready and willing to

help and support me in any way possible. I thank them for opening up a whole new world for me. Thanks especially to 林秀花, 黃世楨, 劉秋甘, 林俊男, 劉美華 and the 邵 family for all their hospitality, support and care. Finally, I want to express my appreciation to all the participants who volunteered to be a part of what I hope was a good experience for all.

AN INVESTIGATION OF TAIWANESE NORMS FOR THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE: FORM C (MANDARIN CHINESE TRANSLATION) — SHSS:C (MCT)

Abstract

by Jeremy Blair Roark, Ph.D.
Washington State University
August 2009

Chair: Arreed Barabasz

The primary purpose of this study was to establish normative data for the Mandarin Chinese Translation (MCT) of the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C; Weitzenhoffer & Hilgard, 1962). Fourteen administrators gave the SHSS:C (MCT) as well as demographic and meditation questionnaires to 322 participants of Taiwanese Nationality. A sample mean of 6.87 (SD = 2.41) was found. Score distributions, normality, internal consistency, item difficulty and comparisons with other SHSS:C samples are presented. Scores on the SHSS:C were compared to both demographic and meditation practice data. The psychometric properties of the SHSS:C were found to be similar to those of other samples. A Kuder-Richardson Formula 20 for the Taiwanese sample was found to be 0.78. The results suggest the need for more research regarding hypnotizability in Asian populations, including further assessment of the relationship between hypnotizability and meditation. The high mean also provides support for the continued and expanded use of hypnosis in relevant treatment applications in Taiwan.

TABLE OF CONTENTS

Page

LIST OF TABLES AND FIGURES

TABLES

FIGURES

DEDICATION

This dissertation is dedicated to my wife and life partner Isabella H. Lin-Roark and my two daughters Essence and Olivia Roark.

They gave me the support, love and encouragement I needed at every step of the way throughout graduate school and the dissertation process. Without them, the completion of this dissertation would not have been possible. I am forever grateful to them and only hope I can return to them even a portion of what they have given to me.

CHAPTER ONE

INTRODUCTION

Justification for the Study

There are many potential uses of hypnosis. The importance for service providers to know their patient/client's ability to respond to hypnosis has been shown time and time again. Most researchers have recognized for some time that the measurement of hypnotizability is important both in investigating the nature of hypnotic phenomena and/or assessing the potential effectiveness of many treatments incorporating hypnosis (Barabasz & Watkins, 2005; Bowers, 1993; Council, 2002; Evans, 1991; Frankel, 1987; Gfeller, 1993; Groth-Marnot, 1991; Hilgard, 1965, 1987; Lynn, & Shindler, 2002; Mott, 1979; Nadon & Lawrence, 1994; Perry, Nadon & Button, 1992; Sapp, 2004; Spiegel & Spiegel, 2004; Weitzenhoffer, 2002; Woody, Bowers & Oakman, 1992; Woody, Barnier, & McConkey, 2005; Yu, 2004b). Knowing a person's hypnotizability in a counseling setting can save frustration in the case of low hypnotizable clients, and can spare them disappointment if their expectations would have otherwise been overly high (Barabasz & Watkins, 2005). As important as it is to know an individual's level of hypnotizability, establishing a norm sample for a population is also very important. As Tellegen (1978-1979) points out, it is a great advantage that standardized tests have been developed that permit the collection of normative data. Normative data can suggest directions for the use of hypnosis with certain populations and, through the comparison of results, may also suggest differences between populations, potentially making factors effecting hypnotizability more transparent.

There is currently very little research on hypnosis in Asian countries (with the notable exception being Japan). In Japan there is actually a journal dedicated to hypnosis research

providing perhaps some starting point for understanding research and the practice of hypnosis in Asian countries. Since so little research is available on hypnosis and hypnotizability in Chinese speaking countries, and there is no hypnotizability research based on populations in Taiwan, the proposed study should help to fill this significant gap in the literature. In searching for available literature it quickly became apparent that if there was any hypnosis research done in Taiwan it is not accessible due to a lack of comprehensiveness of journal databases. Finally, when searching for research regarding hypnotizability, as opposed to hypnosis, even fewer were available. Only three studies were found to have been conducted in Asian countries, not including Japan. Yu (2004a, 2004b, 2005) has investigated hypnotizability with Cantonese speaking samples in Hong Kong. The first two of these studies involved a self-report assessment of hypnotizability made without actually requiring the demonstration of hypnotic ability, while in the third study, Yu incorporated the use of the Creative Imagination Scale (CIS; Barber & Wilson, 1978). The CIS (test characteristics are discussed in chapter two) is a very different instrument than the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C; Weitzenhoffer & Hilgard, 1962). The justification for the proposed study lies in the fact that no research has been conducted using a Mandarin Chinese translation (MCT) of the SHSS:C or any other direct measure of hypnotizability in Taiwan.

Additionally, several studies have been conducted in the past regarding a possible relationship between hypnotizability and meditation (e.g., Davidson & Goleman, 1976; Pan, Zhang & Xia, 1994; Shapiro, 1978; Spanos, Gottlieb, & Rivers, 1980; Van Nuys, 1973; Walrath & Hamilton, 1975). The most common failure of these studies has been a lack of participants with a significant history of meditation practice (Delmonte, 1984; Heide, Wadlington, & Lundy, 1980). Historically, meditation has been practiced much more widely and much longer in various

parts of Asia (Otani, 2003). The testing of hypnotizability in Taiwan presents an excellent opportunity to also retest the hypothesis that hypnotizability and meditation may be significantly related. These participants' duration and quality of meditation practice should provide the best possible sample to test this relationship.

Of all scales in use today, the SHSS:C (also known as the "Form C") has been the most widely used and has been regarded as the "gold standard"; many newer scales of hypnotizability have been validated against it (A. Barabasz & M. Barabasz, 1992; Barabasz & Watkins, 2005; Perry, Nadon, & Button, 1992; Woody, Barnier & McConkey, 2005). While this research directly fulfills the purpose of establishing a Taiwanese norm, translation of the SHSS:C into Mandarin also makes it available for possible use in many other parts of Asia as a tool in diagnosis and treatment planning within health care systems and for psychological services on an individual level (Lynn & Shindler, 2002).

It is hoped that greater awareness of hypnosis and hypnotizability testing in Taiwan and other parts of Asia will be realized; that greater use of hypnosis in practical settings in Taiwan will be realized; that hypnosis research in Taiwan and other Asian countries will be expanded; that there will be promotion of cross cultural research in hypnosis; and that a sharing of information regarding the usefulness of and similarities between hypnosis and meditation will take place. It is also hoped that the reporting of a continually expansive set of norms for various valid and psychometrically sound scales of hypnotizability, in this case the SHSS:C, may lead to a greater understanding of the various factors that contribute to cultural and individual differences in hypnotizability. To the extent that this investigation has been able to further any of these goals it has served its function. Eventually, all cultures that partake in a sharing of

knowledge regarding differences in how hypnosis has been and/or could be practiced will benefit from this sharing of information.

Statement of Purpose

Given there were no data, prior to this study, regarding hypnotizability using a population in Taiwan and given that the SHSS:C is considered the "gold standard" for measurement of hypnotizability (Barabasz & Watkins, 2005; Bowers, 1993; Lynn, & Shindler, 2002; Nadon & Lawrence, 1994; Register & Kihlstrom, 1986; Weitzenhoffer, 2002), the purposes of this study were to (a) create a Mandarin Chinese version of the SHSS:C, (b) establish normative data for Taiwan, (c) assess the psychometric properties of the SHSS:C (MCT) administered to a representative sample, and (d) analyze data regarding the relationship between hypnotizability and meditation experience.

Objectives

1. Investigate the hypnotic ability of a representative sample in Taiwan.
2. Attain high inter-rater reliability for scale administrators in this investigation.
3. Compare hypnotizability scores based on gender and ethnic background.
4. Examine the internal consistency, item difficulty, and other individual characteristics of the SHSS:C (MCT) with this Taiwanese sample.
5. Compare the psychometric properties of the SHSS:C (MCT) to the original SSHS:C normative data and data obtained using the Spanish, Italian, Dutch, German, Korean and Mexican adaptations of the SHSS:C.
6. Analyze the relationship of scores attained on the SHSS:C (MCT) with information obtained about participants' practice of meditation.

Definition of Terms

Absorption: "A disposition for having episodes of 'total' attention that fully engage one's representational resources" (Tellegen & Atkinson, 1974, p. 268).

Dissociation: "The splitting off of certain mental processes from the main body of consciousness with various degrees of autonomy" (E. Hilgard, 1992, p. 69).

Hypnosis: "An experience characterized by an ability to sustain a state of attentive, receptive, intense focal concentration with diminished peripheral awareness in response to a signal" (Spiegel & Spiegel, 2004, p. 19).

Hypnotizability: The capacity an individual has to enter the state of hypnosis and produce a non-voluntary response to a hypnotic suggestion (Weitzenhoffer, 2002), as measured in this investigation by the SHSS:C (MCT).

Meditation: A group of mental exercises that can lead to the experience of an altered state of consciousness through the calm limiting of thought and/or the focus of attention inward (Murray, 1982) as assessed in this investigation by a meditation questionnaire (see Appendices A & B).

Limitations

1. Meditators in Taiwan were readily available for hypnotizability testing; however, as the main purpose of this study was to gather normative data for the SHSS:C (MCT), long-term meditators were not specifically sought out. While the number of meditators was relatively high, the actual number of long-term meditators was still relatively low.

2. It was beyond the scope of this study to investigate changes in hypnotizability over time, thus limiting the conclusions that can be drawn regarding the nature of the link between hypnotizability and meditation practice.

CHAPTER TWO

REVIEW OF THE LITERATURE

What is Hypnosis?

Hypnosis is believed to have been practiced since the beginning of humankind (Barabasz & Watkins, 2005) in potentially all cultures of the world. Likewise, practices involving altered states of consciousness resembling the hypnotic state have been observed in 90% of 437 cultures sampled around the world (Bourguignon & Evascu, 1977). While hypnosis is typically thought of as an altered state of consciousness, this is a point of some contention among researchers and much scientific research has been focused on further investigation into the nature of hypnosis. Hypnosis has now been observed and investigated in the scientific community for over 200 years (Dixon & Laurence, 1992). The study of hypnosis has gone through several major phases before coming to where it is today in western society. While Mesmer is often credited with popularizing hypnosis and/or bringing it into the realm of scientific study (Barabasz & Watkins, 2005; Bramwell, 1956; Forrest, 2002; Hilgard, 1965), there have been many individuals and groups of individuals who have throughout time studied and practiced hypnosis bringing the field to where it is today. For an extensive look at this history there are many sources worth recommending. The following two chapters were for this researcher indispensable: “The Early History of Hypnotism” (Bramwell, 1956) and “The History of Hypnosis and its Relevance to Present-Day Psychotherapy” (Barabasz & Watkins, 2005).

For the purposes of this investigation, suffice it to say that from the time of Mesmer to the present day, the nature of hypnosis has been debated rigorously and hypnotic phenomena have been seen from many divergent perspectives. Some scientists have seen hypnosis as worthy of study while others have not. Some physicians, psychologists, and other professionals have

seen hypnosis as quite useful and embraced its practice while others have not. Some have seen hypnotizability as a beneficial skill while others have seen it as detrimental. Members of the general public have also taken positions regarding hypnotic phenomena despite, in many cases, not really knowing much about it. In the public and professional realms there were often strong sentiment from those who dismissed hypnosis as non-scientific or even claimed it had its roots in the satanic. Despite these perhaps cyclical struggles, practitioners, such as Franz Mesmer, John Elliotson, James Esdaile, James Braid, Ambroise-August Liebeault and others, who were quite well known and respected in their field, risked great criticism by seeing beyond narrower concepts of medicine. They took interest in hypnosis and its practice, reinvigorating interest in its use over time (Barabasz & Watkins, 2005).

Today, there are also differences of opinion as to what hypnosis is among researchers who practice and investigate the nature of hypnosis regularly (Hilgard, 1992). Many researchers include dissociative principles in the explanation of hypnotic phenomena while some researchers deny anything out of the ordinary is occurring during hypnosis and focus instead on explaining the phenomena by means of social influences that might be occurring. In truth, many researchers agree that the subjective experience of the individual is very important in understanding and describing the nature of hypnotic phenomena (e.g., Eisen, & Fromm, 1983; Field, 1965; Fromm et al., 1981; Hilgard, 1973; Kahn, Fromm, Lombard & Sossi, 1989; Lombard, Kahn & Fromm, 1990; Orne, 1959; Spiegel & Spiegel, 2004; Ward & Kemp, 1991) and, while hypnosis can be a powerful adjunct to treatment, science has not yet been able to explain the phenomena with any single all-encompassing theory (Barabasz & Watkins, 2005). For this reason, despite its long history of practice, much research is still needed in order to scientifically and objectively describe the nature of hypnotic phenomena.

Several definitions of hypnosis and hypnotic phenomena have been forwarded. For example, Spiegel and Spiegel (2004) and Burrows and Stanley (2001) suggest hypnosis is best defined according to the subjective experience and report of participants as well as by the phenomena that accompany the hypnotic state. If the definition is based on these experiences, then what happens that allows this experience to take place is also of importance in understanding the nature of hypnosis. There is general agreement that absorption and dissociation are major components of hypnosis (Evans, 1991; Hilgard, 1973; Spiegel & Spiegel, 2004, Tellegen & Atkinson, 1974). In 1965, Hilgard published his theory of neodissociation in which he theorized hypnosis to be an altered state of consciousness involving dissociation. Since Hilgard published his theory of neodissociation, many practitioners have used it as a basis for understanding hypnotic phenomena. Another component, absorption, was identified in 1974 by Tellegen and Atkinson. Tellegen and Atkinson found absorption, as measured by a scale which they developed, to correlate with various scales of hypnotizability. Absorption is further discussed below as a correlate to hypnotizability.

The effort to describe the hypnotic experience through an increased understanding of the subjective experiences which unfold during hypnosis has also produced results that have shed new light on the nature of hypnosis and supported many previous findings as well. Kumar, Pekala and McCloskey (1999) administered the Phenomenology of Consciousness Inventory (PCI; Pekala, 1982, 1991) during a brief pause in the administration of the SHSS:C. They found experiences of four phenomena to occur with increased frequency in persons with greater ability to experience hypnosis: (a) dissociative control, (b) positive affect, (c) visual imagery, and (d) attention to internal processes. After changing methodologies and choosing to use a Hungarian sample, Varga, Józsa, Bányai, Gösi-Greguss and Kumar (2001) again found the experience of

these same four phenomena during the entire administration of the SHSS:C to correlate with scores on the SHSS:C. In both of these studies, experience of visual imagery and the correlation of visual imagery with hypnotizability were not found with the HGSHS:A. There is evidence to suggest that lack of experience of visual imagery on the HGSHS:A, as compared to the SHSS:C, is not do to the nature of individual vs. group administration (Angelini, Kumar, & Chandler, 1999), but instead possibly due to the fact that greater visual imagery is often stimulated more in highly hypnotizable participants by the more cognitively difficult and imagery-based suggestions of the SHSS:C (Varga et al., 2001).

Historically, there has been much disagreement regarding the nature of hypnosis. Whether it is best explained by the state view, described above, or a non-state view of hypnosis has been open to question. The non-state or sociocognitive theory views hypnotic responses as social interaction only. Supporters of the sociocognitive view argue that there is no separate "state" of hypnosis and that instead "hypnotized" persons are merely enacting a role. These theorists have researched the effect expectancy and other "social influence" variables have on hypnotizability more than other constructs. In other words, these theorists argue that what a participant expects their response to be to hypnotic stimuli is often a significant factor in the degree of their actual response. Wickless and Kirsch (1989) found that when manipulating participants' expectancy by telling them they would be likely to respond to hypnotic stimuli and/or allowing them practice sessions in hypnosis they actually scored higher on tests of hypnotizability. Unfortunately, Wickless and Kirsch neglected to include a measure of potential changes in expectancy pre and post manipulation; thus, correlations between expectancy and hypnotizability are unknown. It should also be noted that manipulated expectancies do not

always correlate significantly with hypnotic responsiveness (Benham, Bowers, Nash & Muenchen, 1998).

Other factors investigated for their importance in measuring optimal hypnotizability are beliefs about hypnosis and rapport. Goebel and Stewart (1971) actually investigated effects of beliefs about hypnosis on hypnotizability scores and found that a manipulation of these variables had a significant effect on later measurement of hypnotic performance. Likewise, Gfeller, Lynn and Pribble (1987) were able to increase participants' hypnotizability by purposefully increasing the rapport participants felt they had with experimenters. These studies not only suggest the importance of beliefs about hypnosis and rapport in hypnotic responding, but also, directly suggest methods for maximizing the usefulness of hypnosis on a practical level.

Overall, if findings of Kirsch's 1993 survey (as cited in Holroyd, 2003), asking psychologists in the Division of Psychological Hypnosis of the APA about their beliefs regarding the nature of hypnosis, are generalizable, then the majority of professionals utilizing hypnosis in some form of practice would be in agreement that hypnosis does entail an altered state. While many of the "state" theorists acknowledge that social influence, expectancy, and rapport can sometimes be a part of an individual's hypnotic response, they point out that it is impossible to explain all hypnotic responses as due to persons acting in social roles. Researchers who tend to conceptualize hypnotic phenomena from either one or the other framework are at least to a small degree beginning to incorporate pieces of what have historically been opposing sides. It would not be inaccurate to say that most state theorists have always understood that social factors such as rapport and trust are important in maximizing the effectiveness of the use of hypnosis (Barabasz & Watkins, 2005). At least one strong supporter of the non-state view of hypnosis has also recently acknowledged that levels do exist within hypnotic experience (Kirsch, 2003).

Hypnosis in Asian Cultures

It is generally accepted by researchers that the history of hypnosis begins well before Mesmer (Spanos & Chaves, 1991). What is less often discussed, but perhaps also generally accepted, is that hypnosis is also not bound historically or in modern times to practice in the western world. Evidence exists to suggest hypnosis was used in parts of Asia as long ago as 1800 B.C. and in ancient times by yogis in India (Barabasz & Watkins, 2005). Still, likely due to lack of historic record, language and cultural differences, little is known about hypnosis as it is/was perceived and practiced outside of the modern western world. While ancient records are incomplete, if not almost nonexistent, there are some interesting descriptions of the nature of hypnosis and its practice that have been found. Hallaji (1962) reports on the traditional hypnotic practices of an Asian cultural group uninfluenced by western concepts and practices. According to the Sufi healers he interviewed, this practice was based on practices well established since the 12th century. For centuries prior to that "masters" practiced it on a smaller scale. At the time of his observation, the practice was uninfluenced by western medicine. He reports that Sufi healers combined trance, chanting, hand passes, relaxation, breathing, a belief in healing powers and methods only known to that particular community to cure patients.

Many western researchers have suggested that there is a lack of agreement on the nature of hypnosis and that there is also widespread misunderstanding about hypnosis. Green, Page, Rasekhy, Johnson, and Bernhardt (2006) conducted a study involving three western countries (Australia, Germany and the United States) and one Middle Eastern country (Iran). In all, three measures were given, the Attitudes Toward Hypnosis scale (ATH) (Spanos, Brett, Menary, & Cross, 1987) the Opinions About Hypnosis scale (OAH) (McConkey, 1986), and the Beliefs About Forensic Hypnosis Scale (BAFH) (Wilson, Greene, & Loftus, 1986). Earlier studies of

these scales reveal three factors for the ATH (positive beliefs about hypnosis, beliefs about the mental stability of hypnotizable people, and an absence of fear concerning hypnosis). Beliefs about the experience, nature, effects of self and hetero-hypnosis, and the extent to which hypnosis is seen as an altered state of consciousness are assessed by the OAH. Beliefs about the utility of hypnosis in forensic applications are assessed by the BAFH. Findings of note in the Green et al., (2006) study include that across samples female more than male respondents: (a) agreed that deeply hypnotizable persons are as normal and well adjusted as others, and (b) had less overall fear regarding hypnosis. Differences between countries include the following: (a) the U.S. participants had more positive beliefs about hypnosis than in the Australian sample, (b) the Iranian participants more frequently associated hypnosis with "weak-mindedness" and expressed more fear about hypnosis than in the U.S. and German samples, and (c) the German participants viewed hypnosis as an altered state of consciousness less often than participants in the Iranian and U.S. samples. Factors contributing to these differences in beliefs and attitudes toward hypnosis, and whether they may be more affected by cultural, political, historical, geographical, or individual influences remains undetermined. What is clearer is that hypnosis is understood/ misunderstood to varying levels in all parts of the world.

In Asia, Yu (2004a) conducted a study in Hong Kong regarding the beliefs and attitudes about hypnosis in both a general public sample and a medical professional sample of predominantly Chinese participants. Yu collected data using McConkey's 1986 inventory regarding general beliefs about hypnosis, parts of Northcott's 1996 questionnaire, and the ATH (Spanos, Brett, Menary, & Cross, 1987). Yu found that results in this Chinese population were incredibly similar to those of the McConkey and Jupp (1986) study. Compared to Northcott's (1996) results, Yu claimed his respondents more easily recognized the usefulness of hypnosis,

but were less likely to see hypnosis as a way to achieve transcendence. On the ATH Yu mentioned that responses were generally more positive than presented in Spanos et al., but also highlighted the fact that 49.9% of respondents had "some potential resistance against the use of hypnosis" and 54.9% "would attempt to hold themselves back." Finally, Yu reported that not only was the general public's view of hypnosis often based on cultural myths, but so also were the views of a significant number of medical professionals (Yu, 2004b).

In Japan, Koizumi (2001) set out to determine the thoughts, impressions and feelings about hypnosis in Japanese university students. Koizumi summarized participants' descriptions of their thoughts with five categories: (a) 29% included the idea that it might be used as a technique to control others; (b) 26% included the idea of using it in hypnotherapy or to produce psychological effects (c); 15% stated their ideas were influenced by the mass media; (d) 11% reported negative feelings about hypnosis, and; (e) roughly 19% reported other miscellaneous ideas. Results of the short survey suggested the existence of three factors: (a) metaphysical phenomena, (b) fortune telling, and (c) techniques in clinical psychology. Koizumi noted several relevant findings including the idea that so many Japanese students had negative beliefs incorporated into their overall opinions of hypnosis, that many also had beliefs about the psychotherapeutic/metaphysical aspects of hypnosis. It is interesting to consider how these cultural beliefs about hypnosis might affect individuals' ability to enter a hypnotic state and respond to hypnotic suggestion relative to western cultures whose beliefs about hypnosis, although varied, may be at least slightly more familiar.

Saito (1993), who at the time of publication had a history of over 30 years of hypnosis research in Japan, described the nature of hypnosis by integrating both science and cultural perspective. He described the various stances held so firmly in the United States regarding the

nature of hypnosis as either a special state, or non-state phenomena and presented a “new paradigm” of hypnosis. Saito suggested hypnosis is traditionally defined as “one’s consciousness becoming altered by suggestions and a state of trance being generated or formed” (p. 38). He stated this is based on the western “self-psychology,” which views consciousness as consisting of reasoning, logic, thinking, and language. Saito proposed that consciousness itself can be conceptualized differently than this. Saito viewed hypnosis as the emergence of an internal preexisting consciousness being developed, rather than a new state and called this preexisting state the “Original Consciousness” (OC). He suggested it is similar to the concept of an altered state of consciousness, yet perhaps in some ways also fundamentally different. Saito described the OC as existing not for reasoning and thinking, but something that exists for maintenance of human life. Saito gave his own definition of hypnosis as “a method of manifesting the OC while lowering the functions for adjusting to the environment (or Reality Orientation)” (p. 39). He emphasized that hypnosis is the activation of the OC rather than a change in alertness. Saito went on to describe the functions of the Reality Orientation as being set up and structured for the purpose of making decisions that lead to behaviors. He included elements of planning, examination, thinking, and imagining, which underlie decision-making. He stated that these functions are less emphasized when under special conditions. Finally, underlying these common processes is the OC, which becomes activated when the processes as described above are less active. Saito suggested that there are seven factors that can lead to the activation of the OC: (a) stimuli is either heightened or lowered below certain limits; (b) when certain parts of the brain are stimulated physically or chemically; (c) when in coma; (d) when sleeping or dreaming; (e) when given continuous, monotonous stimuli; (f) when given a mood appropriate for the situation; and (g) when unable to handle very rare circumstances (shock, panic, trauma, etc.).

Examples of situations that lead to activation of the OC include those that are usually intentional: relaxation, bio-feedback, hypnosis, self control/self discipline training, introspection, and vigilance and those that are often unintentional: highway hypnosis, absorption in activities, drinking, drug induced, being in love, “out-of-body” experiences, etc. It is not known how prevalent this conception of consciousness and hypnosis is in Asia; however, it does seem interesting in its unique perspective of the phenomena.

Only one study was found published in the Chinese language and/or using a sample from China that seems to primarily deal with the nature of hypnosis. Jin, Zhang, M. Li, X. Li and Yue (1994) conducted a study in China, with 14 male and 19 female patients in a clinic aged 7 to 76. These patients experienced induced hypnotic states during which EEG readings were taken to measure changes during the experience. The EEG results were then compared to EEG readings taken during the normal waking state. Changes in theta, delta, and beta waves were all noted in various parts of the brain, suggesting the patients experienced an altered state of consciousness (Jin, Zhang, M. Li, X. Li, & Yue, 1994). The existence of this study suggests researchers in China share a similar interest with Western researchers in investigating the nature of hypnosis as an altered state of consciousness.

Uses of Hypnosis

The debate as to the nature of hypnosis will likely continue for the coming decades and, while a theoretical understanding of the nature of hypnosis is quite important as therapists, healers, researchers and teachers as well, a great deal of focus may also be placed on: (a) discovering new ways in which hypnosis can be used as a tool for the improvement of various treatments both physical and psychological and; (b) seeing that hypnosis is used appropriately.

Hypnosis can be used with a wide variety of medical and psychological issues and treatments. When used as an adjunct to therapeutic strategies hypnosis can have an enormous impact on treatment outcomes (Spiegel & Spiegel, 2004). According to reviews by Frankel (1987) and Fromm (1987), the following physical and mental health problems can be addressed successfully using hypnosis: pain, asthma, migraine, irritable bowel syndrome (IBS), various skin diseases, burns, nausea, vomiting, surgery, hemorrhagic disorder, cancer, immunity problems, cessation of unwanted habits (including overeating, nail biting, stentorian snoring, smoking and the use of other substances) (see also A. Barabasz & Watkins, 2005), psychological disorders (including phobias and psychotic, borderline, narcissistic, and post-traumatic stress/PTSD disorders), and somatic and psychosomatic disorders. Reviews by Montgomery, DuHamel and Redd (2000) and Pinnel and Covino (2000) reinforce the efficacy of hypnosis with many of the treatments just mentioned, citing additional and more recent research regarding treatments with hypnosis. Montgomery et al. add that hypnosis has also been used successfully to treat, depression, anorexia nervosa, and dissociative identity disorder. In addition, other authors suggest that it can be used to treat: AD/HD in children (A. Barabasz & M. Barabasz, 2000); sexual abuse related trauma (Smith, 1995); and is among the most useful methods for treating persons with Dissociative Identity Disorder and PTSD (Barabasz & Watkins, 2005; Watkins, 2000; J. Watkins & H. Watkins, 1997). In addition to the above, Pinnel and Covino point out that hypnosis has been used for treating anxiety (pre-surgery or otherwise surgery elated), facilitating childbirth and aiding in the treatment of other obstetric/gynecological issues. They emphasize that researchers need to continue to strive to meet standard methodological guidelines outlined by Chambless and Hollon (1998) in order to stand up to rigorous analysis required by the medical profession before a treatment may be formally accepted for more widespread practice.

Hypnosis also has many applications for the field of dentistry including relaxation, reducing and/or eliminating dental phobia, pre-medication, reducing salivation and as an anesthesia and analgesia during painful procedures (Barabasz & Watkins, 2005).

Frankel (1987) reported that hypnosis can be used to provide relief of discomfort, contribute to structural healing, and in some cases, slow down or even reverse the worsening pathophysiology. It has been suggested that outcomes are often better for high hypnotizables than low hypnotizables in various treatments (Mott, 1979) including pain control (see Holroyd, Nuechterlein, Shapiro, & Ward, 1982). It should also be considered that hypnotizability measured in an experimental context often provides a conservative estimate of responsiveness compared to the clinical context (Lynn & Shindler, 2002). For example, a highly motivated patient in whom the desire to be free of a symptom is high may respond dramatically to hypnotic intervention even if his or her hypnotizability is low (Mott, 1979). Holroyd (1996) continued with this idea by suggesting that highly motivated and well-trained patients who are suffering often offer an opportunity to observe how useful hypnosis can be.

Holroyd (1996) and Montgomery, DuHamel, and Redd (2000) suggested that while hypnosis has been utilized in these various treatments, its use in pain management clearly represents a very significant portion of the work that can be done. In the use of hypnosis, the feelings of relaxation, distraction of attention from the pain, and the alteration of the perception of the pain itself, each contributes to the relief of the symptom (Frankel, 1987). As in many of the above-described treatments, hypnotizability can be an important factor in pain reduction. Evidence suggests that for highly hypnotizable people, hypnotic analgesia is far more powerful than placebo analgesia (Frankel, 1987; Hilgard & LeBaron, 1982; McGlashan, Evans & Orne, 1969) and that even low hypnotizable people can exhibit significant hypnoanalgesia or in some

cases can be taught to (E. R. Hilgard & Hilgard, 1994; Holroyd, 1996). In children and adolescents with cancer, for example, the more hypnotizable patients experience greater pain reduction (Hilgard & LeBaron, 1982). Hypnosis has also demonstrated efficacy in the relief of laboratory and acute clinical pain such as experienced in dentistry and emergency room procedures (Hilgard & Hilgard, 1994), and as Holroyd (1996) also pointed out, it has been successfully applied in the treatment of persistent/chronic pain. Hypnosis can contribute to the effectiveness and efficiency of both surgery and anesthesiology due to certain highly hypnotizable participants' ability to distract and/or dissociate the pain to a mere awareness of being touched in some cases (Barabasz & Watkins, 2005). In short, the effectiveness of hypnosis is beyond that of relaxation (M. F. Miller, A. Barabasz, & M. Barabasz, 1991), a good placebo (McGlashan, Evans, & Orne, 1969; Spanos, Perlini, & Robertson, 1989), and/or psychotherapeutic coping (M. E. Miller & Bowers, 1993).

Uses of Hypnosis in Asia

Although hypnosis/trance has been used greatly cross-culturally and historically for healing purposes (Ward & Kemp, 1991), research about how hypnosis may be used is scarce in Asia (Yu, 2005), especially outside of Japan where the field of hypnosis is quite active and the Japanese Journal of Hypnosis is maintained. Adding to this overall scarcity, however, is an additional barrier of language, possible proprietary regulations regarding the sharing of research in standard databases, lack of interaction and perhaps cultural differences, which have led to an overall lack of sharing of ideas, experiences and successes. Database searches revealed publications in Chinese, English, and Japanese regarding the use of hypnosis in various parts of Asia. In this section this research will be reviewed for what it may reveal about both current and historic uses of hypnosis in Asia. Hallaji (1962), for example, reported Sufi healers as describing

their practices being used for many treatment and curative purposes, including: cancer, impotence, tuberculosis, insomnia, headaches, indigestion, lack of appetite, undefined fears, and backache. Kim (1983) also claimed that hypnosis, especially that conducted in an Ericksonian framework, due to its indirect, yet structured nature, would be especially useful in the treatment of persons of Asian descent.

Some formal research has been done and reported in non-English publications in both China and Japan, although much less so in China than Japan. In Japan, Motoda (1996) employed and described a hypnotic procedure in which clients can decide for how long they will remain in hypnosis. The author suggested that the longer clients repeat the hypnotic procedure the more likely they will be to obtain a cure for their ailment. The clients, including nine adolescents with vision problems and 16 adults with difficulties including psychological, psychosomatic, physiological and physical symptoms, were instructed how to conduct their own self-induction for home practice. Motoda's findings in this group of 25 participants were that 76% experienced from light improvement to full cures. This method seems to be good for addressing psychosomatic illness or for maximizing the power of the mind over illness at least in the population studied. It should also be considered that, due to the subjectivity of self–report of symptoms, improvement or lack of it might not be directly comparable from client to client. Also in Japan, Moriyama (2003) described a concept of hypnosis and trance as a therapeutic process of mutual trance experience. Moriyama suggested that the therapist can use his or her own personal resources to engage with the client in an empathic way that produces a trance like interaction. His method seems to be a unique way of integrating "talk therapy" and hypnosis describing the process as involving the therapist experiencing the client and the client experiencing the therapist simultaneously. Moriyama suggested that under these conditions the

therapist can utilize the trance state to more quickly move beyond client ambivalence with the use of soft suggestions. Further research would be required to determine the effectiveness of this approach.

In China a total of four studies are available for review regarding the use of hypnosis in clinical treatment as an adjunct to other treatments and in the treatment of various physical and psychological issues including: angina pectoris (Li, Zheng, Song, Gao, Ni, & Yuan, 2002), glaucoma (Du & Liu, 2001), situational dysuria (Zhu & Yang, 1999), and test anxiety (Yu, 2006). The first two studies were relatively larger investigations that dealt with physical ailments, while the latter two were case studies that dealt with primarily psychological issues. In the first study, Li et al., (2002) used hypnosis in conjunction with acupuncture in 40 patients diagnosed with angina pectoris and compared this group with 31 patients who received acupuncture treatment alone. The "hypnotic acupuncture" group consisted of 22 females and 18 males aged 43-68, while the acupuncture only group consisted of 11 females and 20 males aged 45-69. Li et al. reported that there were no statistically significant differences between the two groups before treatment and that the hypnotic acupuncture group obtained significantly more improvement both psychologically and physically as measured by lowered report of symptoms, ECG readings, blood health measures and psychological measures of depression and anxiety. In the second study, Du and Liu (2001) evaluated the psychological effects of an intervention with 80 patients 40 to 70 years old who were waiting for surgery for primary angle-closure glaucoma. Forty patients were assigned to the control group while the other 40 patients received supportive psychotherapy, relaxation training and self-hypnosis training. Group comparisons were made pre and post using measures for various indices of improvement with heart rate and blood pressure measurements being taken during the operation as well. The intervention group was found to

have lower state anxiety, fewer symptoms of depression one day before surgery and three days after the operation, less pain, and lower heart rate and blood pressure during surgery. Du and Liu claimed to also have used hypnosis to counteract spontaneous negative experiences in surgery. While the authors concluded that the intervention was effective in helping patients through the process overall and 67% of patients desired to continue the relaxation and/or hypnosis self-training, it is difficult to know to what aspects of treatment the various improvements may be due. Zhu and Yang (1999) used hypnosis in conjunction with desensitization to treat a single male patient with situational dysuria in a five-session intervention and report the patient to have achieved full remission of symptoms. They outlined their procedure, which included an evaluation of symptoms, drug treatment, the induction of hypnosis, suggestions for positive imagery, the practice of imagery, and the evaluation of progress at follow up. Finally, Yu (2006) described the first published use of hypnosis in a Chinese population in Hong Kong. In this study the author assessed the examination anxiety of three participants pre and post treatment with the Achievement Anxiety Test (AAT: Alpert & Haber, 1960) and the Subjective Units of Discomfort Scale (SUDS: Wolpe, 1969). The treatment consisted of "cognitive-behavioural" hypnosis in four sessions. Yu reported significant improvement in all three participants based on at least one of the two post measures and self-report. In general, this study represents yet another step forward for hypnosis in Hong Kong and for the sharing of hypnosis research between Western and Asian countries.

Hypnotizability and the Importance of Knowing It

Weitzenhoffer (2002) differentiated hypnosis, hypnotism, suggestion and hypnotizability from one another by stating that hypnosis can be thought of as a state of consciousness, while hypnotism is the act of producing this state and suggestion is the primary method for measuring

hypnotizability while in a state of hypnosis. Weitzenhoffer further defined hypnotizability as the capacity to enter a state of hypnosis, while Tellegen (1978-1979) defined hypnotic capacity as the maximal hypnotic performance under the best of circumstances. It should be noted that most researchers, theorists and practitioners recognize hypnotizability as a stable trait with significant individual variability (Council, 2002) and that the measurement of hypnotizability or the objective observance of hypnosis is in fact a critical component in understanding hypnosis (Spiegel, 2005). From a practical sense, in working with clients and/or patients, it is important to know various characteristics of a person's hypnotic responsiveness and abilities and combine that information with knowledge about efficacious uses of hypnosis in order to better choose appropriate treatment for individuals seeking care (Spiegel & Spiegel, 2004). It is also important to note that, in some cases, higher hypnotic ability can result in more successful treatment with hypnosis as an adjunct (Frankel, 1987; Gfeller, 1993).

Attempts have been made to measure hypnotizability since research on hypnotic phenomena first began (Perry & Laurence, 1980). As a stable personal trait, many attempts have been made to find correlates between hypnotizability and other traits. The list of investigations of potential correlates is extensive; however, the vast majority of research has been focused around personality and absorption. A myriad of personality characteristics seem to have been investigated for their possible relationship with hypnotizability. However, no traditional scales or subscales thereof have consistently been shown to correlate well despite the stability of various measures of hypnotizability (Spiegel & Spiegel, 2004). This has led some researchers to believe that there is something about the nature of hypnosis and hypnotic ability that goes beyond current measures of personality (Van Nuys, 1973).

Tellegen and Atkinson (1974) identified a relationship between absorption and hypnotizability and, since then, correlations between the two have been consistent across many research studies (Balthazard & Woody, 1992; Glisky, Tataryn, Tobias, Kihlstrom, & McConkey, 1991; Oakman, Woody, & Bowers, 1996). While the correlation between hypnotizability and absorption is typically found to be positive and moderate, the theoretical relationship between the two constructs is quite strong and remains very important in understanding the nature of hypnosis and hypnotizability (Council & Kirsch, 1996). Attempts have been made to find certain subscales of hypnotizability, which may correlate more highly with absorption. Different types of suggestions (i.e. cognitive, challenge, or ideomotor) have been investigated to assess their specific correlations with absorption (McConkey, Sheehan, & Law, 1980; Monteiro, MacDonald, & Hilgard, 1980). Council, Kirsch and Hafner (1986) suggested that the correlation might to some degree depend on expectancies. In 1992, Balthazard and Woody found that absorption seems to correlate more strongly with hypnotic suggestions which are more difficult to pass and, lastly, Oakman, Woody and Bowers (1996) found that while mean absorption and hypnotizability scores of the sample were not effected by experimental context, the correlation between the two measures was. While this search for answers has in some cases created confusion, the answers to these questions are still to be found through the use scales of hypnotizability (Frankel, 1989).

The question arises then, what can be taken from these various investigations on the nature of the relationship between potential correlates and the nature of hypnosis and hypnotizability? Despite the current absence of stronger correlates and a lack of consensus on the nature of hypnosis, researchers and practitioners should be careful not to ignore the credible experience of hypnotic phenomena (Hilgard, 1992). The subjective experience of hypnotizable

persons should also be further explored (Spiegel & Spiegel, 2004) as direct measure and testing of hypnotizability continues to be the most accurate way of predicting how a person might respond if attempts are to be made to use hypnosis as an adjunct to treatment.

Hypnotizability in Asian Populations

Hypnotizability does not seem to be a construct frequently measured in traditional forms of hypnosis in Asia. Practitioners and researchers have made assessments of sorts; however, no internationally published normative data in Asia are available regarding direct measure of hypnotizability. While Del Rosario (2002, p. iii) states "There is, to date, no published data on trait hypnotic ability on any Asian sample" it should be noted that at least three studies had been conducted, one in China and two in Japan, and two of these three studies were published in Asian journals by the time of his study. In China, Sun (1994) claimed to have utilized a translation of the SHSS: Form A, although the actual citation seems to contain multiple errors and there is no reference listed. In Japan, Tanabe and Kasai (1993) utilized a Japanese translation of a measure used throughout the West, the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A; Shor & Orne, 1962). Despite this oversight, Del Rosario was correct in suggesting a general paucity of data regarding hypnotizability in Asian countries. The fact that some research has been done; however, supports strongly the idea that not only is there interest in hypnotizability in Asia on the part of westerners, but Asian researchers have also been interested enough in the construct to take on the laborious task of translation and administration of instruments in contemporary research. There still exists, however, a significant gap in the exchange of scientific findings in hypnosis and possibly other fields across significant language and cultural barriers.

As mentioned above, the HGSHS:A has been translated into Japanese (Tanabe & Kasai, 1993) and the SHSS:A has been utilized in China (Sun, 1994), presumably translated into some form of Chinese using simplified characters, although, nothing is mentioned in the article about translation. Tanabe and Kasai suggested that, while no norming study seems to have been published testing the psychometric properties of the translation, the Japanese version of the HGSHS:A has actually become the most frequently used measure of hypnotizability in published studies in Japan. Lack of familiarity with the Japanese language and journals published in Japan makes it difficult to rule out the existence of larger studies; however, the largest study found and translated utilizing the HGSHS:A compared hypnotizability with scores on the Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986) in a sample of 107 participants. A mean score on the HGSHS:A of 4.9 (SD = 2.7) was reported. Unfortunately, the mean obtained was not compared to existing means found in other samples to determine if differences were statistically significant. In the Sun (1994) study in China, Sun investigated the effect of hypnotizability on the stroop effect. A total of 24 participants were divided into two groups based on high vs. low hypnotizability. Each of the groups performed the stroop task both while in hypnosis and while in a state of normal awareness. Sun found that highly hypnotizable participants made significantly fewer errors in significantly less time than participants under all other conditions; however, there was still a significant delay in response to the stroop condition. In this study, as in the Japanese study, no mention of norms for the measures of hypnotizability is made.

In Korea the HGSHS:A and SHSS:C are reported to have been translated by Pyun (1997) and Kim (2000), respectively; however, there does not seem to be any published studies by these translators investigating the psychometric properties of these instruments. Del Rosario (2002)

apparently conducted the first study using these translated instruments. While much of Del Rosario's research regarding his use of the SHSS:C will be discussed later, including limitations of the study, it is helpful to briefly discuss here the results obtained on the HGSHS:A in this population. The HGSHS:A (Korean translation) was administered to 163 Korean university students and, while this study is suggested to be merely an exploratory investigation due to the sample size, the resultant mean of 6.66 (SD = 2.39) is perhaps still worth noting. The author found the mean and standard deviation to be similar to most other administrations of the HGSHS:A.

Despite the use of hypnosis in China for medical purposes, the concept of hypnotizability has not yet been pursued extensively in China. In predominantly Cantonese and English speaking Hong Kong, Yu (2004a, 2004b, 2005) has begun pursuing the concept of hypnotizability. Yu is the only researcher known to be gathering and reporting normative data regarding hypnotizability and only in this single population. Thus, Mandarin language measures for use in other parts of Asia are still needed. Yu (2004b) suggested that knowing an individual's hypnotizability is important clinically before treatment takes place and, while the main purpose of his first two studies was to investigate beliefs and attitudes about the uses of hypnosis, Yu also inquired about "self-perceived" hypnotizability by asking participants what they thought their level of hypnotizability might be. His findings included great similarity in general beliefs about hypnosis with western samples; perhaps the most noteworthy differences with western samples were Yu's participants thought of hypnosis as a more useful tool, but were less likely to believe it could lead to any type of transcendence. Participants in this study who envisioned themselves to be more hypnotizable also had more positive attitudes toward hypnosis than those who perceived themselves to be less hypnotizable. While self report of expected hypnotizability has

been shown in some studies to correlate with actual tested hypnotizability in American samples (Council et al., 1983; Melei & Hilgard, 1964), the strength of these correlations tends to be moderate and inconsistent, often varying with the participants' confidence in their self-assessment and/or guesswork (Kirsch & Council, 1992). In Yu's study it seems possible that expected hypnotizability might be most related to beliefs about hypnosis, a possibility that was not addressed in his report. Studies investigating the nature of the relationship of expected hypnotizability and actual hypnotizability do not seem to have been conducted in Asia. Finally, some of Yu's participants may have had experience in hypnosis while others may not have (prior to participation all persons inquiring were encouraged to take part). However, no data were reported as to what percentage had experience with hypnosis. While this has proven to be the beginning of further research regarding hypnotizability by Yu, it is unfortunate that no data were presented on the validity of this method of hypnotizability assessment in Chinese samples.

Recognizing the need for further testing of hypnotizability, Yu (2005) administered the CIS to 90 Chinese university students. Again, Yu's research was groundbreaking in the Chinese community. However, as McConkey, Sheehan, and White (1979) point out, the CIS, while correlated with the HGSHS:A, tends to measure active imagery and imagination more exclusively than other more complex scales which require a hypnotic induction and measure a fuller range of hypnotic abilities (McConkey et al., 1979). Yu's sample consisted of 45% of psychology majors at a college in Hong Kong for a total of 90 participants. A mean of 20.41 (SD = 6.24) was attained and was reported as comparable to those found by Barber and Wilson (1978-1979). Yu found no gender differences and appears to have assessed for differences based on religious affiliation. He compared two categories, Christian participants vs. those with "no religion," a notable yet unexplained potential bias, and found a significant difference in response

to the age regression item, self-reported Christians being less successful overall on this item. In general, the participants' hypnotizability as tested with the CIS was similar to their self-perceived hypnotizability. Finally, Yu observed seven of the participants, roughly 8%, experiencing "natural amnesia, drowsiness, and sleep" and suggested greater investigation of this response is needed.

Hypnotizability and Meditation

Some researchers have also speculated potential links may exist between hypnosis and meditation, questioning whether or not the two practices have much in common. The practice of meditation in the East is more widespread than hypnosis and more widespread than the practice of meditation in the West. Meditation has been practiced in the East for over 2,500 years (Otani, 2003) and, at least in appearance, seems to some researchers and practitioners to share many similarities with hypnosis. In fact, several researchers have attempted to study the relationship between hypnotizability and meditation and, in some cases, the practice of various traditional martial arts, often as an attempt to learn more about the exact nature of hypnosis (Brown, Forte, Rich, & Epstein, 1982-1983; Davidson & Goleman, 1977; Delmonte, 1984; Holroyd, 2003; Mackett, 1989; Otani, 2003; Spanos, Gottlieb, & Rivers, 1980; Van Nuys, 1973; Windle & Samko, 1992).

Eastern meditation seems to have much in common with hypnosis including similar phenomenological and neurophysiological effects (Delmonte, 1984; Holroyd, 2003) and the fact that they both involve: similar procedures, mental discipline/concentration (Holroyd, 2003; Otani, 2003), "ego-receptivity" (Brown & Fromm, 1986; Otani, 2003; Van Nuys, 1973), and absorption (Holroyd, 2003; Otani, 2003; Saito, 1993). Both hypnosis and meditator groups have been found to have experienced alterations in state of awareness, self-awareness, time sense,

perception, meaning, imagery vividness, rationality and increased positive feelings as measured by the PCI (Pekala, 1991; Pekala & Kumar, 2000). Holroyd (2003) found that the neurophysiology of deep hypnosis and deep meditation are different from other states of consciousness, yet similar to one another.

Given the differences that exist in culture and understandings of these phenomena, it is important to investigate various forms of human consciousness, including meditation, as an aid to better understand hypnosis (Spiegel & Spiegel, 2004). Otani (2003) reported believing increased understandings of the nature of human consciousness and meditative and hypnotic experiences could be realized through the study of experienced Buddhist meditators with regard to their hypnotizability. Pan, Zhang and Xia (1994) suggested that the study of altered states of consciousness, such as a dream, hypnosis, and meditation, are important as they could lead to more powerful techniques for use in psychology and psychosomatic medicine.

It is well noted in the meditation literature that there are at least two major types of meditation, as well as several subtypes and/or variations (Davidson & Goleman, 1977; Otani, 2003; Suzuki, 1970). The first major type is called concentrative meditation and the second major type is referred to as “calm mind” meditation, also known as “mindfulness” in the West. Concentrative meditation involves the restriction of attention to a single focus over a long period of time, leading to an enhancement of the discriminatory function, while calm mind meditation, on the other hand, involves the calming of the mind while being aware of mental events and allowing them to come and go naturally, considering nothing a to be a distraction (Maliszewski, Twemlow, Brown, & Engler, 1981). The importance of distinguishing between various types of meditation is illustrated in a recent study conducted in China by Pan, Zhang and Xia (1994). They found significant increases in alpha and theta waves in EEG patterns during concentrative

and non-concentrative Chi-Gong practice as compared to prior to Chi-Gong practice ($p < 0.02$), and no significant change in an "eyes-closed" control group. Pan, Zhang and Xia stated that they believe these increases are likely due to the long-term practice of Chi-Gong and other types of meditation.

In the West, meditation has been researched in terms of its relation to hypnotizability; however, sufficient evidence describing how meditation practice may affect a person's hypnotizability is lacking. Most studies are conducted on western populations, by relatively inexperienced practitioners of westernized forms of meditation such as transcendental meditation (TM) (Delmonte, 1984). Perhaps given Delmonte's concerns regarding participant proficiency with meditation and possible westernization of the various forms of meditation some of the following studies find only weak positive results.

Van Nuys (1973) suggested that meditation experience might be more related to hypnotizability than various aspects of personality. In this study, there were no pre measures of hypnotizability and all participants experienced the same 30 minutes of meditation. Participants' attention and hypnotizability were measured. Meditation attention measures which counted the number of distractions during a focusing exercise and hypnotizability scores from the HGSHS:A were found to have a Pearson correlation of -.42, $p < .01$. Unfortunately, the Van Nuys study did not consider the importance of consistent meditation practice and did not specifically address the question of effects of meditation directly on hypnosis or vice versa. Rather, the intent seems to have been merely to investigate the relationship of hypnotizability to attention during meditation.

Walrath and Hamilton (1975) also measured hypnotizability of meditators and non-meditators. They divided 30 participants evenly into meditation, hypnosis and control groups. All participants took the Stanford Hypnotic Susceptibility Scale, Form A. Those in the hypnosis

group were selected based on their high scores (10-12), while those in the meditation group all had at least six months experience meditating and had all received training in TM. The authors reported 100% of the meditators attained scores of 11 or 12 on the Form A, while only 44% of the non-meditating volunteers scored from 10 to 12. They concluded that either the practice of TM increases hypnotizability or only highly hypnotizable participants found something about the practice of TM interesting enough to continue its practice (Walrath & Hamilton, 1975).

Davidson, Goleman and Schwartz (1976) looked directly at the effect of meditation practice on hypnosis. Davidson, et al, divided participants into four groups based on amount of meditation practice, ranging from no experience to more than two years of practice. The mean length of practice is not given for any group and the range for the long-term meditator group is also not given. Davidson, et al, used the Shor Personal Experience Questionnaire (PEQ) as an indirect measure of hypnotizability to assess differences between groups. They did not find significant differences between the four groups on PEQ scores $F(3, 54) = 2.35$, $p < .08$, but did find a significant difference in meditation length among those who rated there experience as "most intense" on the PEQ $F(3, 54) = 3.47$, $p < .03$. In reflecting on these results, Davidson, et al, (1976) noted that different types of meditation may result in different findings.

Shapiro (1978) also studied the effect of short-term meditation on hypnotizability. Participants in this study were non-meditators. Their hypnotizability was assessed pre and post intervention with the Stanford Hypnotic Susceptibility Scale, Form C "Group Variant" (no information is given about this "variant"). Nine participants practiced meditation twice daily for three weeks while six others served as a control group. Shapiro reported that hypnotizability was increased significantly for two of the nine meditators, all other changes in hypnotizability were non-significant.

Spanos, Gottlieb, and Rivers (1980) conducted a study to test the effect of meditation on hypnotizability in which meditation was considered a short-term treatment. This study was presented as a partial replication based on the design of the Van Nuys study; however, the Van Nuys study claimed it was a cross-sectional study and meditation experiences were not considered interventions. Given practicing meditators were actually excluded from the study and participants in the meditation group spent a total of only two hours meditating this adaptation of the Van Nuys design seems inadequate to answer the question posed. Furthermore it was suggested to participants in the meditation group that during the meditation session they would experience intrusions of thought and that they were to attend to these intrusions and make note of them. The possible negative effects of these suggestions on the quality of the meditation experience were not discussed. Given the very brief nature of the meditation practice it is no wonder Spanos, Gottlieb, and Rivers did not find any changes in hypnotizability.

Most studies addressing the possible relationship between hypnosis and meditation use participants that have had very little practice with meditation or actually exclude from their samples persons who had previously practiced (Heide, Wadlington, & Lundy, 1980) and are, therefore, methodologically questionable (Delmonte, 1984). The effect meditation might have on hypnotizability is more difficult to answer with samples consisting of short-term meditators only, and it is perhaps the unavailability of large numbers of long-term meditators in the West that has presented further obstacles to research regarding the connection of meditation to hypnotizability. Given the foreign nature of meditation to the western world, researchers of its theory and/or practice should take special care to understand and describe it in sufficient depth and conduct experiments with appropriate populations in order to avoid presenting a distorted, unbalanced and incomplete picture (Maliszewski, Twemlow, Brown, & Engler, 1981). Results of studies in

eastern cultures where long-term meditators may be more prevalent could potentially be quite different. Holroyd (1996) pointed out that actual meditators often practice for a minimum of 30 minutes per day for several years to realize the benefits. Finally, Otani (2003) suggested that meditation is a life long endeavor and that most studies showing psychological and physiological effects of meditation are based on experienced meditators with over 30 years experience, stating that the idea of "short term" meditation is philosophically heretical.

Given the above research regarding meditation and hypnotizability, it is important to consider the effect of meditation practice on the assessment of hypnotizability in Asian samples. In this study meditation was assessed and evaluated for its possible contribution to individuals' hypnotizability through the use of a meditation questionnaire to elicit specific information regarding meditation practice and experience.

Scales of Hypnotizability

In the 1950's, Weitzenhoffer and Hilgard began a major project in the search and development of an optimal scale of hypnotizability. It seems fitting, then, that Weitzenhoffer (2002) has conducted extensive review and critique of various scales of hypnotizability in which he identified over 25 instruments measuring hypnotic depth, hypnotic susceptibility, suggestibility, hypnotizability and other variations. The various scales claim to measure in some cases different aspects of the hypnotic experience and, while some may take as long as one hour to administer, others, such as the Hypnotic Induction Profile (HIP; Spiegel & Spiegel, 1978) and the Stanford Hypnotic Arm Levitation Induction and Test (SHALIT; Hilgard, Crawford, & Wert, 1979), take less than 10 minutes to complete. Eventually, scales were developed which could be administered in a group rather than an individual setting. Due to the sheer number of measures in existence, due to varying understandings of what is being measured, and due to various methods

of validation employed, all these scales do not measure hypnotizability in its true sense (Weitzenhoffer, 2002). Thus, carefully choosing the right scale or profile based on specific needs and sound psychometric properties is very important (Tellegen, 1978-1979). Given the importance of hypnotizability in the use of hypnosis, a brief review of some major scales of hypnotizability follows.

Council (2002) took a detailed look at various scales of hypnotizability. His historical presentation of the following scales is useful in understanding how the measurement of hypnotizability has evolved over time. Liebeault and Berheim, two early practitioners of hypnosis, developed what was perhaps the first measure of hypnotizability in around 1890. These scales measured "depth" of hypnosis, a concept that no longer receives as much attention in research as does hypnotizability. From the time "The White Scale" was developed by White (1930), interest in the testing of hypnotizability began to expand. With this scale a quantitative scoring method was introduced, the items were arranged in order of increasing difficulty and scoring was based on observable behavior. The next year brought with it two additional scales, the Davis and Husband Scale (1931) and the Barry, McKinnon and Murray Scale (1931). The Davis and Husband scale was the most widely used scale for many years despite lacking specific criteria to determine what type of responses might represent a pass or fail (Council, 2002; Edmonston, 1986). The Friedlander-Sarbin Scale (1938) was based in part on features of the Davis and Husband Scale and the Barry, McKinnon and Murray Scale. A standard induction, test suggestions and scoring criteria were used, making the testing of a person's hypnotizability a much more standardized process.

This brings us to a group of scales referred to as the Stanford scales, work for which began in 1957, and some of which are still in active use today. There were major flaws inherent

in earlier scales of hypnotizability due to a lack of careful definitions and a lack of precise means of measuring it. The SHSS: Forms A & B (Weitzenhoffer & Hilgard, 1959) solved these problems more efficiently than other previous adult measures by defining hypnotizability operationally as the number of behavioral responses that a participant gave to the hypnotic suggestion items (London, 1965). Hilgard and Weitzenhoffer led a group of researchers at Stanford University who would eventually develop a total of five major scales: The Stanford Hypnotic Susceptibility Scales (SHSS), Forms A & B in 1959, the SHSS, Form C in 1962, and the Stanford Profile Scales of Hypnotic Ability (SPS), Forms I & II in 1963. The forms A & B, as well as I & II, were meant to be alternate forms, while the Form C stood on its own. Other differences in the Form C included the ordering of items by difficulty in a Guttman type scale (except for an amnesia item, necessarily at the end) and the simultaneous elimination of two easy items and the addition of two more difficult items that pertained to distortions of memory and perceptual experience. The SPS, Forms I & II, (Weitzenhoffer & Hilgard, 1963) rather than assessing for a global hypnotizability were designed to reveal a profile of hypnotic ability; however, they never became as widely used as the SHSS: Form C (Woody, Barnier, & McConkey, 2005).

Many other scales have been developed, but most have not gained much attention in publications other than through use by their own developers (Perry, Nadon, & Button, 1992). The Hypnotic Induction Profile (HIP) gained some popularity for itself in that it can be given in a very short period of time thus making it perhaps the only practical instrument available for use by various health service providers. The HIP is also based on work done over many years with practical clinical samples rather than experimental samples only as most other scales are (Spiegel & Spiegel, 2004). This tool has been seen by some to be controversial in its use of its eye-roll

test (Council, 2002) and by others to be an important instrument for its predictive relationship with treatment outcomes and psychopathological factors (Barabasz & Watkins, 2005). Regardless of one's perspective on the utility of information provided by the HIP, given its efficiency, this instrument will undoubtedly continue to attract the attention of clinicians and perhaps researchers alike.

Other scales make efficient use of time by making group administration possible. The Harvard Group Scale of Hypnotic Susceptibility (HGSHS:A; Shor & Orne, 1962) and the Waterloo-Stanford Group C Scale of Hypnotic Susceptibility (WSGC; Bowers, 1993) are especially useful for their ability to screen large numbers of participants at once and thus have been used widely in hypnosis research. The HGSHS:A has been in existence longer, used in more studies, and been normed on more populations than the WSGC; however, some researchers (Weitzenhoffer, 2002) have suggested the WSGC may be a more accurate instrument and certainly more closely correlated to the SHSS:C (Bowers, 1993). Due to the widespread use of the HGSHS:A (it has been translated and normed with more populations than any other scale of hypnotizability) some researchers and/or practitioners may not switch to the newer WSGC; however, this option should be considered. While these group scales can be quite useful in screening, most researchers and scale developers agree that the SHSS:C is still the best measure of hypnotizability and thus still irreplaceable.

Development of the SHSS:C

After the development of the SHSS: A & B, Form C was designed to increase the variety of hypnotic experiences that might be tapped and include more difficult items so as to be able to better differentiate highly hypnotizables from very highly hypnotizables (Hilgard, 1965). The mode dropped from four on the Form A to two on the Form C due, to a large degree, to the

elimination of two of the easier items from the Form A and the addition of two harder items to the final Form C (voice and visual hallucinations). These changes also led to fewer participants scoring 11 and 12 on the Form C. Hilgard noted that with these minor differences, the scores from the two forms had otherwise similar distributions. The Guttman style order of the Form C is based on pretest data and later norming data were found to be generally supportive of that order. Hilgard noted that to fit better a Guttman-type scale the preliminary easy items should be a little more difficult, the more difficult items at the end a little easier, and the intermediate items should have been more spread out in terms of difficulty.

The existence of a standard instrument with the excellent psychometric properties SHSS:C has allowed for direct comparisons between various clinical and experimental investigations (Barabasz & Watkins, 2005) and has likely been an integral part of showing that hypnotizability is actually a very stable trait over time. The stability of hypnotizability as a trait has been well established with test-retest correlations of .6 and .7 after 10 year (Morgan, Johnson, & Hilgard, 1970) and 25-year (Piccione, Hilgard, & Zimbardo, 1989) periods respectively. The SHSS:C is strongly recommended now as the gold standard of hypnotizability testing (Barabasz & Watkins, 2005; Lynn & Shindler, 2002; Nadon & Lawrence, 1994; Register & Kihlstrom, 1986; Weitzenhoffer, 2002); however, likely due to the amount of time required to administer the scale individually, it is underutilized (Bowers, 1993).

Normative Samples of the SHSS: Form C

The original SHSS:C has to date been normed and used in populations in the United States and has been adapted, translated and normed with populations in Germany, Spain, Italy, Holland, and Mexico. It has also been utilized in Korea; however, not with enough participants to constitute a normative sample. The various studies reviewed in this section incorporate various

methodologies that emphasize the importance of the SHSS:C to varying degrees and report both some differences and similarities in properties of the adapted instruments.

Original Stanford Norms

Hilgard (1965) published the data for the original norming sample of the SHSS:C. Two hundred and three participants previously given the SHSS:A were later given the Form C to which 104 additional participants were added to improve the regularity of the distribution. A mean of 5.19 and standard deviation of 3.09 were obtained. Hilgard noted that a mode of two was obtained due to the two very easy items mentioned previously and that fewer scores of 11 or 12 were obtained as compared to the SHSS:A due to the additional more difficult items also described earlier. A Kuder-Richardson (Formula 20) reliability of .85 was found for the total scale and biserial correlations ranged from .49 for item #2 to .87 for item #12 with an average of .71 indicating high internal consistency. Retest reliability was also calculated based on the six items that were equivalent in the Form A, and other items as retesting was conducted, with item #10's retest reliability being estimated at .70. Retest reliability for all items ranged from .60 on item numbers 4, 8 and 11 to .77 on item #1 with an average of .67. Hilgard suggested that high face validity plus high internal consistency guarantee the validity of the scale as a whole. It is important to note, in analysis of the SHSS:C, that scores are not normally distributed (Hilgard, 1965; Perry, Nadon & Button, 1992); rather there are multiple peaks at 5, 8, 10 and the scales mode of 2.

After subjecting the scores to factor analysis, Hilgard (1965) found that a three-factor model fit best with the data presented. The first factor is described as "ideomotor inhibition", includes item numbers 5, 8, 9, 11 and 12 and accounts for 44% of the variance. The second factor is labeled the "difficulty factor" and includes item numbers 1, 2, 6, and 7. Finally, the third

factor is called “Positive hallucination” and includes item numbers 3, 4 and 10. These three factors combined accounted for 66% of the variance. One factor considered alone was found to be prominent with 10 of 12 items accounting for at least 50% of the variance. The presence of this strong single factor related to primary hypnotizability makes the use of a single overall score for the scale fairly appropriate (Hilgard, 1965).

Spanish Norms

Spanish norm data for the SHSS:C were collected from a total of 85 female and 30 male participants and published in 1996 by Lamas, del Valle-Inclán, and Díaz. The SHSS:C was given to this subgroup of an original group of 496 participants who were first administered the HGSHS:A. Rather than being randomly selected, the 115 participants were selected based on their HGSHS:A scores in order to ensure participants with a wide range of hypnotizability scores (Lamas et al., 1996). The administration of the SHSS:C was done after providing time to discuss hypnosis and answer general questions participants had. The scale was given in full for each participant without the use of the discontinuation criteria and in a soundproofed room with normal lighting. Each administration took between 45 and 60 minutes. The authors did not mention what procedures were used to translate the SHSS:C nor the number of administrators, which leaves one to wonder if there is a need to calculate inter-rater reliability and if so what the inter-rater reliability might be.

The mean SHSS:C score was 5.78 (*SD* = 3.15) (Lamas, del Valle-Inclán, & Díaz, 1996). The authors reported these results to be similar to the Hilgard (1965) study except for scores of 8 or 9 being more frequent in the Spanish sample than the US sample. The authors reported a Spearman correlation coefficient of .9 with the Hilgard sample. They suggest their calculated Cronbach’s alpha correlation coefficient of .85 is the same as Hilgard’s calculated Kuder-

Richardson Formula 20. This is problematic for two reasons: first, the Cronbach alpha is an inappropriate statistic given the lack of equality of items inherent in the Guttman type design of the scale, and second even if it were appropriate they make no attempt to discuss how these formulas might otherwise differ. Lamas et al. (1996) calculated validity for the SHSS:C by comparing scores of participants on this scale to the scores of the same participants on the previously administered HGSHS:A and found a .71 correlation coefficient.

Italian Norms

Data for the Italian norm of the SHSS:C were gathered over a period of 15 years with a back-translated version of the original (De Pascalis, Bellusci, & Russo, 2000). Participants were 263 women and 93 men taking an introduction to psychology course at the University of Rome "La Sapienza". Of the 356 total participants, 218 took the HGSHS:A within three weeks before the administration of the SHSS:C, and the other 138 participants took only the SHSS:C. No other mention is made of possible variability in previous hypnotic experience of the participants. It should be noted that, as pointed out by Sánchez-Armáss (2006), the total number of cases seems to add up to 349 rather than the 356 reported. It also appears that the number of subjects obtaining a score of one may have been left out of the original article (De Pascalis, Bellusci, & Russo, 2000). Given the possibility that the seven missing cases might correspond to the missing number of participants scoring a one this researcher contacted De Pascalis and was informed that in fact there were seven participants who scored a one and that the data had been inadvertently left out of the final article. Participants that took only the SHSS:C responded to an advertisement for a "general psychological experiment." They were told the experiment would involve hypnosis when they arrived to participate. Those that took both the HGSHS:A and subsequently

the SHSS:C originally responded to a similarly worded advertisement. They were told upon arrival that the experiment would involve hypnosis and extend over two sessions.

The difference in mean HGSHS:A scores for those who returned and those who did not was not found to be statistically significant. The SHSS:C scores of those who first took the HGSHS:A was not significantly higher than the group that was only administered the SHSS:C (De Pascalis, Bellusci, & Russo, 2000). No gender differences were found to be significant either. The entire Italian sample yielded a mean score of 6.81 (*SD* = 2.88). It was found that this was significantly higher than earlier reported means for the United States sample (*M* = 5.07, $t(557) = 6.46$, $p < .001$) and the Spanish sample (*M* = 5.87, $t(469) = 3.11$, $p < .01$). Item consistency was also compared to that of the US and Spanish norms and it was found to be acceptable. Using rank order correlations for point-biserials to assess similarities between the Italian and Spanish samples showed that they were significantly correlated (Spearman *rho* = .78, $p < .05$); however, both the Italian and Spanish correlations with the US sample were low, .47 and .50 respectively. In general the Italian instrument was deemed comparable to the US and Spanish reference samples in reliability and, more specifically, the pattern of item reliability was more similar to the Spanish version (De Pascalis, Bellusci, & Russo, 2000).

German Norms

German norms were established with a sample of 108 female and 66 male students (Bongartz, 2000). The participants were compensated an equivalent of roughly five US dollars for their participation. Administrations were done by a total of seven administrators in a dimly lit room and, unfortunately, inter-rater reliability was not reported. Rather than presenting numbers of students with individual scores, Bongartz (2000) divided scores into categories of high, medium and low and presented the number falling into each category. More specifically, scores

of 1 to 4 were considered low, scores of 5 to 8 were considered medium and scores from 9 to 12 were considered high. The lack of reported numbers of students with specific scores makes it difficult to compare the results of this study directly with the results of other SHSS:C norming studies.

The mean score was 5.53, (*SD* = 2.8). Internal consistency was calculated using the Kuder-Richardson Formula 20 and was found to be .72. A correlation coefficient of the German versions of the SHSS:C and the HGSHS:A was found to be .68. In addition to the lack of report of frequency of specific scores, perhaps the aspect of this study most in need of strengthening would be, as with many of the other SHSS:C norm samples, increasing the number of subjects. Overall, Bongartz (2000) suggested the results have great similarity with the original US sample.

Dutch Norms

Dutch norms for the SHSS:C were based on 135 student members of a university population, 66 in 1998 and 69 in 1999 (Näring, Roelofs, & Hoogduin, 2001). The participants were 98 female and 37 male participants who responded to advertisements around campus and in the campus newspaper at a university in the Netherlands. Half of them were majoring in psychology. Originally the study was described as involving attention and suggestibility. Hypnosis was not mentioned until after respondents came to participate. Of an original 142 respondents, seven did not complete the scale. The mean age of participants was 21.51 years, ranging from 17 to 46. The scale was translated into Dutch and was inspected by a native English speaker, but it was apparently not back translated. Participants filled out some questionnaires as part of another research project, were given some general information about hypnosis and were allowed to ask questions of the experimenter. There were four experimenters altogether and, in

order to insure consistency in scoring, they each observed 13 of the participants live and 13 on videotape. Experimenters later discussed scoring and worked out any differences.

Inter-rater reliability was calculated for each of two pairs of experimenters and the kappa for each pair was .84 (Näring, Roelofs, & Hoogduin, 2001). The average hypnotizability of 4.31 (*SD* = 2.6) was found to be significantly lower than the original U.S. Hilgard sample (*M*=5.19, *SD* = 3.09, *z* = 3.72, *p* <.001). Participants were categorized into three groups based on hypnotizability inconsistent with previous categories. In this study scores of 0-2 were considered low, 3-5 medium, and 6-12 high, whereas in other reports categories are more evenly divided. This leads to an appearance of more similar findings despite the significantly lower mean compared to other samples. Internal consistency was calculated using the Kuder-Richardson-20 and found to be .78, comparable to the original sample reported by Hilgard (1965). The authors offered three possible explanations for the differences found between this Dutch population and the original Hilgard study. First, that the results represented an actual difference between cultures. Second, the translation may have deviated slightly from other languages. Finally, recruitment strategies were slightly different (Näring, Roelofs, & Hoogduin, 2001). Overall, psychometric properties of the Dutch language version were similar to those of other language versions. It is unfortunate that more participants could not have been part of this study; perhaps persons from the community in addition to the students in the sample. However, this research accomplished a significant task of giving a context and method of understanding future studies using the SHSS:C within the Dutch population.

Korean Study

The focus of this study was actually to simply determine if an Asian sample might be similar to other samples using three instruments to assess hypnotizability (Del Rosario, 2002).

While the HGSHS:C and the HGSHS:A Subjective Experience Scale was given to 163 psychology students, the SHSS:C was given to only 47 participants in the study. While it is not possible to consider this a normative study given the low number of participants and the fact that only high scorers on the HGSHS:A (ranging from 7 to 11) took the SHSS:C, this represents what appears to be the first time the SHSS:C was used in a published study with a population in Asia. The mean score on the SHSS:C was reported as 6.91 (*SD* = 2.43) for participants selected based on their high scores on the HGSHS:A. A reliability coefficient of .72 is reported for this sample; however the method of calculation is not mentioned. Again, given the method of selection of participants it is very difficult to interpret these results. Del Rosario (2002) claimed to have given the SHSS:C for the purpose of validating the HGSHS:A; however, it is clearly stated that the participants that took the SHSS:C were those that scored a seven or above on the HGSHS:A. Unfortunately, when calculating correlations for the two instruments, the overall results of the SHSS:C administration were compared with the overall results of the HGSHS:A administration. Del Rosario (p. 86) partially addressed this issue by stating "Differences in the method of selection of participants may have influenced differences in the correlation of the two scales. It is likely that I inadvertently invited only those participants who received high scores on the Harvard Form A to return for the Stanford Form C testing".

While Del Rosario's (2002) study was not intended to establish normative data for the SHSS:C with a Korean sample, along with its strengths, there are limitations of the study to consider. While it is of significant scientific value to determine the various levels of hypnotizability in various cultures, it seems unfortunate that cross-cultural research be led by persons who: (a) do not speak the language of the participants, (b) can not attest directly to the accuracy of translations of instruments used, (c) can not directly assess the degree to which

administration of those instruments followed standardized scripts, (d) provide no information regarding the original translators of the instruments and/or research that they themselves have conducted in the field, and, (e) do not describe the nature of consultation and with whom they may have consulted regarding culturally appropriate interpretations of the data. Inter-rater reliability was not calculated, nor was there consideration given to the possible effect on participant volunteering and performance given the unique nature of the relationship of the researcher to potential participants and the attitudes male and female participants may have had toward the group of all female graduate student administrators of the scales (gender differences were not found in the SHSS:C scores, but male participants were found to have significantly lower scores than female participants on the HGSHS:A). Del Rosario also pointed out that the mean for females on the SHSS:C was 7.26, (*SD* = 2.25) while the mean for males was 6.25, (*SD* = 2.7), although this is not a significant difference. Del Rosario then compared males to females on both tests and, with no direct comparison of female performance on the SHSS:C to female performance on the HGSHS:A, seemingly made an error in concluding that females did better on the HGSHS:A than on the SHSS:C. Given the generally greater difficulty of the SHSS:C, as compared to the HGSHS:A, this result is actually to be expected, whereas the fact that male participants did more poorly on the HGSHS:A than the SHSS:C is opposite of what would be expected, given the relative difficulty of the two measures.

Del Rosario (2002) suggested that since the mean, standard deviation and score distributions were comparable to European norms it enhances the scales' reliability and validity overall. However, while the similar results may suggest the scale is measuring the same phenomena in a new culture, this is an assumption as it may also be true that there are other culturally based variables and/or response patterns that may be interacting in a way that lead to

these similar results. Del Rosario (p. 6) contradicts himself in this regard when he cites Perry, Nadon and Button (1992) saying "The lowering and raising of the mean scores across samples may be due to a number of factors: differences in language, cultural orientation, methods of delivery, preparatory induction procedures, selection of participants, and how participants were prepared for induction." It follows that it is possible to obtain a similar mean, standard deviation, score distribution and even a high correlation between two instruments in two samples and still these distributions may be affected by these various factors in unknown ways. Similar results then would not necessarily say anything about other scales without a sound interpretation based on an understanding and explanation of the variables mentioned above.

Perhaps the most encouraging aspect to Del Rosario's (2002) research for the current investigation is the fact that the presence of previously translated scales utilized in Del Rosario's study does serve as strong evidence for the desire to conduct research in the field of hypnosis regarding hypnotizability in other parts of Asia, not only Japan. It is also important to note that, had Del Rosario not conducted this research, the existence of Korean translations of these instruments would still be unknown to many parts of the world. This also suggests the possibility that there may be scholars in other parts of Asia who may be well read in the practice of western hypnosis and may, in fact, be actively practicing hypnosis, but not actively publishing research in this area in internationally recognized journals.

Mexican Norms

Recently a Spanish version of the SHSS:C was translated and back translated from the original English version with the intent for its use with Mexican populations (Sánchez-Armáss & A. Barabasz, 2005). In this most recent norming study of the SHSS:C, 513 participants, 338 females and 175 males were administered the SHSS:C. Approximately 70% of the participants

were volunteers from the School of Psychology at the Universidad Autonoma de San Luis Potosi and the others were volunteers from other areas of the university and community. Administrators of the test included 27 advanced psychology students, all with over 400 supervised hours of clinical experience. Discontinuation criteria were not used with this study.

Inter-rater reliability (Fleiss, 1986) was found to be above .95. The mean was found to be 7.56, (*SD* = 2.29) and the distribution was found to be negatively skewed. No gender differences were found. Differences in distribution were found between the Mexican norms and the Spanish and Dutch norms. Significant correlation coefficients were found between the Mexican norms and the five other reference samples (the Korean sample was not included in this analysis). The test reliability coefficient was found to be .66 using the Kuder-Richardson 20 for scores based on dichotomous pass/fail items. Statistics were run applying discontinuation criteria, which improved the test reliability coefficient to .77 and did not create additional significant differences to test psychometrics. The Mexican data set was negatively skewed, suggesting members of the sample and perhaps other Mexican residents would be better potential candidates for hypnotherapeutic interventions than other populations and the conclusion is then made that if hypnosis is utilized the effect would be a significant improvement to the current quality of health care available.

As a final note, it is due to the importance of understanding the characteristics of a person's hypnotizability that these translations and studies have been conducted. The translations are necessary for non-English speakers and the normative data are necessary to understand the characteristics of a person's hypnotizability within the context of their culture and experience. It is important to consider reasons for variations that were found between not only individual participants, but the population means as well.

CHAPTER THREE

METHODOLGY

The English version of the SHSS:C, originally normed at Stanford University and published in 1962, was used to create the Mandarin Chinese Translation (MCT), which was then used to establish normative data with a Taiwanese sample. It should be noted that while approximately 70% of the population's native language is Taiwanese, the written form of the Taiwanese language has not been taught in mass for many years. Mandarin Chinese is the official language in Taiwan, and, while Taiwanese and/or English instruction is available to all students at various points in their education, Mandarin is the only language taught throughout the entire educational system.

Participants

From an original pool of 328 volunteers, normative data for the SHSS:C (MCT) were gathered from a sample of 322 participants all of whom were Taiwanese citizens. The SHSS:C (MCT) was not administered or only portions were administered to six volunteers who were not included in the final sample for the following reasons: one volunteer did not meet the minimum age requirement of 18, three were on psychotropic medications at the time of data collection, and two did not complete the full scale.

The southern and central parts of Taiwan can be thought of as more ethnically Taiwanese and more traditional than the northern part of Taiwan, as evidenced by various cultural activities, celebrations, frequent public religious ceremonies (e.g., parades, burning of ghost money) and the representation of these traditions in the media. In Taipei, these strong traditions coexist with greater modernization, evidenced by such things as greater general economic development, high

tech mass transportation systems, and the current tallest building in the world, “Taipei 101.” Also, based on data collected, the northern part of Taiwan, particularly Taipei, more than other areas is home to a higher concentration of ethnically Chinese or “mainlanders”, typically first, second, and/or third generation immigrants from China. Given the differences in the various areas of Taiwan, collecting data from these multiple areas was thought to be more likely to produce a more representative total sample. Given these areas are thought to have very different compositions ethnically and culturally it was determined that sampling from each would lead to a final sample more representative of the overall population in Taiwan.

Fourteen administrators collected data then from the general public in three cities (in northern, central, and southern areas) in Taiwan (n = 303) and in the United States from Taiwanese citizens at a major university (n = 19). The sample consisted of 219 females and 103 males, age 18 to 78 with a mean age of 33.6. Thirty-four participants reported previous experience with hypnosis or trance, while 94 reported having meditated in the past.

Volunteer participants were recruited by administrators through the use of newspaper advertisements, posted flyers (see Appendices C and D), word of mouth, and visits to university classrooms and community centers to discuss potential participation. It was advertised that the study involved hypnosis and the testing of hypnotizability. After testing, one participant reported a mild headache. After a brief consultation and upon checking the following day the participant reported the headache to have dissipated. No other negative sequela were observed or reported.

Multiple test administrators. The fourteen administrators were used in order to expedite the collection of data and to represent a more varied sample of practitioners who may later use the instrument in Taiwan. Medical professionals, psychologists, psychiatrists, and two psychiatry internists participated in the training required for the purposes of this study. A 24-hour training

workshop in administration and scoring of the SHSS:C (MCT) and general procedures for data collection was organized by the primary investigator, and presented by the primary investigator with assistance from the primary translator of the SHSS:C (MCT). Administrators had previous experience in the use of hypnosis in clinical settings and basic concepts of hypnosis were also reviewed.

Inter-rater reliability. In order to demonstrate inter-rater consistency, one trained administrator and one observer administered the SHSS:C (MCT) to 10 participants who were also video recorded for the purpose of establishing and verifying scoring consistency among raters. After all administrators had been trained in administration, and scoring methods, they watched these administrations on video and scored independently the performance of the 10 participants.

Instruments

A screening form (Appendix E), a demographic questionnaire (Appendices F and G), the Mandarin Chinese translations of the Arm-Drop test (Appendix H), and the SHSS:C (Appendix I) were given to all participants. The previously mentioned meditation questionnaire (Appendices A and B) was given only to participants who reported meditation experience on the demographic questionnaire. All Mandarin Chinese documents used have an English version included on the previous appendix page with the exceptions of the English versions of the SHSS:C and the Arm-Drop Test.

Criteria for Screening. Exclusion criteria was based on five factors. Any one not yet 18, not holding Taiwanese citizenship, or claiming to not speak Mandarin fluently was considered ineligible. Any history of psychological disorders or diagnosis or the use of psychotropic medication and/or recreational drugs was also grounds for exclusion from the study.

The demographic questionnaire. This was utilized to gather information regarding participants' age, gender, ethnicity, area of Taiwan in which they grew up (hometown), occupation, SES, marital status, and any prior experience with hypnosis, trance, and/or meditation.

The Arm-Drop test (Barabasz & Watkins, 2005) served as a preliminary experience with hypnosis for participants prior to beginning the SHSS:C. The Arm-Drop test is advantageous in that it is both a helpful screening technique and is useful for beginning hypnotherapists in conveying a greater sense of confidence than many other techniques. This test may be introduced to subjects with or without mention of hypnosis and may or may not be used as an actual induction procedure. Participants were asked simply to visualize holding a bucket as water was being poured into it. The hypnotherapist watched for any movement, particularly any up or down movement of the arms relative to one another and to their original position. Again, interpretable responses to this test are more common than with many other techniques and in many ways served to prepare participants to experience hypnotic phenomena more readily.

The SHSS:C (MCT) was given next and consisted of a standardized eye-closure hypnotic induction followed by the 12 scale items arranged from easiest to hardest in a Guttman style format (the one exception is an amnesia item, last for purposes of test flow, rather than due to level of difficulty). Please see Table 1 for a list of items and their criteria for passing. A score of "+" or "1" was given for passed items, while a score of "-" or "0" was given for items not passed; thus, possible scores ranged from 0 to 12.

Table 1. SHSS:C Items and Criteria for Passing

Items	In order to pass participants were required to:
1. Hand Lowering	Lower their hand at least 6 inches within 10 seconds
2. Moving Hands Apart	Move their hands apart at least 6 inches within 10 seconds
3. Mosquito Hallucination	Grimace, make movement, or in any way acknowledge the effect of the mosquito
4. Taste Hallucination	Report experiencing both sweet and sour tastes and either show overt signs of that experience or report the taste as being strong
5. Arm Rigidity	Bend their arm less than 2 inches in 10 seconds
6. Dream	Have an experience similar to a dream (not simply vague, fleeting experiences, or just ideas without any imagery)
7. Age Regression	Demonstrate a clear change in handwriting
8. Arm Immobilization	Refrain from raising their arm more than 1 inch in 10 seconds
9. Anosmia to Ammonia	Deny smelling ammonia, or show no overt signs
10. Hallucinated Voice	Answer realistically to the voice, or give evidence of having hallucinated answers
11. Negative Visual Hallucination	Hallucinate the absence of a box
12. Amnesia	Be unable to recall more than 3 items prior to removal of the suggestion for amnesia

The meditation questionnaire was intended only for those participants with prior meditation experience. It was utilized to assess the extent of experience participants had with meditation. Questions were asked from the perspective of duration and quality of experience, type of meditation practiced, recent practice vs. former practice, length of sessions, number of years practicing, frequency of practice, amount of group vs. individual practice, formal vs. informal study, and subjective experience. Portions of both the demographic and meditation questionnaires were based on those developed by Wang (2001).

All instruments not previously translated into Mandarin were translated by a trained linguist, hypnotherapist, and doctoral candidate in psychology fluent in Mandarin, English and Taiwanese. The Arm-Drop Test (Barabasz & Watkins, 2005) translation includes a small change: in the original version "two gallons" is used for a measure of water, in the Mandarin translation this is changed to the equivalent "eight liters."

The SHSS:C (MCT) was used to test hypnotizability. Participant performance on the SHSS:C (MCT) was recorded on the scoring sheet with a "1" if the criteria for passing a particular item was met and a "0" if it was not met. In addition to translation, the SHSS:C (MCT) was also checked by a professor of Chinese literature in Taiwan and back translated by the primary investigator. Given the use in Taiwan of a different numbering system for the year based on the date that the government of the Republic of China was established (1911), reference to years in the original SHSS:C are changed in the SHSS:C (MCT) accordingly (i.e., the year 2000 in the original version is the year 89 for this translation).

As specified in the SHSS:C manual, *materials* used for administration were: (a) a quiet stopwatch, (b) a pencil and paper, (c) a bottle of "household" ammonia, (d) three small colored boxes, and (e) a small table on which to place the boxes. In addition, administrators were

instructed to use standardized lighting (a torchiere floor lamp placed behind the participant). It is relevant to note that "household ammonia" was not located in Taiwan and instead a solution of 5% pure ammonia and 95% water was used. Boxes used by the multiple administrators were of uniform color (red, white, and blue), but were of two different sizes. Roughly half of the administrations were conducted with painted boxes brought from the United States and measuring 3 inches x 3 inches x 3/8 inches. The remaining administrations were conducted with boxes wrapped in colored paper measuring 2 inches x 3 inches x 3/8 inches.

Environment. Administrators were instructed to record data regarding environmental conditions during administration including, but not limited to: date, time of day, and descriptive data regarding lighting and outside noise level. Small, quiet rooms typically used as offices or for individual medical or psychological consultation were used.

Procedure

Administrators used a procedure checklist (appendix J) to insure proper procedures were observed and to take any additional, anecdotal notes about the participant's experience. Screening of each potential participant was done first. Informed consent was then obtained from those who met all screening criteria (see Appendices K & L). A file number was assigned to each participant signing the informed consent. No names, only file numbers, were used on all subsequent instruments. Next the demographic form was completed. Participants were then asked if they had any meditation experience and what languages they were able to speak as children. When necessary, further appropriate instruction regarding the SHSS:C age regression item was given and, when possible, participants were assigned to an administrator with which there would be no potential language mismatching. Participants were asked about their beliefs about hypnosis and what they thought might happen during hypnosis. A brief discussion and

question and answer period regarding the nature of hypnosis then took place using information from a debunking information sheet as a resource (see Appendices M & N). After debunking was completed and in accordance with standard procedures for administering the SHSS:C participants were exposed to an initial hypnotic experience using the Arm-Drop test (Barabasz & Watkins, 2005). The administrator then asked participants for reference and orientation information regarding the day, date, year and location of testing.

The 12-item SHSS:C (MCT) was administered according to standard procedures adopted from Weitzenhoffer and Hilgard (1962). First, the standardized hypnotic induction was used, followed by the 12 items of the SHSS:C (MCT) and finally the re-alerting phase. While the Guttman-scaling of the items has been shown to be generally stable, Hilgard (1965) conceded there is some variability and, as the purpose of this study was to establish a norm for the SHSS:C (MCT) in Taiwan, the full scale was administered to each participant without the use of discontinuation criteria.

After test administration, in order to assess subjective experience of the testing situation, participants were asked “Can you tell me how you felt about the experience?” Finally, the meditation questionnaire was also given to participants who had previous experience with meditation. Additional debriefing regarding the participant’s experience was also provided for those interested. While administration time of the SHSS:C (MCT) typically ranged from 40 to 50 minutes, the overall time involved, including debriefing, typically ranged from 60 to 90 minutes.

Data Analysis

Inter-rater reliability was calculated Using Fleiss’s (1971) inter-rater correlation coefficient (ICC), based on the 10 independently scored participants and the scores given to these participants by the 14 administrators.

Score Distribution was analyzed, the mean and standard deviation and Tukey's 5 number summary for this sample were calculated. A Shapiro-Wilks test was used to assess if the results were normally distributed. A *t* test was used to evaluate the similarity of means within the sample based on gender, and presence or absence of experience with meditation. An ANOVA analysis was used to evaluate between-group differences in hypnotizability between the Taiwanese, American, Italian, German, and Mexican samples. Pearson correlations and a standard multiple regression analysis were used to evaluate what variables regarding the practice of meditation might be related to hypnotizability and thus possibly add to the accuracy of predictions of hypnotizability.

Psychometric Properties such as the internal consistency, point-biserial correlations, and item difficulty of the instrument were determined. Given the dichotomous scoring of the SHSS:C (MCT) in order to calculate internal consistency a Kuder-Richardson 20 was used. The Kolmogorov-Smirnov Two-Sample Test was used to compare the distribution of the Taiwanese sample to reference samples. Point-biserial correlations were used to calculate the relationship of each item to the overall score. Item difficulty in this sample was analyzed based on pass rates for each item.

CHAPTER FOUR

RESULTS

The statistical analyses were performed using, mainly, the Statistical Package for the Social Sciences (SPSS) version 16.0.1. Interrater reliability, the Kuder-Richardson Formula 20 (KR-20), and Point-Biserial analyses were calculated using a common spreadsheet. Two-Sample Kolmogorov-Smirnov Test analyses were performed using Visualstat 2009 SP1. Alpha levels were set at .05 for all tests of statistical significance.

Inter-rater Reliability

As mentioned earlier 10 subjects were video taped while being administered the SHSS:C. The 14 administrators then viewed these recordings and independently scored these participants. Using Fleiss's (1971) inter-rater correlation coefficient (ICC), this process yielded a group inter-rater reliability ($\hat{R}$ =.95) indicating excellent reliability and consistency among the 14 raters.

Score Distribution

The overall mean of the sample of 322 usable participants' data was 6.87 with a standard deviation of 2.41. Both the median and mode in this sample were found to be seven. The actual distribution is presented in Figure 1. Participants achieved scores on the SHSS:C (MCT) spread across the full range of the scale from zero to twelve. Tukey's 5 number summary is displayed below in Table 2. The frequency distribution across low, medium, high, and very high scores for the Taiwanese sample is shown in Table 3. A Shapiro-Wilks test showed the distribution of scores was not normal ($W = .968$, $p < .05$). Skewness and kurtosis of the sample were measured at -.465 and -.101 respectively.

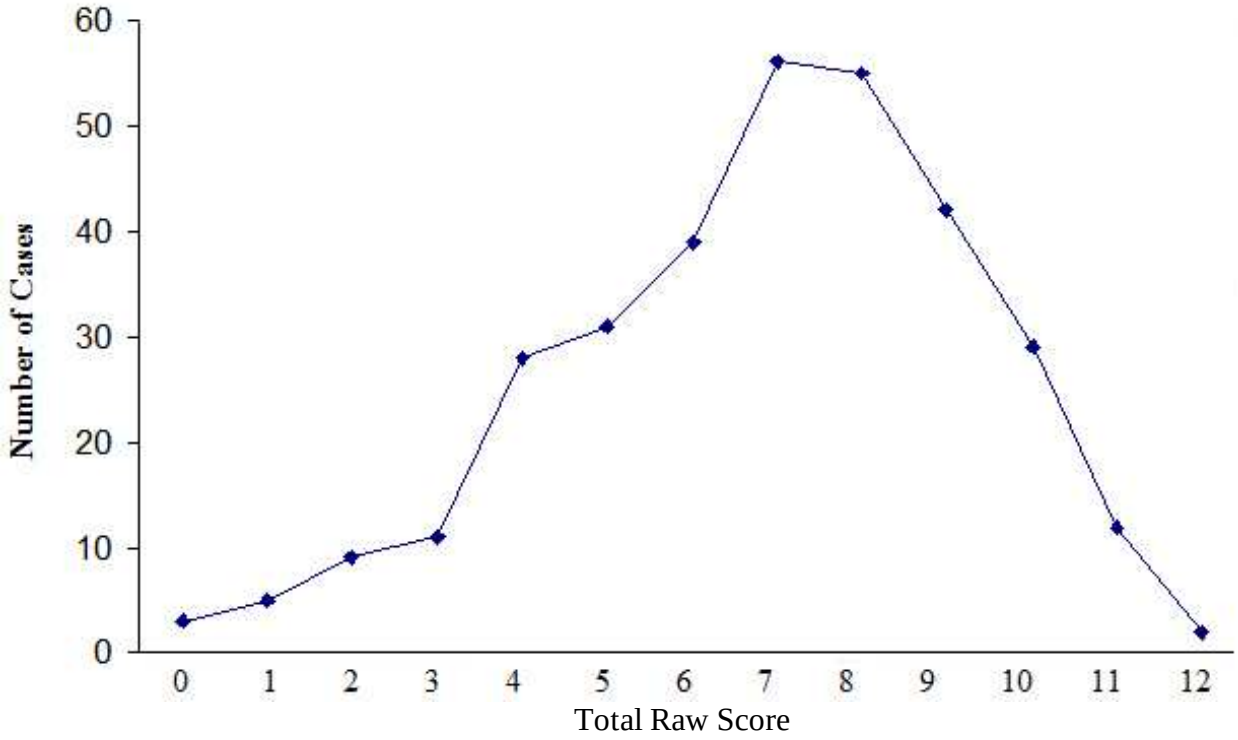

Figure 1. Score Distribution for the Taiwanese Sample (*n* = 322).

Table 2. Tukey's Five-Number Summary of Hypnotizability Scores for the Taiwanese Sample

	SHSS: C Raw Score
Minimum	0.0
1st quartile	5.0
Median	7.0
Mean	6.87
3rd quartile	9.0
Maximum	12.0

Table 3. Frequency Distribution of Scores by Hypnotizability Level for the Taiwanese Sample

	Total Sample (n = 322, M = 6.87, SD = 2.41)		
Hypnotizability level	Total raw score	Number of cases	Percentage of cases
Very high	12	2	0.6
(n = 14; 4.3%)	11	12	3.7
High	10	29	9.0
(n = 126; 39.1%)	9	42	13.0
	8	55	17.1
Medium	7	56	17.4
(n = 126; 39.1%)	6	39	12.1
	5	31	9.6
Low	4	28	8.7
(n = 56; 17.4%)	3	11	3.4
	2	9	2.8
	1	5	1.6
	0	3	0.9

Hypnotizability and Demographic Variables of Interest

Participants seem to be fairly evenly spread by age across a large range from 18 to 78. The mean age was 33.6 years (*SD* = 11.19). By gender, the overall means were: for males 6.73 (*SD* = 2.61) and for females 6.94 (*SD* = 2.31). Use of an independent-samples *t* test showed participant gender differences to be non-significant, $t(320) = -.738$, $p = .46$. Participants reported their hometown being from one of four geographical regions. Looking at census data it is possible to see that the sample is fairly representative of the larger population by region. About half (53.4%) of the sample came from the Northern part of Taiwan, 14.6% Central, 28% Southern, 1.9% from the Eastern part of Taiwan and 2.2% reported having hometowns in multiple regions. Census data from the Directorate General of Budget, Accounting and Statistics, Executive Yuan in Taiwan (2000) reveal very similar statistics for the percentage of the population living in each of the regions they identify. According to this census data 43.9% of the population lives in the North part of Taiwan, 24.6% in the Central Region, 28.8% in the South, 2.4% in the East, and 0.3% living on Islands surrounding Taiwan. Also fairly representative of the larger population was the ethnicity participants identified with. Given six categories, participants identified themselves as Chinese Mainlander (17.4%), Hakka (7.8%), Southern-Ming/Taiwanese (64.3%), Taiwanese Aboriginal (0.3%), or Multiracial (9.0%). Four participants did not report their ethnicity. According to Huang (1993), overall in Taiwan mainlanders make up 13%, Hakka (12%), *Holo* or Taiwanese (73.3%), and aborigines (1.7%). See Table 4 for a graphic representation of this data.

Table 4. Demographic Data: Hometown and Ethnicity of the Taiwanese Sample Participants Compared to the Overall Population

Hometown by percent	South	Central	North	East	Multiple
This sample	28.0	14.6	53.4	1.9	2.2
Population	28.8	24.6	43.9	2.4	--[a]

Ethnicity by percent	Aboriginal	Hakka	Mainland Chinese	Taiwanese	Multiracial
This sample [b]	0.3	7.8	17.4	64.3	9.0
Population	1.7	12.0	13.0	73.3	--[c]

[a] Census data, being conceptually different from hometown, did not include a percent for the multiple category. [b] Four people, or 1.2% of the sample, did not report an ethnicity.
[c] The census data did not include information on citizens who might consider themselves multiracial.

Analyses. An independent-samples *t* test was used to compare the SHSS:C mean scores for participants who had previous experience with hypnosis (*n* = 34, *M* = 7.24, *SD* = 2.09) vs. those who did not have any previous experience with hypnosis (*n* = 287, *M* = 6.85, *SD* = 2.41). One participant left this item blank. The *t* test showed that for this sample prior experience with hypnosis or lack of prior experience did not significantly effect SHSS:C scores, *t* (319) = .883, *p* = .378. An analysis of variance was used to determine if significant differences in SHSS:C scores exist among differing ethnic groups among participants. The ANOVA was non-significant, *F*(4, 313) = 1.83, *p* = .12. Only one categorical demographic variable's analysis revealed significant between-group differences in hypnotizability. A one-way analysis of variance was conducted to evaluate the relationship between level of education achieved and hypnotizability scores. The ANOVA was significant, *F*(4, 315) = 4.08, *p* = .003. Follow up tests were conducted to evaluate pair-wise differences among the means. There was a significant difference in the means between those whose highest level of education attained was high school (*M* = 8.20, *SD* = 1.98) and those who had attended and/or graduated from college (*M* = 6.74, *SD* = 2.48). There was also a significant difference in the means between those whose highest level of education attained was high school and those who had attended and/or graduated from graduate school (*M* = 6.65, *SD* = 2.28). Additional ANOVA analyses did not reveal a significant relationship between hypnotizability and any of the other categorical demographic variables measured in this study: hometown *F* (4,317) = 0.82, *p* = 0.52, occupation *F* (5,308) = 1.89, *p* = 0.10 (8 people gave no response), income *F* (6,303) = 0.82, *p* = 0.52 (12 people had no response), and marital status *F* (3,317) = 2.21, *p* = 0.09. For other sample demographic information please see Table 5.

Table 5. Demographic Data: Highest Education Level Completed, Ethnicity, Hometown, Income, Marital Status, and Occupation

		Total Sample (n = 322)		
Variable	Category	Number	Percent	Mean SHSS:C score
Education	Elementary	3	0.9	4.33
	Middle School	4	1.2	7.75
	High School	35	10.9	8.20
	College	194	60.2	6.74
	Graduate School	84	26.1	6.65
	No response	2	0.6	8.00
Ethnicity	Aboriginal	1	0.3	5.00
	Hakka	25	7.8	7.32
	Mainland Chinese	56	17.4	6.91
	Taiwanese	207	64.3	6.69
	Multiracial	29	9.0	7.83
	No response	4	1.2	6.75
Hometown	South	90	28.0	6.54
	Central	47	14.6	6.89
	North	172	53.4	6.98
	East	6	1.9	7.67
	Multiple Hometowns listed	7	2.2	7.57
Income	under NT $18,000	24	7.5	7.62
	NT $180,000 to NT $420,000	46	14.3	6.70
	NT $420,000 to NT $780,000	66	20.5	6.80
	NT $780,000 to NT $1,200,000	96	29.8	6.96
	NT $1,200,000 to NT $1,800,000	40	12.4	6.42
	NT $1,800,000 to NT $2,700,000	17	5.3	7.12
	over NT $2,700,000	21	6.5	6.81
	No response	12	3.7	7.00
Marital Status	Single	196	60.9	7.03
	Married	118	36.6	6.65
	Divorced	4	1.2	7.75
	Widowed	3	0.9	4.00
	No response	1	0.3	8.00
Occupation	Homemakers	7	2.2	6.00
	Laborers	21	6.5	7.57
	Professionals	169	52.5	6.54
	Students	99	30.8	7.31
	Unemployed	5	1.6	7.00
	Other	13	5.3	7.15
	No response	8	2.5	6.75

Between Sample Similarities and Differences

Comparisons of the psychometric properties of the SHSS:C (MCT) with the original SSHS:C normative data and data obtained using the Spanish, Italian, Dutch, German, Korean and Mexican adaptations of the SHSS:C were made, including internal consistency, item pass rates, score distributions, and the use of Two-Sample Kolmogorov-Smirnov Test analyses. The KR-20 for the Taiwanese sample was found to be .70 without the use of discontinuation criteria and .78 when discontinuation criteria were retroactively applied to participants' scores on the full scale. The number of participants, mean scores, standard deviations and KR-20 values of other samples are also presented in Table 6.

Table 6. Sample Size, Mean, Standard Deviation, and Reliability Coefficient for the Taiwanese and Reference Samples

Sample	*n*	*Mean*	*SD*	*KR-20*
Taiwan	322	6.87	2.41	.78[a]
Korea	47	6.91	2.43	.72[b]
Mexico	513	7.56	2.29	.77[a]
USA	307	5.19	3.09	.85
Spain	115	5.78	3.15	.85[c]
Italy	356	6.81	2.88	.76
Germany	174	5.53	2.80	.72
Holland	135	4.31	2.60	.78

[a] Value was obtained applying the discontinuation criterion (Weitzenhoffer & Hilgard, 1962). [b] Method of calculating the reliability coefficient was not reported. [c] Value was computed using Cronbach's alpha.

Internal consistency can be shown by examining both the KR-20 and point-biserial correlations between each item and the total score. The point-biserial correlations for the Taiwanese and other reference samples are listed in Table 7. Pass rates for each item on all reference samples are listed in Table 8.

The Two-Sample Kolmogorov-Smirnov Test was used to compare the Taiwanese distribution to that of other samples. Compared to the American, Dutch, Mexican, and Spanish samples the Taiwanese distribution was statistically different: American (D = .11, KS = .29, p < .001); Dutch (D = .14, KS = .46, p < .001); Mexican (D = .10, KS = .20, p < .001); and Spanish (D = .15, KS = .24, p < .001). In fact, only the Italian distribution was determined to be not statistically different from that of the Taiwanese sample. The critical value (D) was found to be .10 (KS = .10, p = .058). Comparisons to the Korean sample were not made due to its small sample size and the method of participant selection used.

Table 7. Point-Biserial Correlations for the Taiwanese and Reference Samples

Item		Point-Biserial correlation with total score minus the item					
		Taiwan	Mexico	USA	Spain	Italy	Germany
	n =	322	513	203	115	356	174
1.	Hand lowering	.43	.32	.60	.49	.29	.23
2.	Moving hands apart	.40	.33	.49	.43	.35	.37
3.	Mosquito hallucination	.53	.49	.80	.62	.49	.48
4.	Taste hallucination	.61	.59	.75	.54	.50	.56
5.	Arm rigidity	.49	.56	.76	.62	.50	.52
6.	Dream	.51	.44	.57	.50	.39	.34
7.	Age Regression	.61	.50	.68	.59	.56	.48
8.	Arm immobilization	.54	.53	.81	.70	.55	.54
9.	Anosmia to ammonia	.45	.36	.65	.49	.33	.41
10.	Hallucinated voice	.34	.39	.63	.23	.26	.15
11.	Negative visual hallucination	.40	.47	.87	.29	.36	.36
12.	Posthypnotic amnesia	.44	.48	.85	.63	.46	.54

Table 8. Item-Pass Percentages for the Taiwanese and Reference Samples

Item		Percentage of Cases Passing							
	n =	Taiwan 322	Korea 47	Mexico 513	USA 203	Spain 115	Italy 356	Germany 174	Holland 135
1. Hand lowering		94	91	96	92	87	88	96	87
2. Moving hands apart		92	94	89	88	87	87	78	89
3. Mosquito hallucination		72	79	73	48	60	53	32	34
4. Taste hallucination		59	49	70	46	50	66	49	26
5. Arm rigidity		84	89	81	45	73	74	69	47
6. Dream		43	45	39	44	41	62	49	32
7. Age Regression		67	57	58	43	37	55	48	37
8. Arm immobilization		60	74	65	36	59	63	55	39
9. Anosmia to ammonia		49	34	78	27	37	62	39	18
10. Hallucinated voice		10	9	16	19	4	11	3	1
11. Negative visual hallucination		10	21	22	9	5	17	13	2
12. Posthypnotic amnesia		46	36	70	9	38	44	23	18

Analysis of Meditation Data

Several steps were taken in order to analyze the relationship of scores attained on the SHSS:C (MCT) with information obtained about participants' practice of meditation. First an independent-samples *t* test was calculated based on the scores of meditators (*n* = 94) vs. non-meditators (*n* =228). This test showed a significant difference between the two groups, *t* (320) = -2.25, *p* = 0.03. The mean score for meditators on the SHSS:C was 7.34 (*SD* = 2.38) while the mean for non-meditators was 6.68 (*SD* = 2.40).

Looking in greater detail at the meditation questionnaire it should be noted that of the original sample of 94 meditators, questionnaires from two participants had to be eliminated due to respondents not completing even half the questions. Other missing responses were filled in based on a process of ranking and averaging the meditators' other responses to calculate how they might have likely responded in relation to the other meditators who answered the particular item. Once missing data were estimated, correlation coefficients were computed between the SHSS:C scores and the five ratio type meditation variables assessed in this study which include: (a) the average length of time, in minutes, each participant spent meditating each session during the six months prior to their participation in this study (*M* = 16.9, *SD* = 19.8, ranging from 0 to 90), (b) the average length of time, also in minutes, each participant spent meditating each session since they first began meditating (*M* = 26.9, *SD* = 20.6, ranging from 1 to 120), (c) the number of months spent meditating (*M* = 41.5, *SD* = 60.6, ranging from 0 to 336), (d) the percentage of time meditating in a group (*M* = 43.9, *SD* = 96.7, ranging from 0 to 100), and finally (e) the number of months receiving formal training in meditation (*M* = 13.1, *SD* = 35.8, ranging from 0 to 240). Please see Table 9 for a graphical representation of these data.

Table 9. Meditation Data

	Total Sample (n = 92)		
Variables	*Mean*	*SD*	*Range*
Session time in last 6 months (in minutes)	16.9	19.8	0 – 90
Session time overall (in minutes)	26.9	20.6	1 – 120
Months spent meditating	41.5	60.6	0 – 336
Percent of time meditating in group	43.9	96.7	0 – 100
Months of training	13.1	35.8	0 – 240

The correlation between the SHSS:C scores and the number of months receiving formal training was significant, (r = .177, p = .046) as was the correlation between the SHSS:C scores and the number of months spent meditating (r = .235, p = .012). No other significant correlations were found between the SHSS:C scores and the remaining three ratio type meditation variables.

Multiple regression. A standard multiple regression analysis was conducted to further clarify the relationship between hypnotizability and meditation. In the analysis, the two meditation variables that correlated significantly with participants' level of hypnotizability based on the Pearson analysis (i.e., the number of months receiving formal training and the number of months spent meditating) were entered simultaneously as independent variables while SHSS:C scores were entered as the dependent variable. Data screening led to the elimination of two cases. Evaluation of linearity led to the natural log transformation of (a) the number of months spent meditating, and (b) the number of months receiving formal training in meditation. It was also necessary to change SHSS:C scores by applying a square root transformation in order to meet normality assumptions for the multivariate analysis. Review of the collinearity statistics indicated adequate tolerance and VIF values, suggesting that while the two meditation variables assessed related constructs their correlation was not so high as to cause a problem with multi-collinearity. Regression results indicated that the overall model of the meditation variables significantly predicted participants' SHSS:C scores, R^2 = .071, R^2_{adj} = .050, $F(2, 87) = 3.33$, p = 0.04. This model accounted for 7.1% of the variance in hypnotizability scores. Still, review of the beta weights did not reveal either of the meditation variables to be a significant independent predictor of SHSS:C scores.

CHAPTER FIVE

DISCUSSION

This study marks the first time the SHSS:C has been translated into Chinese and used to establish normative data for an Asian population. It is also the first time results from a study such as this are to be reported in a medium accessible by a worldwide audience. The data collected show the study to fulfill it's main purposes of (a) creating the Mandarin Chinese Translation of the SHSS:C or the SHSS:C (MCT), (b) establishing normative data for a Taiwanese sample representative of the greater population in Taiwan, and (c) assessing the psychometric properties of the SHSS:C (MCT). The final purpose of comparing this hypnotizability data, to data obtained from meditators regarding their meditation and possible links between meditation and hypnotizability was also fulfilled, although it seems there is much more research that could be done in this area. In this section this researcher hopes to highlight relevant findings, experiences, and thoughts for future research.

Inter-rater reliability

The high correlation between raters on the sample of 10 participants who were videotaped and individually rated by all administrators is really what allows analysis of the data obtained to move forward. It is very fortunate that this correlation is as high as it is and this result seems related to multiple factors, which might be helpful to consider for future research. It seems to be important for attaining a high inter-rater reliability that administrators go through a thorough and standardized orientation to study procedures and scoring as they did both in this study and in the study conducted by Sánchez-Armáss (2005). Additionally, the use of a video

recorder allowing for later playback seemed to be a good way to ensure that all administrators saw the same hypnotic response from the same perspective.

Data gathering

It should be noted that standardizing the process of establishing inter rater reliability by video taping seems to have been very helpful in maintaining a high level of consistency between raters. Other efforts were made to standardize procedures including the use of the procedure checklist, and the debunking information sheet. Regarding the standardization of the administration of the SHSS:C, given the training that all administrators underwent and the combined experience with the use of hypnosis in clinical settings it seems that more could not have been done to maintain consistency. Some critics of the SHSS:C may say that despite the objective criteria used to score each item by observation there is still a subjective element built into the instrument through these observations. While this is somewhat true, having conducted this research it is very apparent that the SHSS:C is quite deserving of its place as the gold standard of tests of hypnotizability. All efforts were made to ensure that the Mandarin Chinese Translation would live up to this standard; however, it is worth pointing out that the anosmia to ammonia item in some ways defies efforts to standardize. This researcher proposes several criteria with which to further standardize the administration of this item. First and foremost, as mentioned by Sánchez-Armáss (2005), it is important to set a reasonable standard by which the concentration of ammonia can be set and recreated. In this experiment pure ammonia was purchased in Taiwan and a 5% solution was created through dilution. Anecdotally, during training, it also seemed important to many of the administrators that the mouth on the bottles that the ammonia was in also be of a fixed size, that the ammonia be held a set distance away from the participant's nose, and that the timing within the breathing cycle be made consistent across

administrations. These threats to the reliability of this item are perhaps evidenced by the low and inconsistent point-biserial correlations across samples.

Score Distribution

The sample size of 322 was large enough to realistically ensure the best possible and most representative distribution of scores. The fact that the overall mean is slightly to the right of center makes it almost inevitable that there would be fairly significant skewness and that the distribution itself would not be likely to be a normal distribution. The fact that the sample size was so large, however, did make it possible to apply some statistics (i.e. *t* test and ANOVA) otherwise meant for normal distributions and still produce a reasonably accurate *p* value (Green & Salkind, 2003).

Hypnotizability and demographic variables

Ethnicity, hometown and other variables did not present statistically significant differences on hypnotizability in this sample. Of all the demographic data collected the only variable that showed significant between-group differences was level of education. When looking at education level achieved not only was high school associated with significantly higher scores than those attained by college/graduate school attendees, the scores also suggested a trend for elementary the lowest scores of any group. Due to the very low number of participants in this category (n = 3) further study would be required to investigate if there was enough difference to even consider this a trend in the data. It is still important to consider the possibility that the other ways of assessing hypnotizability may be more useful for persons who did not attend school beyond elementary. In this sample, the mean for those whose highest level of education was high school was higher than the mean for those whose highest level of education was college or graduate school. It is important to consider the question of why this difference exists. As there

does not seem to be a theoretical or researched explanation, an answer to this question would likely require further study.

Between sample similarities and differences

The psychometric properties of the SHSS:C (MCT) are both sound and comparable to those of other similar scales which have been normed in other populations. The KR-20 for the full scale was reasonable and for the purpose of research it seems most appropriate to continue to use the full scale without discontinuation criteria. Given the use of discontinuation criteria only improved the internal consistency, as was also the case with the recent Mexican sample, it also seems advisable to use the discontinuation criteria in clinical applications with Taiwanese participants.

Pass rates for this sample suggest some differences in item difficulty compared to other samples. The most significant difference in pass rates for the current sample is found when comparing the pass rate and ranking for item seven, Age Regression, to the pass rates on this item from other samples. Members of the current sample as a whole did considerably better on the Age Regression item than members of other samples. Relative to other items within the sample they also did better. This item ranked fifth from the highest within this sample, the highest ranking, compared to other samples whose average ranking on this item was seventh. This result with age regression is particularly interesting as higher cognitive levels of hypnotic capacity are assessed by this item (Barabasz & Spiegel, 1989). Looking at the data from this perspective raises a few questions: Are members of the Taiwanese sample better age regressors, and, if so, why? The Posthypnotic Amnesia item is also quite high relative to many other samples, second in ranking next to the Mexican sample. The heightened ability to respond positively to these items is perhaps a good sign that on average Taiwanese people may have

greater capacity to put these abilities to practical use compared to members of some of the other reference samples. At this time it is difficult to speculate on the clinical significance of these results; however, future research in these areas might be very interesting and contribute potentially very practical information regarding the use of hypnosis with various therapeutic interventions (e.g. ego state therapy, Watkins & Watkins, 1997).

Across samples, items one, Hand Lowering, and two, Moving Hands Apart, are very consistently the most frequently passed items, while item 11 is very consistently the second to least often passed item. Item 10, Hallucinated Voice, could be said to be the most difficult item across samples, but because within the USA sample it was found to be 10^{th} in difficulty it is important to note that it is not as consistently set in its ranking as the three previously mentioned items. The pass rates for item three, Mosquito Hallucination, and nine, Anosmia to Ammonia, items are the least consistent across samples. Reasons for these differences between samples might be an interesting avenue of exploration. It would seem pass rate consistency across samples would be due to (a) greater similarity in administrators understanding of administration and scoring, (b) greater clarity of responses, and/or (c) perhaps greater universality of the item across cultures. With items like the Mosquito Hallucination and Anosmia to Ammonia the question of why these pass rates fluctuate is perhaps the most important questions to answer.

Regarding Point-Biserial Corrleations the Hallucinated Voice item has very consistently low point-biserial correlations across samples. The average point-biserial correlation is actually just .33, the lowest of all items when looking at the five other major studies focusing on the SHSS:C.

Analysis of Meditation Data

While much of the data from the meditation questionnaire did not show very clear and specific relationships with hypnotizability, this seems to be due in large part to the design of the questionnaire itself. Many items were left blank and it seems that some items may have been confusing to participants. More time might have been spent discussing with administrators how to answer questions regarding the instrument. Despite these problems, there were several noticeable trends that, had the number of participants been larger, might have begun to show statistically significant trends. From a review of the research in the area of meditation it seems that assessment tools are greatly lacking. Evaluation of meditation experience would, in fact, seem to be somewhat contrary to the purpose behind its practice; however, for the purposes of research and a greater scientific understanding of meditation it seems necessary to create theoretically and psychometrically stronger measures of meditation.

Results of this study suggest further research into the possible connection between meditation and hypnotizability might be quite illuminating. The fact that at the very least there is a correlation between hypnotizability and meditation experience in this Taiwanese sample suggests the importance of future research involving further comparisons of the two. It is necessary to assess with greater accuracy what it is about various types of meditation experience that may be most strongly correlated with hypnotizability. It seems possible that with long term meditation practice it might be possible that certain factors may even lead to increases in hypnotizability as measured. As Shor, Orne and O'Connell (1966) point out, it might also be that in populations with higher average hypnotizability participants are further along the way to reaching their "plateau hypnotizability".

Implications for future research

While some suggestions for future research were discussed above it is perhaps beneficial to summarize here. Future research with international samples is still needed. DePascalis (2000) points out that there is a lack of normative studies for non-English versions of the SHSS:C and that it would be a step forward to have other norming studies conducted with non-English versions of the SHSS:C. In particular, further studies in Asia are needed and would present a prime opportunity to further study the relationship between meditation and hypnosis. Due in part to the potential cultural and historic differences regarding the use of hypnosis in various cultures it is also important to begin assessing what factors may contribute to differing levels of hypnotizability and the practicality of applying a western understanding of hypnosis cross-culturally to eastern hypnotic practices. Assessment of beliefs about hypnosis, consideration of cultural backgrounds and the inclusion of additional relevant measures would help to begin to fill in these otherwise missing pieces of data. Future research might not only strive to highlight characteristics of hypnotizability within a given culture, but also somehow further contribute to a greater understanding of the nature of hypnosis.

REFERENCES

Alpert, R. & Haber, R. N. (1960). Anxiety in academic achievement situations. *Journal of Abnormal and Social Psychology, 61,* 207-215.

Angelini, F. J., Kumar, V. K., & Chandler, L. (1999). The Harvard Group Scale of Hypnotic Susceptibility and related instruments: Individual and group administrations. *International Journal of Clinical and Experimental Hypnosis, 47,* 236-250.

Balthazard, C.G. & Woody, E.Z. (1992). The spectral analysis of hypnotic performance with respect to "Absorption". *International Journal of Clinical and Experimental Hypnosis, 40,* 21-43.

Barabasz, A. F. & Barabasz, M. (1992). Research designs and considerations. In E. Fromm & M. Nash (Eds.), *Contemporary hypnosis research* (pp. 173-200). New York, NY: Guilford Press.

Barabasz, A. F. & Barabasz, M. (2000). Treating AD/HD with hypnosis and neurotherapy. *Child Study Journal, 30,* 25-32.

Barabasz, A. F., & Watkins, J. G. (2005). *Hypnotherapeutic techniques* (2nd ed.). New York, NY: Brunner-Routledge.

Barabasz, M. & Spiegel, D. (1989). Hypnotizability and weight loss in obese subjects. International Journal of Eating Disorders, 8, 335-341.

Barber, T. X., & Wilson, S. C. (1978-1979). The Barber Suggestibility Scale and the Creative Imagination Scale: Experimental and clinical applications. *American Journal of Clinical Hypnosis, 21,* 84-108.

Barry, H. Jr., MacKinnon, D. W., & Murray, H. A. (1931). Studies in personality: A Hypnotizability as a personality trait and its typological relations. *Human Biology, 3,* 1-36.

Benham, G., Bowers, S., Nash, M., & Muenchen, R. (1998). Self-fulfilling prophecy and hypnotic response are not the same thing. *Journal of Personality and Social Psychology, 75,* 1604-1613.

Bernstein, E. M. & Putnam, F. W. (1986). Development, reliability, and validity of a dissociation scale. *Journal of Nervous and Mental Diseases, 174,* 727-735.

Bongartz, W. (2000). Deutsche Normen für die Stanford Hypnotic Susceptibility Scale: Form C (SHSS:C) [German norms for the Stanford Hypnotic Susceptibility Scale: Form C]. *Experimentelle und Lkinische HypnoseII 16,* 123-133.

Bourguignon, E. & Evascu, T. (1977). Altered states of consciousness within a general evolutionary perspective: A holocultural analysis. *Behavioral Science Research, 12,* 197-216.

Bowers, K. S. (1993). The Waterloo-Stanford Group C (WSGC) Scale of Hypnotic Susceptibility: Normative and comparative data. *International Journal of Clinical and Experimental Hypnosis, 41,* 35-46.

Bramwell, J. M. (1956). *Hypnotism: Its History Practice and Theory.* New York, NY: The Julian Press, Inc.

Brown, D., Forte, M., Rich, P., & Epstein, G. (1982-1983). Phenomenological differences among self-hypnosis, mindfulness meditation, and imaging. *Imagination, Cognition & Personality, 2,* 291-309.

Brown, D. P. & Fromm, E. (1986). *Hypnotherapy and hypnoanalysis.* Hillsdale, NJ: Erlbaum.

Burrows, G. D. & Stanley, R. O. (2001). Introduction to clinical hypnosis and the hypnotic phenomena. In G. D. Burrows, R. O. Stanley & P. B. Bloom (Eds.), *International Handbook of Clinical Hypnosis,* (pp. 3-17). New York, NY: John Wiley & Sons, Inc.

Chambless, D. L. & Hollon, S. D. (1998). Defining empirically supported therapies. Journal of Consulting and Clinical Psychology, 66, 7-18.

Council, J. R. (2002). A historical overview of hypnotizability assessment. *American Journal of Clinical Hypnosis, 44,* 199-208.

Council, J. R. & Kirsch, I. (1996). Explaining context effects: expectancy and consistency. *Contemporary Hypnosis, 13,* 29-32.

Council, J. R., Kirsch, I. & Hafner, L. P. (1986). Expectancy versus absorption in the prediction of hypnotic responding. *Journal of Personality & Social Psychology, 50,* 182-189.

Council, J. R., Kirsch, I., Vickery, A. R., & Carlson, D. (1983). "Trance" versus "skill" hypnotic inductions: The effects of credibility, expectancy, and experimenter modeling. *Journal of Consulting and Clinical Psychology, 51,* 432-440.

Davidson, R. J. & Goleman, D. J. (1977). The role of attention in meditation and hypnosis: A psychobiological perspective on transformations of consciousness. *International Journal of Clinical and Experimental Hypnosis, 15,* 291-308.

Davidson, R. J., Goleman, D. J., and Schwartz, G. E. (1976). Attentional and Affective Concomitants of Meditation: A cross-sectional study. *Journal of Abnormal Psychology, 85,* 235-238.

Davis, L. W. & Husband, R. W. (1931). A study of hypnotic susceptibility in relation to personality traits. *Journal of Abnormal and Social Psychology, 26,* 175-182.

Delmonte, M. M. (1984). Meditation: Similarities with hypnoidal states and hypnosis. *International Journal of Psychosomatics, 31,* 24-34.

Del Rosario, G. (2002). The structure of human hypnotic suggestibility and trait hypnotic responsiveness of Koreans (Doctoral dissertation, Saybrook Graduate School and Research Center, 2002). *Dissertation Abstracts International, 63,* 572.

De Pascalis, V., Bellusci, A., & Russo, P. M. (2000). Italian norms for the Stanford Hypnotic Susceptibility Scale, Form C. *International Journal of Clinical and Experimental Hypnosis, 48,* 315-323.

Directorate General of Budget, Accounting and Statistics, Executive Yuan, R.O.C. (2000). Nationality distribution of population by city/county in Taiwan-Fukien Area. Retrieved December 11th, 2008, from http://eng.stat.gov.tw/public/Attachment/53301716471.doc

Dixon, M. & Laurence, J. R. (1992). Two hundred years of hypnosis research: Questions resolved? Questions unanswered! In E. Fromm & M. Nash (Eds.), *Contemporary hypnosis research* (pp. 34-66). New York, NY: The Guilford Press.

Du, M. & Liu, F. (2001). Effect of psychological intervention on mental state of surgical patients with primary angle-closure glaucoma. *Chinese Mental Health Journal, 15,* 412-414.

Edmonston, W. E. (1986). *The induction of Hypnosis.* New York, NY: John Wiley & Sons, Inc.

Eisen, M. R., & Fromm, E. (1983). The clinical use of self-hypnosis in hypnotherapy: Tapping the functions of imagery and adaptive regression. *International Journal of Clinical and Experimental Hypnosis, 31,* 243-255.

Evans, F. J. (1991). Hypnotizability: Individual differences in dissociation and the flexible control of psychological processes. In S. J. Lynn & J. W. Rhue, (Eds.), *Theories of hypnosis: Current models and perspectives. The Guilford clinical and experimental hypnosis series* (pp. 144-168). New York, NY: Guilford Press.

Field, P. B. (1965). An inventory scale of hypnotic depth. *International Journal of Clinical and Experimental Hypnosis, 13,* 238-249.

Fleiss, J. L. (1986). *The design and analysis of clinical experiments.* New York, NY : John Wiley & Sons.

Fleiss, J.L. (1971) Measuring nominal scale agreement among many raters. *Psychological Bulletin, 76,* 378-382.

Forrest, D. (2002). Mesmer. *International Journal of Clinical and Experimental Hypnosis, 50,* 295-308.

Frankel, F. H. (1987). Significant developments in medical hypnosis during the past 25 years. *International Journal of Clinical and Experimental Hypnosis, 35,* 231-247.

Frankel, F. H. (1989). Hypnosis is a Multi-Dimensional Event. *American Journal of Clinical Hypnosis, 32,* 13-14.

Friedlander, J. W. & Sarbin, T. R. (1938). The depth of hypnosis. *Journal of Abnormal and Social Psychology, 33,* 281-294.

Fromm, E. (1987). Significant developments in clinical hypnosis during the past 25 years. *International Journal of Clinical and Experimental Hypnosis, 35*(4), 215-230.

Fromm, E., Brown, D. P., Hurt, S. W., Oberlander, J. Z., Boxer, A. M., & Pfeifer, G. (1981). The phenomena and characteristics of self-hypnosis. *International Journal of Clinical and Experimental Hypnosis, 29,* 189-246.

Gfeller, J.D. (1993). Enhancing hypnotizability and treatment responsiveness. In J. W. Rhue & S. J. Lynn, (Eds.), *Handbook of clinical hypnosis* (pp. 235-249). Washington, DC: American Psychological Association.

Gfeller, J. D., Lynn, S. J., & Pribble, W. E. (1987). Enhancing hypnotic susceptibility: Interpersonal and rapport factors. *Journal of Personality & Social Psychology, 52,* 586-595.

Glisky, M. L., Tataryn, D. J., Tobias, B. A., Kihlstrom, J. F. & McConkey (1991). Absorption, openness to experience, and hypnotizability. *Journal of Personality and Social Psychology, 60,* 263-272.

Goebel, R. A., & Stewart, C. G. (1971). Effects of experimenter bias and induced subject expectancy on hypnotic susceptibility. *Journal of Personality & Social Psychology, 18,* 263-272.

Green, J. P., Page, R. A., Rasekhy, R., Johnson, L. K., & Bernhardt, S. E. (2006). Cultural Views and Attitudes about Hypnosis: A Survey of College Students Across Four Countries. International Journal of Clinical and Experimental Hypnosis, 54, 263-280.

Green, S. B., & Salkind, N. J. (2003). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (3rd Ed.). Upper Saddle River, New Jersey: Pearson Education, Inc.

Groth-Marnot, G. (1991). Hypnotizability, suggestibility, and psychopathology: An overview of research. In J.F. Schumaker (Ed). Human suggestibility: Advances in theory, research, and application (pp. 219-234). Florence, KY: Taylor & Frances/Routledge.

Hallaji, J. (1962). Hypnotherapeutic techniques in a central Asian community. *The International Journal of Clinical and Experimental Hypnosis, 10*, 271-274.

Heide, F. J., Wadlington, W. L. & Lundy, R. M. (1980). Hypnotic responsivity as a predictor of outcome in meditation. *The International Journal of Clinical and Experimental Hypnosis, 28*, 358-385.

Hilgard, E. R. (1965). *Hypnotic Susceptibility.* Harcourt, New York, NY: Brace and World, Inc.

Hilgard, E. R. (1973). The domain of hypnosis: With some comments on alternative paradigms. *American Psychologist, 28,* 972-982.

Hilgard, E. R. (1992). Dissociation and Theories of Hypnosis. In E. Fromm & M. Nash (Eds.), *Contemporary hypnosis research* (pp. 69-101). New York, NY: The Guilford Press.

Hilgard, E. R., Crawford, H. J., & Wert, A. (1979). The Stanford Hypnotic Arm Levitation Induction and Test (SHALIT): A six minute hypnotic induction and measurement scales. *International Journal of Clinical and Experimental Hypnosis, 27*, 111-124.

Hilgard, E. R. & Hilgard, J. R. (1994). *Hypnosis in the relief of pain* (Rev ed.). Philadelphia, PA: Bruner/Mazel.

Hilgard, J. R. & LeBaron, S. (1982). Relief of anxiety and pain in children and adolescents with cancer: Quantitative measures and clinical observations. *International Journal of Clinical and Experimental Hypnosis, 30,* 417-442.

Holroyd, J. (1996). Hypnosis treatment of clinical pain: Understanding why hypnosis is useful. *International Journal of Clinical & Experimental Hypnosis, 44*, 33-51.

Holroyd, J. (2003). The science of meditation and the state of hypnosis. *American Journal of Clinical Hypnosis, 46,* 109-128.

Holroyd, J. C., Nuechterlein, K. H., Shapiro, D., & Ward, F. (1982). Individual differences in hypnotizability and effectiveness of hypnosis or biofeedback. *International Journal of Clinical and Experimental Hypnosis, 30*, 45-65.

Huang, Shuanfan. 1993. *Language, Society, and Ethnic Identity* (*語言社會與族群意識*). Taipei, Taiwan: Crane.

Jin, Y., Zhang, Y., Li, M., Li, X. & Yue, D. (1994). Cerebral electrical activity during wakened and hypnotic states in 33 subjects. *Chinese Mental Health Journal, 8,* 220-222.

Kahn, S. P., Fromm, E., Lombard, L. S., & Sossi, M. (1989). The relation of self-reports of hypnotic depth in self-hypnosis to hypnotizability and imagery production. *International Journal of Clinical and Experimental Hypnosis, 37*, 290-304.

Kim, K. (2000). *Korean Translation of the Stanford Hypnotic Susceptibility Scale, Form C.* Seoul, South Korea. (original work published A. M. Weitzenhoffer & E. R. Hilgard, 1962).

Kim, S.C. (1983). Ericksonian Hypnotic Framework for Asian-Americans. *American Journal of Clinical Hypnosis, 25,* 235-241.

Kirsch, I. (1993). Professional opinions about hypnosis: Results of the APA Division 30 survey. *Bulletin of Division 30 Psychological Hypnosis, APA, 2,* 4-5.

Kirsch, I. (2003). *The debate goes on.* Invited address presented at the annual convention of the American Psychological Association, Toronto, Ontario, August 8-12.

Kirsch, I. & Council, J. R. (1992). Situational and personality correlates of hypnotic responsiveness. In E. Fromm & M. Nash (Eds.), *Contemporary Hypnosis Research* (pp. 267-291). New York, NY: The Guilford Press.

Koizumi, S. (2001). Investigation into university students' views towards the notion of 'hypnosis'. *Japanese Journal of Hypnosis, 46,* 40-46.

Kumar, V. K., Pekala, R. J. & McCloskey, M. M. (1999). Phenomenological state effects during hypnosis: A cross-validation of findings. *Contemporary Hypnosis, 16,* 9-21.

Lamas, J. R., Valle-Inclán, F. & Díaz, A. A. (1996). Spanish norms for the Stanford Hypnotic Susceptibility Scale, Form C/Datos normativos de la Escala de Susceptibilidad Hipnótica de Stanford, Forma C, en una muestra española. *Psicothema, 8,* 369-373.

Li, X., Zheng, Q., Song, S., Gao, J., Ni, Z., Yuan, X. & Zhang, L. (2002). A study on hypnotic acupuncture therapy for angina pectoris and its effects on plasma ET and NO. *Chinese Journal of Clinical Psychology, 10,* 63-64, 67.

Lombard, L. S., Kahn, S. P., & Fromm, E. (1990). The role of imagery in self-hypnosis: Its relationship to personality characteristics and gender. *International Journal of Clinical and Experimental Hypnosis, 38,* 25-38.

London, P. (1965). Developmental experiments in hypnosis. *Journal of projective techniques & personality assessment, 29,* 189-199.

Lynn, S. J., & Shindler, K. (2002). The role of hypnotizability assessment in treatment. *American Journal of Clinical Hypnosis, 44,* 185-197.

Mackett, J. (1989). Chinese hypnosis. *British Journal of Experimental and Clinical Hypnosis, 6,* 129-130.

Maliszewski, M., Twemlow, S. W., Brown, D. P., & Engler, J. M. (1981). A phenomenological typology of intensive meditation: A suggested methodology using the questionnaire approach. *ReVISION, 4,* 3-27.

McConkey (1986). Opinions about hypnosis and self-hypnosis before and after hypnotic testing. *International Journal of Clinical and Experimental Hypnosis, 34,* 311-319.

McConkey, K. M. & Jupp, J. J. (1986). A survey of opinions about hypnosis. British Journal of Experimental & Clinical Hypnosis, 3, 87-93.

McConkey, K. M., Sheehan, P. W., & Law, H. G. (1980). Structural analysis of the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis, 28,* 164-175.

McConkey, K. M., Sheehan, P. W., & White, K. D. (1979). Comparison of the Creative Imagination Scale and the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis, 27,* 265-277.

McGlashan, T. H., Evans, F. J., & Orne, M. T. (1969). The nature of hypnotic analgesia and placebo response to experimental pain. *Psychosomatic Medicine, 31,* 227-246.

Melei, J. P & Hilgard, E. R. (1964). Attitudes toward hypnosis, self-predictions, and hypnotic susceptibility. *International Journal of Clinical and Experimental Hypnosis, 12,* 99-108.

Miller, M. E. & Bowers, K. S. (1993). Hypnotic analgesia: Dissociated experience or dissociated control? *Journal of Abnormal Psychology, 102,* 29-38.

Miller, M. F., Barabasz, A. F. & Barabasz, M. (1991). Effects of active alert and relaxation hypnotic inductions on cold pressor pain. *Journal of Abnormal Psychology, 100,* 223-226.

Monteiro, K. P., MacDonald, H. & Hilgard, E. R. (1980). Imagery, absorption, and hypnosis: A factorial study. *Journal of Mental Imagery, 4,* 63-81.

Montgomery, G., DuHamel, K., & Redd, W. (2000). A meta-analysis of hypnotically induced analgesia: How effective is hypnosis? *International Journal of Clinical and Experimental Hypnosis, 48,* 138-153.

Morgan, A. H., Johnson, D. L., & Hilgard, E. R. (1970). The stability of hypnotic susceptibility in twins: A preliminary report. *Behavior Genetics, 1,* 213-224.

Moriyama, T. (2003). The use and devices of hypnosis in the talking therapy: From the viewpoint of therapeutic relationships, mutual-trance, and dialogue. *Japanese Journal of Hypnosis, 47,* 27-33.

Motoda, K. (1996). Free prolonged hypnosis. *Japanese Journal of Hypnosis, 40,* 23-29.

Mott, T. (1979). The clinical importance of hypnotizability. *American Journal of Clinical Hypnosis, 21,* 263-269.

Murray, J. B. (1982) Genetic Psychology Monographs, 106, 85-115.

Nadon, R. & Laurence, J. R. (1994). Idiographic approaches to hypnosis research: or how therapeutic practice can inform science. *American Journal of Clinical Hypnosis, 37,* 85-94.

Näring, G. W. B., Roelofs, K., & Hoogduin, K. A. L. (2001). The Stanford Hypnotic Susceptibility Scale, Form C: Normative data of a Dutch student sample. *International Journal of Clinical and Experimental Hypnosis, 49,* 139-145.

Northcott, P. (1996). Yellow PagesReg. advertisers of hypnotherapy: A survey of hypnosis beliefs and practice. *Contemporary Hypnosis, 13,* 120-128.

Oakman, J. M., Woody, E. Z. & Bowers, K. S. (1996). Contextual influences on the relationship between absorption and hypnotic ability. *Contemporary Hypnosis, 13,* 19-28.

Orne, M. T. (1959). The nature of hypnosis: Artifact and essence. *Journal of Abnormal and Social Psychology, 58,* 277-299.

Otani, A. (2003). Eastern meditative techniques and hypnosis: A new synthesis. *American Journal of Clinical Hypnosis, 46,* 97-108.

Pan, W., Zhang, L., & Xia, Y. (1994). The difference in EEG theta waves between concentrative and non-concentrative qigong states – a power spectrum and topographic mapping study. *Journal of Traditional Chinese Medicine, 14,* 212-218.

Pekala, R. J. (1982). *The Phenomenology of consciousness inventory (PCI).* Thorndale, PA: Psychophenomenological Concepts.

Pekala, R. J. (1991). *The Phenomenology of consciousness inventory (PCI).* West Chester, PA: Mid-Atlantic Educational Institute. (Original work published 1982).

Pekala, R. J., & Kumar, V. K. (2000). Individual differences in patterns of hypnotic experience across low and high hypnotically susceptible individuals. In R. G. Kunzendorf, & B. Wallace (Eds.), *Individual differences in conscious experience. advances in consciousness research, 20,* 309-335. Amsterdam, Netherlands: John Benjamins Publishing Company.

Perry, C., & Laurence, J. R. (1980). Hypnotic depth and hypnotic susceptibility: A replicated finding. *International Journal of Clinical and Experimental Hypnosis, 28,* 272-280.

Perry, C., Nadon, R., & Button, J. (1992). The measurement of hypnotic ability. In E. Fromm & M. Nash (Eds.), *Contemporary hypnosis research* (pp. 459-490). New York, NY: The Guilford Press.

Piccione, C., Hilgard, E. R., & Zimbardo, P. G. (1989). On the degree of stability of measured hypnotizability over a 25-year period. *Journal of Personality and Social Psychology, 56,* 289-295.

Pinnell, C. M. & Covino, N. A. (2000). Empirical findings on the use of hypnosis in medicine: A critical review. *International Journal of Clinical and Experimental Hypnosis, 48,* 170-193.

Pyun, Y. D. (1997). *The Harvard Group Scale of Hypnotic Susceptibility: Form A, Korean Translation.* Seoul, South Korea. (Original work published R. E. Shor & E. C. Orne, 1962).

Register, P. A. & Kihlstrom, J. F. (1986). Finding the hypnotic virtuoso. *International Journal of Clinical and Experimental Hypnosis, 34,* 84-97.

Saito, T. (1993). The new paradigm for hypnosis. *Japanese Journal of Hypnosis, 38,* 37-41.

Sánchez-Armáss, O. (2006). The Stanford Hypnotic Susceptibility Scale, Form C: Normative data of a Mexican sample (Doctoral dissertation, Washington State University, 2006). *Dissertation Abstracts International, 63,* 572.

Sánchez-Armáss, O. & Barabasz, A. F. (2005). Mexican norms for the Stanford Hypnotic Susceptibility Scale, Form C. *International Journal of Clinical & Experimental Hypnosis, 53,* 321-331.

Sapp, M. (2004) Hypnotizability: Harvard and Stanford scales with African American college students. *Sleep & Hypnosis, 6,* 14-18.

Shapiro, D. (1978). Behavioral and attitudinal changes resulting from a "Zen experience" workshop and Zen meditation. *Journal of Humanistic Psychology, 18,* 21-29.

Shor, R. E. & Orne, E. C. (1962). Harvard Group Scale of Hypnotic Susceptibility, Form A. Palo Alto, CA: Consulting Psychologists Press.

Shor, R.E., Orne, M. T. & O'Connell, D. N. (1962). Validation and cross-validation of a scale of self-reported personal experiences which predicts hypnotizability. The Journal of Psychology, 53, 55-75.

Smith, W. H. (1995). Hypnosis in the treatment of sexual trauma: A master class commentary. *International Journal of Clinical and Experimental Hypnosis, 43,* 365-368.

Spanos, N. P. Brett, P. J. Menary, E. P. Cross, W. P. (1987). A measure of attitudes toward hypnosis: Relationships with absorption and hypnotic susceptibility. *American Journal of Clinical Hypnosis, 30,* 139-150.

Spanos, N. P. & Chaves, J. F. (1991). History and historiography of hypnosis. In S. J. Lynn & J. W. Rhue, (Eds.), *Theories of hypnosis: Current models and perspectives. The Guilford clinical and experimental hypnosis series* (pp. 43-78). New York, NY: Guilford Press.

Spanos, N. P., Gottlieb, J., & Rivers, S. M. (1980). The effects of short-term meditation practice on hypnotic responsivity. *Psychological Record, 30,* 343-348.

Spanos, N. P., Perlini, Voorneveld, P. W., & Robertson, L. A. (1989). Hypnosis, suggestion, and placebo in the reduction of experimental pain. *Journal of Abnormal Psychology, 98,* 285-293.

Spiegel, D. (2005). Multileveling the playing field: Altering our state of consciousness to understand hypnosis: Comment. *Contemporary Hypnosis, 22,* 31-33.

Spiegel, H. & Spiegel, D. (2004). *Trance and treatment: Clinical uses of hypnosis* (2nd ed.). Washington, DC: American Psychiatric Publishing, Inc.

Sun, S. (1994). A comparative study of the stroop effect during hypnosis and during wakened states. *Psychological Science (China), 17,* 287-290, 296.

Suzuki, S. (1970). *Zen mind, beginner's mind.* New York, NY: Weatherhill.

Tanabe, H, & Kasai, H. (1993). Dissociative experiences and hypnotic susceptibility. *Japanese Journal of Hypnosis, 38,* 12-19.

Tellegen, A. (1978-1979). On measures and conceptions of hypnosis. *American Journal of Clinical Hypnosis, 21,* 219-237.

Tellegen, A. & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("Absorption"), A trait related to hypnotic susceptibility. *Journal of Abnormal Psychology, 83,* 268-277.

Van Nuys, D. (1973). Meditation, attention, and hypnotic susceptibility: A correlational study. *International Journal of Clinical and Experimental Hypnosis, 21,* 59-69.

Varga, K., Józsa, E., Bányai, É. I., Gösi-Greguss, A. C. & Kumar, V. K. (2001). Phenomenological Experiences associated with hypnotic susceptibility. *International Journal of Clinical and Experimental Hypnosis, 49,* 19-29.

Wang, H. (2001). Length and frequency of practice of Zen meditation and personality for meditators in Taiwan. (Doctoral dissertation, Texas A & M, 2001) *Dissertation Abstracts International, 62,* 476.

Walrath, L. C., & Hamilton, D. W. (1975). Autonomic correlates of meditation and hypnosis. *American Journal of Clinical Hypnosis, 17,* 190-197.

Ward, C. & Kemp, S. (1991). Religious Experiences, Altered States of Consciousness, and suggestibility: Cross-Cultural and Historical Perspectives. In J.F. Schumaker, (Ed). *Human suggestibility: Advances in theory, research, and application.* (pp. 159-182). Florence, KY: Taylor & Frances/Routledge.

Watkins, J. G. (2000). The psychodynamic treatment of combat neuroses (PTSD) with hypnosis during World War II. *International Journal of Clinical and Experimental Hypnosis, 48,* 324-333.

Watkins, J. G. & Watkins, H. H. (1997). *Ego states: Theory and therapy.* New York, NY: W. W. Norton & Company, Inc.

Weitzenhoffer, A. (2002). Scales, scales and more scales. *American Journal of Clinical Hypnosis, 44,* 209-220.

Weitzenhoffer, A. M. & Hilgard, E. R. (1959). *Stanford Hypnotic Susceptibility Scale, Forms A and B.* Palo Alto, CA: Consulting Psychologists Press.

Weitzenhoffer, A. M. & Hilgard, E. R. (1962). *Stanford Hypnotic Susceptibility, Form C.* Palo Alto, CA: Consulting Psychologists Press.

Weitzenhoffer, A. M. & Hilgard, E. R. (1963). *Stanford Profile Scales of Hypnotic Susceptibility, Forms I and II.* Palo Alto, CA: Consulting Psychologists Press.

Wells, W. R. (1931). Hypnotizability versus suggestibility. *Journal of Abnormal & Social Psychology, 25,* 436-449.

White, M. M. (1930). The physical and mental traits of individuals susceptible to hypnosis. *Journal of Abnormal and Social Psychology, 25,* 293-298.

Wickless, C., & Kirsch, I. (1989). Effects of verbal and experiential expectancy manipulations on hypnotic susceptibility. *Journal of Personality & Social Psychology, 57,* 762-768.

Wilson, L., Greene, E., & Loftus, E. (1986). Beliefs about forensic hypnosis. *International Journal of Clinical and Experimental Hypnosis, 34,* 110-121.

Windle, R., & Samko, M. (1992). Hypnosis, Ericksonian hypnotherapy, and aikido. *American Journal of Clinical Hypnosis, 34,* 261-270.

Wolpe, J. (1969) The practice of behavior therapy (1st ed.). New York: Pergamon.

Woody, Bowers & Oakman, J. M. (1992). A conceptual analysis of hypnotic responsiveness: Experience, individual differences, and context. In E. Fromm & M. Nash (eds.) *Contemporary Hypnosis Research,* (pp. 3-33). New York, NY: The Guilford Press.

Woody, E. Z., Barnier, A. J., & McConkey, K. M. (2005). Multiple hypnotizabilities: Differentiating the building blocks of hypnotic response. *Psychological assessment, 17,* 200-211.

Yu, C. K. (2004a). Beliefs and attitudes of Chinese regarding hypnosis and its applications. *Contemporary Hypnosis, 21,* 93-106.

Yu, C. K. (2004b). Beliefs and opinions regarding hypnosis and its applications among Chinese professionals in medical settings. *Contemporary Hypnosis, 21*(4), 177-186.

Yu, C. K. (2005). Suggestibility of the Chinese as revealed by the creative imagination scale. *Contemporary Hypnosis, 22*, 77-83.

Yu, C. K. (2006). Cognitive-behavioural hypnotic treatment for managing examination anxiety and facilitating performance. *Contemporary Hypnosis, 23*, 72-82.

Zhu, Z., & Yang, Y. (1999). Hypnosis and behavior modification of a patient with situational dysuria. *Chinese Journal of Clinical Psychology, 7*, 240-241.

Appendix A - Meditation Questionnaire (English Version)

Participant No. _____

1. What type(s) of meditative practice do you follow? (use) (check all that apply).

Concentrative _____ Chanting _____ Question focused _____ Calm mind _____

Chi-Gong _____ Other _____ If other, what kind(s)? _____

Note: Questions 2 - 4 are regarding your practice of meditation in the most recent 6 months.

2. In the past six months, what was the average frequency of your meditation practice? (Check the most appropriate answer)

None _____ 1-2 times/week _____ 3-6 times/week _____

Daily _____ 2 times/day _____ 3+ times/day _____

3. In the past six months, what was the average length of time you meditated each time? _____

4. In the past six months, of all the time you spend in meditation,
   a. What percentage do you meditate in group meetings? _____
      (e.g., with a friend, or in a small or large group)
   b. What percentage do you meditate by yourself? _____ (Total = 100%)

5. Did you practice longer in duration and/or more frequently before six months ago?
Practiced more before ____ practiced less before ____ practiced about the same ____

What percentage before six months ago? _____ … in the last six months? _____
(Total = 100%)

6. How many months or years have you practiced meditation? _____

7. From the time you learned meditation until now, what is the average frequency of your meditation practice? (Check the most appropriate answer)

None _____ 1-2 times/week _____ 3-6 times/week _____

Daily _____ 2 times/day _____ 3+ times/day _____

8. What is the overall average length of time you meditate each time? _____ minutes.

9. Of all the time you have spent practicing meditation,
   a. What percentage do you meditate in group meetings? _____
      (e.g., with a friend, or in a small or large group)
   b. What percentage do you meditate by yourself? _____ (Total = 100%)

10. Have you studied meditation formally (i.e. received direct instruction from a master)? If not skip to question 13.

Yes _____ No _____ Reason for seeking study _____

Place _____ Teacher _____

Number of months/years of formal study/guided practice _____

11. What was the overall effect of your formal study on your success in practice of meditation?

Very helpful _____ Helpful _____ No effect _____ Detrimental _____

Long term effect _____ Temporary effect only _____

12. At what point(s) in your overall practice did your training occur?

Near the beginning _____ Near the middle _____ After _____ years Recently ____

13. In all your experience meditating, what percentage of the time have you felt as if you experienced something other than a normal everyday conscious experience?

< 20% _____ 20 – 40% _____ 40 – 60% _____ 60 – 80% _____ > 80% _____

Appendix B - Meditation Questionnaire (Mandarin Chinese Version)

受試者編號：_____

打坐問卷資料 (Meditation Questionnaire)

1. 您用哪一種方式打坐？〔在所有合適的選項右邊打勾。〕

專注 _____ 唸經 _____ 冥想 _____ 靜心 _____

氣功 _____ 其他 _____〔是哪一種？ _____〕

注意：第二題到第四題詢問有關您最近這六個月內練習打坐的情形。

2. 在過去六個月當中，您平均打坐的次數是：〔在最合適的選項右邊打勾。〕

沒有打坐 _____ 少於每週1次 _____ 每週1次到2次_____

每週3次到6次_____ 每天1次 _____ 每天2次 _____

每天2次以上 _____

3. 在過去六個月當中，您平均每次打坐的時間有多長？ _____ 分鐘

4. 最近這六個月內，您在打坐上面所花的時間：

a. 在團體中打坐的時間占百分之幾？ _____%
〔比如和一個朋友，或是在一個小型或大型的團體中〕

b. 獨自打坐的時間占百分之幾？_____% 〔總和 = 100%〕

注意：以下的問題詢問有關您長期練習打坐的情形。

5. 您在六個月以前和最近這六個月相較，打坐的時間以及頻率：

多很多 _____ 比較多 _____ 差不多一樣 _____

比較少 _____ 少很多 _____

6. 您已經練習打坐多久了？ _____ 年 _____ 個月

7. 從您開始學打坐到現在，平均打坐的次數是：〔在最合適的選項右邊打勾。〕

少於每週1次 _____ 每週1次到2次 _____ 每週3次到6次_____

每天1次 _____ 每天2次 _____ 每天2次以上 _____

8. 從開始學打坐到現在，您平均每次打坐的時間有多長？ _____ 分鐘

9. 從開始學打坐到現在，您在打坐上面所花的時間：

a. 在團體中打坐的時間占百分之幾？ _____%
〔比如和一個朋友，或是在一個小型或大型的團體中〕

b. 獨自打坐的時間占百分之幾？_____% 〔總和 = 100%〕

10. 您是否正式學習過打坐〔比如接受過一位師父的直接教導〕？

有 _____ 沒有 _____ 〔如果沒有，請跳至第13題。〕

正式〔拜師〕學習打坐的原因 _____

學習的地點 _____ 老師 _____

學習的時間 _____ 年 _____ 個月

11. 正式學習打坐對於您練習打坐的整體效果為何？

非常有幫助_____ **有幫助**_____ **沒有影響**_____ 有傷害_____

有長期的效應 _____ **只有短期**的效應 _____

12. 在您長期打坐的過程中，正式學習打坐是從何時開始？

打從一開始_____ **在過程的一半**_____

開始練習打坐 _____ **年之後** **最近**_____

13. 在您所有打坐的經驗中，有百分之幾的時間，感覺好像體驗了跟平常神智清醒時有所不同？

< 20% _____ 20 – 40% _____ 40 – 60% _____ 60 – 80% _____ > 80% _____

Appendix C - Advertisement (English Version)

Are you curious about Hypnosis?

Taiwan Hypnotizability Research

Open to Taiwanese citizens age 18 and above.

Are you interested in understanding hypnosis and it uses, exploring your hypnotic abilities and hypnotizability?

Washington State University Ph.D. Counseling Psychology students Jeremy Roark and Isabella Lin-Roark, are currently conducting this study, to establish normative data for the Taiwanese population regarding hypnotizability. If you would like to participate in this study you will experience real hypnosis different from stage performances. Scientifically trained hypnotherapists will guide you into a hypnotic state and help you assess your hypnotizability, and help you understand the uses and nature of hypnosis (in order to dispell various myths about hypnosis).

This study has been approved by Washington State University.

If you are interested please send an email to roarkjer@wsu.edu or call 0970-188-033 to contact the researcher.

Appendix D - Advertisement (Mandarin Chinese Version)

打破催眠的迷思

臺灣民眾被催眠效度調查

歡迎18歲以上的臺灣公民報名參與本項研究

您想要了解催眠嗎？想要明白催眠的功效嗎？想要知道您
自己進入催眠與投入催眠的程度嗎？

華盛頓州立大學諮商心理學博士班研究生 Jeremy Roark〔林傑明〕和 Isabella Lin-Roark〔林秀真〕，目前正在大臺北地區用中文〔國語〕進行本研究，以便評量測定臺灣民眾的被催眠效度。如果您決定參與本研究，受過科學訓練的催眠心理師，會為您解說催眠的本質〔消弭各種對催眠錯誤的觀念〕及催眠的用處。您將會感受到不同於舞台表演的催眠經驗。

華盛頓州立大學〔 Washington State University〕已批准本研究方法。

如果您有興趣參與本研究，請寄電子郵件至 roarkjer@wsu.edu 或撥打 0970-188-033 聯絡研究人員。

Appendix E – Screening Forms (English and Mandarin Chinese Versions)

Screening questions

Participant No. _____

1. Are you a Taiwanese citizen?

2. What is your age?

3. Have you ever been diagnosed with any type of psychological disorder?

4. Are you currently taking any psychotropic medications or illicit drugs?

5. How many years have you spent living outside of Taiwan prior to age 18?

   How many years total have you spent living outside of Taiwan?

受試者編號 _____

篩選問卷(Screening Questions)

1. 您是台灣公民嗎？

2. 您目前年齡是幾歲？

3. 您是否曾經被診斷出患有任何心理方面的疾病？

4. 您是否正在服用治療精神異常的藥物或違禁藥物？

5. 您在十八歲之前，有幾年是居住在國外？

   從出生到目前為止，您在國外居住過幾年？

Appendix F - Demographic Information (English Version)

Participant No. _____

1. Home Town: _____ Southern_____ Middle_____ Northern_____

2. Ethnicity: Southern Ming_____ Hakka_____ Mainlander_____ Native Taiwanese_____
(If multiracial please check all that apply)

3. Your occupation: _____

4. Yearly Household Income: Under 180,000 ___ 180,000 to 420,000 ___
420,000 to 780,000 ___ 780,000 to 1,200,000 ___ 1,200,000 to 1,800,000 ___
1,800,000 to 2,700,000 ___ over 2,700,000 ___

5. Number of Persons in your household: _____

6. Gender: Male: _____ Female: _____

7. Your age in years: _____

8. Marital status: Single_____ Married_____ Divorced_____ Widowed_____

9. Educational Level completed: Elementary_____ Middle School_____

High School_____ College_____ Graduate School_____

10. Have you ever practiced meditation? Yes____ No____
(If yes, a meditation questionnaire will be given to you after your hypnotizability is measured.)

11. Have you had any previous experience with hypnosis and/or trance? Yes____ No____
(If yes, please describe.)

Appendix G - Demographic Information (Mandarin Chinese Version)

受試者編號 _____

個人基本資料 (Demographic Information)

1. 出生成長地： 南部_____ 中部 _____ 北部 _____

   東部_____

2. 族群：閩南 _____ 客家 _____ 大陸/外省籍 _____ 原住民 _____
   （多元族群者可複選）

3. 職業： _____

4. 性別： 男性： _____ 女性： _____

5. 家庭人口數： _____

6. 家庭年收入〔以臺幣為計算單位〕：

   少於18萬_____ 18萬到42萬 _____

   42萬到78萬 _____ 78萬到120萬 _____

   120萬到180萬 _____ 180萬到270萬 _____

   超過270萬 _____

7. 年齡： _____

8. 婚姻狀況： 單身 _____ 已婚 _____

   離婚 _____ 喪偶 ____

9. 教育程度： 小學 _____ 國中 _____ 高中 _____

   大專或大學 _____ 研究所 _____

10. 您曾經練習過打坐嗎？ 有_____ 沒有_____
〔如果有，在催眠測試之後，我們會給您一份有關打坐的問卷讓您填寫。〕

11. 您先前有過被催眠或出神狀態的經驗嗎？ 有_____ 沒有_____
〔如果有，請描述。〕

Appendix H - Arm-Drop Test (Mandarin Chinese Translation)

落臂測試 (Arm-Drop Test)

我要測試一下你的反射動作方面的能力。請你在椅子上面坐直坐正，把你的雙手伸出來，在你的前面伸直，手掌心朝下，兩隻手不要互相碰到。你做得很好。現在把你的眼睛閉起來，我要你想像一下我正在遞給您一個大大的水桶，讓你用你的右手（或左手）把水桶握住。請用你的手指頭把水桶的把手緊緊地握住。」

注意：治療師現在應該請受試者緊握把手，想像他們真的握住一個水桶。

現在，我要你想像一下，我正好站在你的面前，我的手上提著一桶水，我正在把我手上提著的水倒入你的水桶裡，想像一下這會是一種什麼的情況。你的水桶可以裝入超過十公升的水，我正在把一公升的水倒入你的水桶裡。觀察一下流動中的水正在流入你的水桶中。現在我要倒入更多、更多的水到你的水桶裡。現在您的水桶裡有兩公升的水，您可以感覺到水桶的重量正在增加。三公升。現在更多、更多的水正在流入你的水桶裡。四公升。凝聽一下流動中的水正在嘩啦嘩啦地流入你的水桶中。現在五公升，你的水桶已經半滿了。您可以強烈的感覺到越來越多的水正在流入你的水桶中。我要繼續把水倒入你的水桶裡。六公升。水繼續嘩啦嘩啦地流到你的水桶裡、七公升。越來越多的水正在流入你的水桶中。八公升。水桶很快就會裝滿了。注意一下八公升的水是有多麼的重啊。現在有九公升的水，水桶快滿了，快要滿了。現在，我要倒入第十公升的水，水桶的水已經滿到邊緣上面來了。倒完十公升的水，水桶已經完完全全裝滿了。」

治療師停留十到二十秒，並仔細觀察受試者手臂的動作。

(Record response on the “Procedure Checklist” sheet.)

很好・・・現在把你的雙手放回到椅子的扶手上，讓它們在那裡休息、放鬆。你的手還有手臂現在跟剛開始的時候一樣，不會感覺累或是疲憊・・・・好，就放鬆下來。

等一下我會開始從五倒數到一。我數到一的時候，你會把眼睛打開，而且你會清醒過來，跟你平常醒著的時候一樣。好了，現在開始：5-4-3-2-1。現在你感覺十分清醒！

中文譯者：林秀真 (Isabella H. Lin-Roark) & 林傑明 (Jeremy B. Roark)

Appendix I - Stanford Hypnotic Susceptibility Scale, Form C

(Mandarin Chinese Translation), SHSS:C (MCT)

史丹佛催眠感應能力之評量 C 表

Stanford Hypnotic Susceptibility Scale, Form C[1]: Mandarin Chinese Translation

原作者 (original authors)： André M. Weitzenhoffer & Ernest R. Hilgard

中文譯者 (translators)： 林秀真 (Isabella H. Lin-Roark)

林傑明 (Jeremy B. Roark)

中文翻譯日期：西元2007年初夏

[1]原作:

Weitzenhoffer, A. M., & Hilgard, E. R. (1962). *Stanford Hypnotic Susceptibility Scale, Form C: To be used in conjunction with Forms A and B in research investigations in the field of hypnotic phenomena.* Palo Alto, CA: Consulting Psychologists Press.

0. 闔眼導入催眠〔不用評分〕

注意：這個催眠導入練習可被其他同質的練習所取代。任何被選用的導入方法，須於闔眼狀態結束。然後接續至引導指令1：手移低。

一個既小又亮的東西〔釦子、圖釘〕座落於受試者坐著時須眼睛往上才看得到的地方。可以把它放置於天花板上，距離受試者的眼睛至少六英吋以上。戴眼鏡的受試者必須繼續戴著眼鏡。受試者舒適地坐在一張豎直有軟墊的扶手椅上，椅背須高至可以支撐受試者的頭部。

你有沒有看到在你的前方上面那個小小亮亮的釦子〔圖釘等等〕？〔如有必要，用手指著那個東西。〕好，那就是我所謂的“目標”。

〔1〕 現在請你舒舒服服地坐著，就像上次〔剛才〕一樣，把雙手分別放在椅子的扶手上。你可以直直地看著正前方。我會很快幫助你放鬆，在這同時會給你一些指引，幫你慢慢地進入催眠狀態。現在把你的眼睛向上看著那個目標。如果有必要的話，你可以把頭往後面仰一點點，這樣你的眼睛才不會用力過度。〔如果戴眼鏡：“你能夠透過你的眼鏡看清那個目標嗎？”〕請固定地看著那個目標，一邊凝視它，一邊傾聽我說的話。你能夠被催眠，如果你願意做我叫你做的事情，而且全神貫注在那個目標上，專心聽我所說的話。你今天來到這裡，已經顯示出你的誠意，所以我猜你人在這裡，就表示你想要儘量地去體驗。你能夠被催眠，只有在你想要的情況下。如果你抗拒被催眠，你的參與將會變得毫無意義。儘量全神貫注在那個目標上，仔細注意我說的話，任由所有你覺得將會發生的事情發生。就讓自己自由自在地去體驗。仔細注意我叫你想的事情，如果你的心跑走了，把你的心思帶回到那個目標還有我說的話，這樣你就比較容易感受到被催眠的滋味。催眠並不是超自然或是嚇人的東西。它很正常也很自然，它是隨著專注的狀態以及我們使用的暗示自然地發生。主要是靠著敏銳地專注於某一個特定的東西。有時候，你會體驗跟催眠類似的狀態，當你在一條筆直的公路上開車，而感覺好像遺忘了沿途的風景路標。催眠時放鬆的感覺，很像睡著的前幾個階段，不過你不會真的像平常一樣睡著，因為你會繼續聽到我的聲音，而且會把心思導向我建議的主題上。催眠有點像夢遊，因為被催眠的人並不是很清醒，而仍然可以做很多人們醒著時會做的事情。我所要的，是你願意跟著我的引導

，讓所有將要發生的事情發生。沒有什麼事情會被用來讓你出醜。大部分的人發現他們第二次的經驗比第一次有趣。

如果眼睛閉起來，跳至指令0’〔2’〕而且持續做到指令0’〔7’〕結束為止。

〔2〕 現在安安心心地讓自己放鬆下來。盡你所能持續穩定地看著那個目標，心裡只想著它還有我說的話。如果你的眼睛看到別的地方去，不要讓那困擾你・・・・再一次專注在那個目標上。專心注意那個目標如何改變，那些陰影如何圍繞著它玩耍，看它怎麼有時候模糊不清，有時候又清楚易見。不管你看到什麼都好。自由自在地幻想任何在你腦海裡浮現的東西，可是要持續地凝視著那個目標更久一點。不過，一段時間後，就會凝視得夠久了，你的眼睛就會感到很疲倦，你會強烈地希望它們已經閉著。然後它們就會閉起來，好像它們自己閉起來一樣。當這發生的時候，就任由它發生。

如果眼睛閉起來，跳至指令0’〔3’〕而且持續做到指令0’〔7’〕結束為止。

〔3〕 越來越放鬆。當你想到放鬆，你的肌肉就會放鬆下來。從你的右腳開始放鬆，放鬆你右腿的肌肉・・・・現在放鬆你的左腳，放鬆你左腿的肌肉・・・・全部都放鬆下來。放鬆你的右手・・・下手臂・・・上手臂・・・還有肩膀・・・就是這樣。現在放鬆你的左手・・・下手臂・・・上手臂・・・還有肩膀・・・・放鬆你的脖子，還有胸膛・・・越來越放鬆・・・完完全全放鬆下來・・・完完全全放鬆下來。

如果眼睛閉起來，跳至指令0’〔4’〕而且持續做到指令0’〔7’〕結束為止。

〔4〕 當你放鬆下來，你會感到身體有點沉重或許是有點麻木。你會開始有這種麻木或是沉重的感覺，在你的腿跟腳・・・在你的手還有手臂・・・貫穿你的全身・・・好像你正在安穩中深深地沉入椅子裡。這張椅子很穩固：當你感覺越來越重，它會支撐你沉重的身體。你的眼皮也感覺沉重，又重又累。你開始感到又累又想睡覺。你的呼吸很順暢

也很深沉，很順暢又很深沉。你變得越來越想睡覺、越來越累。你的眼皮越變越重，越來越疲倦沉重。

如果眼睛閉起來，跳至指令0’〔5’〕而且持續做到指令0’〔7’〕結束為止。

〔5〕 凝視那個目標這麼久，已經把你的眼睛弄得很累。你的眼睛痛了而且眼皮感覺很沉重。很快你的眼睛就沒有辦法繼續張開。你會覺得忍受這種不舒服的感覺已經夠久了；你的眼睛因為凝視而感覺疲勞，你的眼皮會覺得太累了沒有辦法繼續張開。你的眼睛因為用力過度而變濕。你變得越來越累、越來越想睡覺。你的眼睛用力過度的感覺越來越強烈。你會感到如釋重負，只要讓你的眼睛閉起來，完完全全地放鬆，完完全全地放鬆。你會很快就用力過度了；用力過度到你會很高興你的眼睛自己閉起來，自己閉起來。

如果眼睛閉起來，跳至指令0’〔6’〕而且持續做到指令0’〔7’〕結束為止。

〔6〕 你的眼睛累了眼皮也感覺很沉重。全身都感到沉重鬆弛。你感覺到一陣愉快溫暖的刺痛感貫穿你的全身，當你變得越來越累、越來越想睡覺。想睡覺。很累。又累又想睡覺。繼續把你的心思放在我所說的話上面；傾聽我的聲音。你的眼睛因為用力過度正在變模糊。你幾乎沒有辦法看到那個目標，你的眼睛是如此地用力過度。用力過度的感覺越來越強烈，越來越強烈，越來越強烈。

如果眼睛閉起來，跳至指令0’〔7’〕而且持續做到指令0’〔7’〕結束為止。

你的眼皮沉重。非常地沉重。越來越重，越來越重。它們正在往下壓，往下，往下。你的眼皮好像被加了重物感覺沉重，被那個重量往下拉・・・如此沉重・・・・你的眼睛正在眨著，眨著・・・閉起來，閉起來・・・・

如果眼睛還沒有閉起來：

很快你的眼睛就會自己閉起來，不過沒有必要讓它們更加用力過度。你在那個目標上已經全神貫注得很好，而且變得非常地放鬆。現在我們已經到了可以讓你的眼睛閉起來的時候了。〔**如果沒有反應**：就這樣了；現在把它們閉起來。〕

〔7〕 你現在感覺非常放鬆，不過你甚至會變得更放鬆。現在你的眼睛是閉著的，就更容易放鬆了。你的眼睛會一直閉著，直到我叫你張開眼睛，或是我叫你醒過來・・・・當你繼續傾聽我的聲音，你會很愉快地感覺到又累又想睡覺。繼續把你的心思放在我說的話上面。你會變得更累更想睡覺。很快你就會睡得很熟，不過你還是會有辦法聽清楚我說的話。直到我叫你，你才會醒過來。不久我就會開始從一數到二十。在我數的時候，你會感覺到越來越往下沉，進入一個又熟又可以充分休息的睡眠當中，不過你將能夠做各式各樣我叫你做的事情，而不會醒過來・・・・一--你會睡得更加深沉・・・・二--往下，往下進入一個又深又熟的睡眠當中・・・・三--四--越來越睡著了・・・・五--六--七--你正在沉入一個很深很深的睡眠當中。沒有任何東西會打擾你・・・・我要你把心思持續放在我的聲音以及那些我叫你想的事情上面。你正在發現，很容易就可以專心傾聽我告訴你的事情・・・・八--九--十--一半了— 一直睡得越來越熟・・・・十一--十二--十三--十四--十五--雖然睡得很熟，你仍然可以清楚地聽得到我。你會一直很清楚地聽得到我，不管你感覺你睡得有多深。十六--十七--十八--睡得很深、睡得很熟。沒有任何東西 會打擾你。 你會體驗很多我叫你體驗的事情・・・・十九--二十。<u>深深地睡著了</u>！直到我叫你，你才會醒過來。你會希望睡得很舒服，而且擁有那些我對你描述的經驗。

我要你知道你會有辦法講話、移動、甚至張開你的眼睛，如果我叫你這樣做的話，並且仍然保持跟現在一樣的被催眠的程度。不管你做什麼，你會一直處在被催眠的狀態，直到我叫你出來為止・・・・好，那麼・・・

接續至引導指令1：手移低。

0'. 闔眼導入催眠

對那些早就把眼睛閉起來的人

眼睛一閉起來，就適當地結束句子，然後說：

你很舒服地放鬆下來，不過你會更放鬆、更放鬆。你的眼睛現在是閉著的。把你的眼睛持續閉著，直到我叫你張開眼睛或是醒過來為止。

然後轉接到適當的地方，繼續用以下的暗示做導引，所有的暗示都假定眼睛已經閉著。萬一眼睛又張開，指示受試者把它們閉起來。

〔2'〕現在就安安心心讓自己放鬆下來。不要緊張。只要仔細傾聽我的聲音。如果你的心思跑走了，沒有關係，不過要把你的注意力帶回來。有時候我的聲音也許似乎會有點改變，或是聽起來好像打從遠方來，那都沒有關係。如果你開始變得更想睡覺，那也沒有關係。不管發生什麼事情，接受它，並且持續傾聽我的聲音，當你變得越來越放鬆。越來越放鬆。只要傾聽而且放輕鬆。不管你覺得什麼事情正在發生，就讓它發生。

〔3'〕越來越放鬆。當你想到放鬆，你的肌肉就會放鬆下來。從你的右腳開始放鬆，放鬆你右腿的肌肉・・・・現在放鬆你的左腳，放鬆你左腿的肌肉・・・・全部都放鬆下來。放鬆你的右手・・・下手臂・・・上手臂・・・還有肩膀・・・就是這樣。現在放鬆你的左手・・・下手臂・・・上手臂・・・還有肩膀・・・・放鬆你的脖子，還有胸膛・・・越來越放鬆・・・完完全全放鬆下來。

〔4'〕當你放鬆下來，你的身體會感到有點沉重或許是有點麻木。你會開始有這種麻木或是沉重的感覺，在你的腿跟腳・・・在你的手還有手臂・・・貫穿你的全身・・・好像你正在安穩中深深地沉入椅子裡。這張椅子很穩固：當你感覺越來越重，它會支撐你沉重的身體。你開始感到又累又想睡覺，累，想睡覺。你的呼吸很順暢也很深沉，很順暢又很深沉。你變得越來越想睡覺、越來越累，你的全身也變得越來越疲倦沉重。

〔5'〕你放鬆下來了，非常放鬆。經由自由自在地體驗，你甚至可以變得更放鬆。你能夠達到一個更加深沉、完全放鬆的狀態。你變得越來越累、越來越想睡覺。有一陣愉

悅的麻木沉重感貫穿你的全身。你開始感到如此放鬆，如此想睡覺。比較容易做的事情，是把你的心思從其他的事物帶回來，只有注意我的聲音。很快你就會只是昏昏欲睡地傾聽我的聲音，當你變得越來越深深地放鬆。

〔6'〕你放鬆下來了，非常放鬆。全身感到沉重鬆弛。你感覺到一陣愉快溫暖的刺痛感貫穿你的全身，當你變得越來越累、越來越想睡覺。想睡覺。很累。又累又想睡覺。繼續把你的心思放在我所說的話上面；傾聽我的聲音。當你越來越放鬆，除了我的聲音還有我說的話，很快就不會想起任何的事物。現在沒有麻煩、沒有憂慮會打擾你。除了我的聲音所說的話，沒有任何事情看起來重要，現在任何其他的事物都不重要。你只有對於我的聲音對你所說的話有興趣。甚至連我的聲音聽起來也許都有點奇怪，好像在夢中傳來給你一樣，當你更加深深地沉入，深度放鬆的這種麻木感、這種沉重感。放鬆，放鬆・・・深深地放鬆。越來越深，越來越深，越來越深。

〔7'〕當你繼續傾聽我的聲音，你會很愉快地感覺到又累又想睡覺。繼續把你的心思放在我說的話上面。你會變得更累更想睡覺。很快你就會睡得很熟，不過你還是會有辦法聽清楚我說的話。直到我叫你，你才會醒過來。不久我就會開始從一數到二十。在我數的時候，你會感覺到越來越往下沉，進入一個又熟又可以充分休息的睡眠當中，不過你將能夠做各式各樣我叫你做的事情，而不會醒過來・・・・一--會睡得更加深沉・・・・二--往下，往下進入一個又深又熟的睡眠當中・・・・三--四--越來越睡著了・・・・五--六--七--你正在沉入一個很深很深的睡眠當中。沒有任何東西會打擾你・・・・ 我要你把心思持續放在我的聲音以及那些我叫你想的事情上面。你正在發現，很容易就可以專心傾聽我告訴你的事情・・・・八--九--十--一半了— 一直睡得越來越熟・・・・十一--十二--十三--十四--十五--雖然睡得很熟，你仍然可以清楚地聽得到我。你會一直很清楚地聽得到我， 不管你感覺你睡得有多深。十六--十七--十八--睡得很深、睡得很熟。沒有任何東西會打擾你。你會體驗很多我叫你體驗的事情・・・・十九--二十。<u>深深地睡著了</u>！直到我叫你，你才會醒過來。你會希望睡得很舒服，而且擁有那些我對你描述的經驗。

我要你知道你會有辦法講話、移動、甚至張開你的眼睛，如果我叫你這樣做的話，

並且仍然保持跟現在一樣的被催眠的程度。不管你做什麼，你會一直處在被催眠的狀態，直到我叫你出來為止・・・・好，那麼・・・

接續至引導指令1：〔右〕手移低。

1.〔右〕手移低

現在把你的右手臂伸出來保持在肩膀的高度，手掌朝上。這樣，這樣對了・・・仔細注意這隻手，看它感覺如何，看它裡面怎麼樣。注意它是不是有一點麻木，或是有點刺痛的感覺；注意到用很少的努力就可以不讓你的手腕彎掉；注意任何吹在它上面的微風。現在仔細注意你的手。想像在你的手裡正拿著一個重物・・・也許是一顆很重的棒球或是一顆撞球・・・一個很重的東西。彎曲你的手指，好像握著這個你想像在你手裡的重物一樣。就是這樣・・・・現在這隻手還有手臂感覺沉重，好像這個重量正在往下壓・・・當它感覺越來越重，這隻手還有手臂開始往下移動・・・好像被迫往下・・・移動・・・移動・・・往下・・・往下・・・越來越往下面・・・更加沉重・・・更加沉重・・・這隻手臂越來越累、越來越疲憊・・・往下・・・慢慢地、確實地・・・往下，往下・・・越來越往下面・・・這個重量是如此地大，這隻手是如此地重・・・・你越來越感覺到這個重量・・・這隻手臂太重了沒有辦法支撐回去・・・它往下面去・・・往下，往下，往下・・・越來越往下面去・・・・

除非完全放下，等十秒鐘；
留意記錄移動的程度，然後接著說：

〔如果沒有完全放下：〕好・・・現在讓你的手回到它原來在椅子扶手上的位置，然後放鬆下來。你的手臂上體驗的沉重和疲倦大概會少很多，如果你沒有全神貫注在它上面，如果你沒有想像有一個東西試著強迫它往下移動。現在就放鬆下來・・・・你的手還有手臂現在跟剛開始的時候一樣，不會感覺累或是疲憊・・・・好，就放鬆下來。

〔如果完全放下：〕很好・・・現在讓你的手回到它原來的位置。就讓它在那裡休息、放鬆。你的手還有手臂現在跟剛開始的時候一樣，不會感覺累或是疲憊・・・・好，就放鬆下來。

記分。給〔十〕如果手在等待的十秒鐘結束之前已經移低至少六英吋。接續至引導指令2：移開雙手。

2. 移開雙手

現在把你的兩個手臂在你的前面伸展開來，手掌面對面，雙手很接近地在一起可是沒有互相碰到。我幫你弄。

握著受試者的雙手，把它們的距離調到大約兩英吋遠。

我要你想像有一股力量在你的雙手上操作要把它們推開來，好像一隻手在推離另外一隻手。你想著你的雙手正在被迫分開，它們開始移動分開・・・分開・・・分開・・・移開・・・移得更開・・・互相離得越來越遠・・・離得越來越遠・・・・

等十秒鐘不要有進一步的暗示而且
留意移動的程度。

〔如果雙手移動得很少：〕好。你注意到思想和行動是多麼地密切相關。我將握著你的雙手把它們帶回來放一起，這樣你就可以感覺它們分開有多遠了。

握著受試者的雙手相當緩慢地把它們移在一起。接著說：「把你的雙手放回到椅子的扶手上，然後放鬆下來。」

〔如果雙手已經移開：〕很好。就把你的雙手放回到椅子的扶手上，然後放鬆下來。

記分。給〔十〕如果雙手在十秒鐘結束之前彼此距離六英
吋或六英吋以上。接續至引導指令3：蚊子幻覺。

3. 蚊子幻覺

你非常仔細地傾聽我說話，很專心地在注意。你也許沒有察覺到有一隻蚊子在這邊發出嗯嗯的聲音，在唱歌，像蚊子平常一樣・・・・現在傾聽它一下・・・聽它高音階的嗯嗯聲，當它飛在你右手邊・・・・它停在你手上・・・也許有一點癢・・・好了，它又飛走了・・・你聽到它高音的嗯嗯聲・・・它又回到你的手上搔癢，它有可能會咬你・・

・你不喜歡這隻蚊子・・・・你想把它弄走・・・・好，把它揮走，把它弄走如果它打擾你的話・・・・(等十秒鐘)

它走了・・・那是一種解脫・・・你沒有再被打擾了・・・那隻蚊子已經不見了。現在放鬆下來，完完全全地放鬆下來。

記分。給〔十〕如果看到任何苦相，任何動作，任何承認暗示效果的行為。接續至引導指令4：味道幻覺。

4. 味道幻覺

A. 甜味

我要你想起一個在你嘴巴裡甜甜的東西。想像有一個嚐起來甜甜的東西在你的嘴巴裡，譬如一點點糖・・・當你想到這個甜味，你能夠真的開始體驗一種甜甜的味道・・・・也許一開始是淡淡的，不過會漸漸增強、漸漸增強・・・漸漸增強・・・・現在你開始注意到有一個甜味在你的嘴巴裡・・・這個甜味正在增加・・・越來越甜、越來越甜・・・現在在你嘴巴裡的甜味有多強？

如果受試者表示他嚐到甜味，要確定味道有多強。如果強度適中，接續至B. 酸味：如果沒有味道或是味道很弱，如下接著說：

它會變得越來越強・・・這種味道通常須要一些時間才能達到它全部的強度・・・・它現在變得越來越強・・・越來越強・・・好了・・・現在怎麼樣？比較強了嗎？

留意記住回答，然後接續至 B. 酸味，由甜味的經驗決定從 a. 或 b. 開始。

B. 酸味

a.〔如果很少或是沒有察覺到甜味〕那沒有關係。有些被催眠的人可以好好地體驗這種味道，其他的人則不行・・・・我們看看對於另外一種味道你會怎麼樣。〔接續至c.〕

b.〔如果受試者說他嚐到明顯的甜味〕現在注意有一件事情正發生在那個味道上。它正在改變・・・〔接續至c.〕

c. 現在你的嘴巴裡開始有一個酸味・・・一個酸酸的味道，好像在你的嘴巴裡有一些檸檬，或是醋・・・・你嘴裡的味道變得越來越酸，越來越酸・・・越來越酸・・・・現在你的嘴巴裡有沒有那個酸味？

留意記住回答。如果回答「有」，詢問「味道強不強？跟你先前所體驗的甜味比較一下，這個酸味的強度怎麼樣？」

d. 〔如果沒有體驗到酸味〕並不是每一個人在被催眠的時候都可以體驗像這樣的味道。你的嘴巴感覺相當正常・・・・放鬆下來，不要再想任何味道了・・・・繼續放鬆下來。

e. 〔如果體驗到酸味〕很好・・・不過要注意那個酸味正在消失，你嘴巴的感覺跟我提到任何味道之前一模一樣・・・・好了，現在相當正常了・・・你就繼續放鬆・・・越來越放鬆・・・・

給〔十〕如果兩個味道都有體驗到，而且〔a〕有明顯的跡象伴隨其中一個味道，譬如嘴唇有移動或是露出苦相，或是〔b〕強烈感受到其中一個味道。接續至引導指令5：〔右〕手臂僵直。

5.〔右〕手臂僵直

請把你的右手臂直直地伸出來，手指頭也伸直。就是這樣，右手臂伸直。想著你的手臂變得越來越僵硬・・・僵硬・・・非常地僵硬・・・當你想到它變僵硬，你就會感覺到它變僵硬了・・・越來越僵硬、越來越僵直，好像你的手臂被綁在一個夾板裡面，所以手肘沒有辦法彎曲・・・僵硬・・・保持僵硬，這樣它就沒有辦法彎曲了。一隻被緊緊地綁在夾板裡的手臂沒有辦法彎曲・・・・你的手臂感覺僵硬好像被緊緊地綁在夾板裡一樣

・・・・測試一下它有多麼地僵硬、多麼地僵直・・・・試試看能不能使它彎曲・・・試試看・・・〔等十秒鐘〕

〔如果手臂彎曲:〕好。你會有機會去體驗很多事情。你可能已經注意到你的手臂如何變得比較僵硬，當你把它想成很僵硬，可能已經注意到要花多少的努力才有辦法使它彎曲。你的手臂一點也不再僵硬了。把它放回原來的位置，然後放鬆下來。

〔如果手臂沒有彎曲:〕放鬆下來・・・不要再試著彎曲你的手臂了・・・・它不再僵硬了・・・・讓它放鬆回到原來的位置。就放鬆下來。

記分。給〔十〕如果在十秒鐘結束之前手臂彎曲少於兩英吋。
接續至引導指令6：做夢。

6. 做夢

我們非常有興趣想知道對一般人來說催眠還有被催眠意謂著什麼。知道答案的最好的方法之一，就是透過人們在被催眠的時候所做的夢。有些人直接夢到催眠的意義，其他人則用一種間接的方式夢到這個意義，象徵性地、藉由夢到在表面上跟催眠似乎沒有關連的事情，不過在事實上卻有可能有相關。現在你跟我都不知道你會做那一種夢，不過我會讓你休息一下，然後你會做一個夢・・・一個真正的夢・・・就是你在晚上睡著的時候所做的那一種。不久之後當我停止對你說話，你會開始做夢。你會做一個跟催眠有關的夢。你會夢到催眠意謂著什麼・・・・現在你正在睡著・・・・越來越深深地睡著了・・・很像你在晚上睡覺的時候一樣・・・・很快你就會睡得很深、睡得很熟。我一停止說話，你就會開始做夢。當我再一次對你說話，如果你碰巧還在做夢，你會停止做夢，然後傾聽我說話，就像打從一開始你就一直這麼做一樣。如果你在我又一次對你說話之前就停止做夢，你會持續處在又愉快又深沉的放鬆狀態・・・・現在睡覺、做個夢・・・深深地睡著！

等兩分鐘。然後說：

夢結束了；如果你有做一個夢，你能夠清楚地記得它的每一個細節，非常地清楚。你不覺得特別想睡覺，也不會感覺跟我叫你入睡、做夢之前有什麼不同，而且你繼續處在深度被催眠的狀態中。不管你夢到什麼，你都能夠記得相當清楚，而且我要你從頭把它描述給我聽。現在告訴我你的夢，從頭開始。

〔如果受試者沒有做夢：〕那沒有關係--並不是每一個人都會做夢。

〔如果受試者猶豫不答，或是陳述得很模糊，探問細節。然後做結束：〕關於夢，全部就只有這樣了。

> 盡可能地把夢逐字記錄下來。給〔十〕如果受試者夢得很好〔也就是說，有一個可以跟夢相比擬的經驗--不只是模糊、稍縱即逝的經驗，也不是沒有意象伴隨的思想或情感〕。受試者有可能拿到一個加分，即使他也許堅持那不是一個真正的夢。接續至引導指令7：年齡回退。

7. 年齡回退〔溯〕

需要的物品：8.5 X 11英吋的記事簿以及一號的軟心鉛筆。

繼續越來越深沉地進入催眠的狀態。我將會給你一本記事簿還有一隻鉛筆。我們看一下，你是用那一手寫字的？好，來，你可以用你的〔左，右〕手拿著記事簿，用你的〔右，左〕手拿著鉛筆，這樣一來你就可以很容易地用鉛筆在記事簿上寫字了。〔把記事簿和鉛筆放置於手上，確定眼睛繼續保持在閉著的狀態。〕現在請寫一下你的名字・・・既然在寫了，你何不也寫一下你的年齡還有今天的日期。很好。把記事簿還有鉛筆留在你的手上，並且仔細傾聽我說話。我要你想起你在國小五年級的時候；而且等一下你會發現你自己再一次是個小男〔女〕孩，在一個美好的日子裡，坐在國小五年級的課堂裡上課，在一些紙上寫字或畫畫・・・・現在我將會數到五，數到五的時候，你會回到國小五年級・・・・一，你正在回到過去。現在不再是〔陳述今年的年份〕，也不是〔陳述一個稍早的一年〕，或是〔陳述一個更早的一年〕，而是更早以前。二，你正變得越來越年輕，越

來越小・・・很快你會回到國小五年級，在一個美好的日子裡。三，一直變得越來越年輕、越來越年輕，越來越小、越來越小。很快你會回到國小五年級，而且你會感受到一種，跟以前在一個美好的日子裡，坐在課堂裡上課，寫字或畫畫，一模一樣的經驗。四，很快你就會在那裡了・・・・再一次是個小男〔女〕孩，在國小五年級的班上，現在你差不多在那裡了・・・・再一下子你就會回到那裡去了。五！你現在是個小男〔女〕孩，在學校的教室裡面・・・・

你幾歲？

你在那裡？

你在做什麼？

你的老師是誰？

繼續說下去，即使沒有回退的跡象。

你有一本記事簿，並且拿著一隻鉛筆。我要你用這隻鉛筆在記事簿上寫下你的名字・・・・很好，現在請寫下你的年齡・・・接下來，如果你可以的話，寫一下日期，還有星期幾・・・・

很快你就不會還是在國小五年級，不過你還會變得更年輕，回到國小二年級。我將會數到二，然後你會在國小二年級。一，你還在變得更小，回到一個美好的日子裡，當你在國小二年級的時候・・・・二，現在你在國小二年級了，很快樂地坐在學校裡，拿著一些紙和筆・・・・你在國小二年級・・・・

你叫什麼名字？

你幾歲？

你在那裡？

你的老師是誰？

可以請你在紙上寫一下你的名字嗎・・・・很好・・・・現在你可以寫一下你幾歲嗎？很好・・・・你可不可以告訴我今天的日期是什麼？・・・・或是星期幾？・・・

不管回答是什麼：

很好・・・・現在你可以再一次長大，回到〔陳述今天是星期幾以及今天的日期〕，在〔測試地點的名稱〕。你不再是一個小男〔女〕孩，而是一個〔陳述年紀〕大人，坐在椅子上深深地被催眠了。你幾歲？・・・今天的日期是什麼？・・・你在那裡？・・・沒有錯・・・・今天是〔正確的日期〕，你是〔正確的年齡〕，這裡是〔說出受試者被測驗的場所名稱〕。好，每一件事情都回到跟剛開始的時候一樣。現在我要拿走你手上的記事簿和鉛筆・・・・〔拿走記事簿和鉛筆〕・・・・現在就繼續舒舒服服地放輕鬆・・・・

給〔十〕如果現在跟回退的其中一個年齡的筆跡有名顯的不同。接續至引導指令8：手臂無法動彈。

8.〔左〕手臂無法動彈

你很放鬆、很舒服，有一種沉重的感覺貫穿你的全身。我現在要你想著你的左手臂還有左手。仔細注意它們。它們感覺麻木、沉重，非常地沉重。你的左手感覺有多麼地重啊・・・當你想著它有多麼沉重的時候，它甚至變得越來越重、越來越重・・・・你的左手臂變得更沉重了・・・沉重・・・沉重・・・・你的手變得更沉重了，非常地重，好像它被壓靠在椅子的扶手上面。等一下，你也許想知道你的手有多麼的重--它好像太重了沒有辦法移動--不過即使如此地沉重，也許你可以把它移動一點點，不過也許它重得連那樣都不行・・・・你何不試試看它有多重・・・・試試看能不能把你的手往上擡起來，就試試看。〔等十秒鐘〕

〔如果手擡起來：〕很好。你注意到因為你所處的放鬆狀態，它如何地比平常難擡起來。現在把它放回原來在椅子扶手上的位置，然後放鬆下來。你的手和手臂現在又感覺正常了。它們不再沉重。就放鬆下來・・・全部都放鬆下來。

〔如果手沒有擡起來：〕很好・・・不用再試了・・・就放鬆下來。你的手和手臂現在又感覺正常了。它們不再沉重。就放鬆下來・・・全部都放鬆下來。

記分。給〔十〕如果在十秒鐘結束之前手臂擡高少於一英吋。接續至引導指令9：對氨氣失去嗅覺。

9. 對氨氣失去嗅覺

需要的物品：一個有旋轉式瓶蓋的小瓶子，裡面裝滿未稀釋的家用氨氣。

等一下你會沒有辦法聞到任何的氣味・・・甚至現在你變得越來越沒有辦法聞到氣味了・・・你越來越沒有辦法聞到氣味・・・越來越沒有辦法・・・很快甚至沒有辦法聞到最強的氣味・・・現在你一點點都不再有辦法聞到任何東西了。你不再有辦法聞到任何的氣味。我會把一瓶有氣味的東西放在你的鼻子底下，這樣你就會自己發現你的嗅覺完全消失了，你沒有辦法聞到任何東西・・・你的鼻子完全沒有感覺・・・自己去發現你的鼻子失去感覺了，沒有辦法聞到任何的氣味・・・

把裝有氨氣的瓶子帶到離受試者的鼻子三英吋遠的地方，然後說：

現在好好地聞一下・・・

給予吸聞的機會之後就拿開瓶子。

a. 〔如果受試者適當地吸聞：〕你剛剛有沒有聞到任何東西？〔如果「有」〕對你來說它聞起來像什麼？

留意記住回答，然後接續至c. 結束。

b. 〔如果受試者並沒有適當地吸聞：〕你可以比剛剛那樣更用力地聞一下。〔再一次把瓶子放在鼻子底下〕好，用力地聞一下，自己去發現你真的沒有辦法聞出氣味了・・・〔拿開瓶子〕這一次你有沒有聞到任何東西？〔如果「有」〕對你來說它聞起來像什麼？

c. 〔做結束，對所有的受試者：〕很好・・・現在你的鼻子正在回到正常的嗅覺狀態・・・等一下你會聞出氣味，就像你一直都能夠這麼做一樣・・・現在你能夠好好地聞出氣味，跟其他的時候一樣。來，好好地聞一下這個。

把開著的瓶子放在受試者的鼻子底下。在拿開並且關好瓶子之後，詢問：

跟剛才你聞的東西比較一下，這個聞起來如何？

好，每一件事情都恢復正常了。我們氣味的部分做完了。就休息一下、放鬆下來。

給〔十〕如果否認聞到氨氣，並且缺乏明顯聞到的跡象。接續至引導指令10：聲音幻覺。

10. 聲音幻覺

剛才我忘記告訴你，在這個辦公室裡，有一個人想要問你一些有關你個人的問題，以便做成我們的記錄，譬如你幾歲、你在那裡出生、你有幾個兄弟姐妹、以及一些其他跟基本事實有關的問題。希望你不會介意回答這些問題。這些問題會被在你右邊牆壁上裝的擴音器跟麥克風廣播出來。當你回答的時候，請大聲說話，這樣就可以很清楚地被聽到了。擴音器剛剛才被打開・・・・現在開始廣播第一個問題・・・

等十秒鐘。如果受試者開始回答，接續至在下面的c.；如果沒有回答，說：

你沒有聽到那個問題嗎？

a. 〔如果受試者說他沒有聽到任何東西：〕好。接下來我們做其他的事情。現在沒有任何的聲音在問問題了。

給〔—〕然後接續至引導指令11：陰性視幻覺

b. 〔如果受試者說他聽到那個問題，可是沒有大聲回答：〕我沒有辦法聽到你說的話。請出聲回答，這樣我才能夠聽得到你。〔偶而受試者也許會在幻覺中想像他在回答，如果他看起來好像處於幻覺中，再一次要求他說大聲一點。〕

c. 〔如果受試者聽到並且有回應，讓他說出三個或四個回答，然後如下做結束：〕很好。我想你已經回答夠多的問題了，接下來我們最好做其他的事情。不再有任何的聲音在問問題了。

給〔十〕如果受試者至少有一次很真實地回答，或是顯示出在幻覺中想像他正在回答的跡象。接續至引導指令11：陰性視幻覺。

11. 陰〔負〕性視幻覺：三個盒子

需要的物品：一張小桌子置放於受試者的前方；一張小型的茶几即可。三個小小的、有顏色的盒子〔譬如：紅色、白色、和藍色〕，大約三英吋長、二英吋寬、1/2英吋高。把盒子從左到右排列在受試者前面的桌子上。

當你閉著眼睛坐在那裡，我正把一張小桌子放在你的前面。

把桌子放好；三個盒子排列好。

等一下我會叫你把眼睛打開，看著你前面的那張桌子，保持跟現在一樣的被催眠的程度。我放了兩個盒子在桌子上。事實上，桌上就只有兩個盒子。兩個小小的盒子，沒有其他的東西・・・・好，慢慢地把你的眼睛打開，看著那兩個盒子。你有沒有看到它們？・・・在桌子上你有沒有看到其他的東西？

a. 〔如果受試者說有三個盒子：〕對・・・真的有三個盒子。現在把你的眼睛閉起來，放鬆下來，我把桌子和這些盒子拿走。

給〔—〕然後接續至引導指令12：催眠後的失憶症

b. 〔如果受試者接受有兩個盒子的暗示：〕對。你只有看到兩個盒子。現在我要你告訴我這些盒子看起來怎麼樣。他們大不大？・・・他們像不像？・・・

記錄受試者說出的顏色。

很好，它們是〔受試者說出的顏色〕。對了，〔其中一個盒子的顏色〕色的是在另外一個盒子的右邊還是左邊？沒有錯。

結束：不過現在很努力地看一下・・・確實沒有三個盒子嗎？實際上有三個盒子・・・・第三個盒子是什麼顏色？沒有錯・・・・現在把你的眼睛閉起來，放鬆下來，我把桌子和這些盒子拿走。

給〔十〕如果幻覺出現，不管有沒有持續。有時候第三個盒子會被模糊地看成一個有顏色的點或是陰影。分數仍然是〔十〕。接續至引導指令12：催眠後的失憶症。

12. 催眠後的失憶〔症〕

保持完完全全地放鬆，不過仔細聽我接下來跟你說的話。等一下我會開始從二十倒數到一。你會逐漸地清醒過來，不過在數的時候，你大部份的時間仍然處在你目前的狀態。我數到五的時候，你會把眼睛打開，可是你不會完全清醒。我數到一的時候，你會完全清醒過來，跟你平常醒著的時候一樣。不過，你已經如此地放鬆，以至於會有困難回想起我對你說過的話，以及那些你做過的或是體驗過的事情。去回想那些事情會耗費如此多的努力，以至於你寧可不去嘗試。比較容易的，就是忘掉每一件事情，直到我跟你說你可以記起來了。你會忘掉所有發生過的事情，直到我跟你說：「現在你可以記得每一件事情了！」一直到那個時候，你都不會記得任何的事情。你醒過來以後，會感覺精神很好，而且不會有任何疼痛或是僵硬或是其他令人不愉快的後遺症。現在我會從二十倒數回去，數到「五」的時候，你才會把眼睛打開，在我數到「一」之前，你不會完全清醒過來。我數到一的時候，你才會完全清醒。好了，現在開始: 20-19-18-17-16-15-14-13-12-11-10〔一半了〕9-8-7-6-5-4-3-2- 1。現在你感覺十分清醒！我要問你一些跟你的經驗有關的問題。現在請用 你自己的話告訴我，從你開始凝視那個目標之後，每一件發生過的事情。

按照提及的順序，在記分表上記錄陳述的項目。如果停下來，問「還有其他的嗎？」然後記錄回答，直到受試者又停下來為止。
接著說：

你忘記了〔所有，很多，一些〕發生過的事情。你可不可以告訴我這是什麼樣的感覺？

〔如有必要，詢問探索以便確定失憶症的性質，亦即：是否真的忘記、說不出口、等等〕

記錄陳述的話語，然後接著說：

仔細聽我所說的話。現在你可以記得每一件事情了。現在你有想起其他的事情嗎？

按照提及的順序，記錄增添的項目。提醒受試者任何他沒有提到的項目。接著說：

關於剛才你沒有能力去回想起一些事情，對你來說那個感覺有多真？

記錄陳述的話語。

全部就這樣了。謝謝你的參與。

給〔十〕，如果在被告知「現在你可以記得每一件事情了」之前，受試者回想起三個或是更少的項目。回想起來的事情必須特定、具體到可以認得出是哪一個項目；而不是，譬如說：「一件跟我的手臂有關的事情。」

Appendix J - Procedure Checklist

Participant # _____

_____ Screening

_____ Informed consent
- Participant signature (2 copies)
- Consent for future research

_____ Participant Number
- Write number on all sheets

_____ **Demographic questionnaire**
- Meditation experience: Yes No

- "What languages did you speak at home when you were a child?"

  Taiwanese Mandarin Hakka Other: _____

_____ **Assign administrator**
- Write administrator on participant list: _____

_____ Any particular beliefs about hypnosis?

_____ **What do you think might happen during hypnosis?**

_____ Debunking sheet
- Provide debunking information
- Question and answer
- **Debunking result**

_____ **Test Preparation**

- Turn off cellular phones and beepers
- Permission to touch the participants hands and arms
- *When applicable say,*

"No matter how hypnotized you become today, you will always be able to use Mandarin to speak with me."

_____ Arm-drop test: **Passed** **Not Passed**
(drop 15 or more cm)

Remarks:

_____ **Participant age:** _____

_____ **Orientation to present situation**

Year:

Date:

Day:

Location:

_____ Administer SHSS:C

- Record responses on scoring sheet

_____ Discuss experience

- Ask - "Can you tell me how you felt about this experience with hypnosis?"

_____ Mediation questionnaire **NA** **Yes**

Appendix K - Informed Consent (English Version)

Participant No. _____

Taiwanese Norms for the Stanford Hypnotic Susceptibility Scale:

Form C (Mandarin Chinese Translation) - SHSS:C (MCT)

The information in this consent form is provided so that you can decide whether you wish to participate in the study. The purpose of this study is to explore the degree to which Taiwanese individuals enter into hypnosis and become involved in the experiences and behaviors characteristic of it. The Institutional Review Board of Washington State University has approved the participation of subjects and methods in this research.

Your hypnotic capacity will be assessed by a standardized test of hypnotizability developed at Stanford University and translated and adapted for the Taiwanese population by Isabella Hsiu-Chen Lin-Roark. Administration of the scale will involve relaxation instructions and presentation of suggestions. You will be informed about hypnosis and have an opportunity to have all your questions answered. The amount of time for this task will be approximately one hour. Hypnotic inductions will be performed by two primary administrators with over 75 hours of training in hypnosis by Arreed Barabasz, Ph.D., ABPP and assistants who have received 20 hours of training by Jeremy Roark in proper administration and scoring of the test being used.

You will have the opportunity to ask questions at any time and seek further information about the procedures and results of the study. You will be informed if we become aware of any new information which might affect your decision to participate in the study.

Data obtained will be coded and maintained in two separate locked confidential file cabinets and/or safes in the investigator's office. Confidentiality will be maintained. In any research reports, participants will be listed only by number code.

The risks of hypnosis are considered minimal with normal volunteers. However, should a counseling session be needed it will be made available, without charge, by one of the two primary administrators. You may choose to end your participation in the study at any time. If during the course of the study or thereafter you wish to discuss your participation in or concerns regarding this study, you may contact Jeremy Roark at roarkjer@wsu.edu, (phone # in Taiwan) or 509-432-6956.

I certify that I am in good physical, mental health and am not taking medication or recreational drugs. I have never been diagnosed with a psychological or psychiatric problem. The requirements have been explained to me and my questions have been answered. I understand I am free to ask additional questions and/or terminate the experiment at any time. You will receive a copy of this form which you should keep for your records.

I have read the above comments and agree to participate in this experiment. I give my permission under the terms outlined above. I understand that if I have any questions or concerns regarding this project I can contact the investigators by the methods listed above.

This study has been reviewed and approved by the WSU Institutional Review Board for human subject participation. If you have questions about the study please contact the researcher(s) listed above/below. If you have questions about your rights as a participant please contact the WSU IRB at 509-335-9661 or irb@wsu.edu.

Participant Signature _____ Date _____

Thank you for your time,

_____

Jeremy Roark, 509-334-6465
roarkjer@wsu.edu
Washington State University

Appendix L - Informed Consent (Mandarin Chinese Version)

告知後同意書(Informed Consent)

臺灣民眾被催眠效度調查

測試標準：史丹佛催眠感應能力之評量 C 表〔 中文翻譯版 〕

請閱讀本同意書內的資訊，以決定是否參與本研究。本研究的目的是要探討台灣民眾進入催眠、投入催眠狀態後之行為效度。華盛頓州立大學制定審查委員會〔 The Institutional Review Board of Washington State University〕已批准本項研究可以有受試 者參與並且核准其研究方法。

您的催眠感應能力將按照史丹佛大學研發的催眠感應能力測試標準進行評量，由林秀真(Isabella Hsiu-Chen Lin-Roark)協助翻譯並針對臺灣民眾的情況做適當的調整。 這套評量測試包含放鬆引導指示及提供暗示。您會被告知有關催眠的資訊，並有機會讓您所提出的問題得到解答。本測試的時間大約是一小時。本測試將由兩位催眠師及助理來進行。催眠師曾受過華盛頓州立大學教授Arreed Barabasz, Ph.D., ABPP 超過兩年的訓練。而助 理人員則受過催眠師Jeremy Roark 二十個小時的訓練。這些經驗背景將可確保本測試的正確執行和準確評分。

您在任何時候都可以提出問題，並針對研究程序和結果提出進一步的問題。在發現任何可能影響您參與此研究的新資訊時，我們會立即讓您知道。

本研究所取得的資料將被視為機密，並由研究人員保管於辦公室內加鎖之機密檔案櫃中。我們將確保您的資料的隱密性。在任何研究報告中，我們都不會提到受試者的姓名或是任何可以辨識出受試者的相關**資訊**。

一般志願接受催眠者所需承擔的風險非常低。但是如果您需要諮詢，我們將指定兩位催眠師中的一位為您提供免費的諮詢服務。您可以隨時中斷參與這項研究。在研究進行期間或之後，如果您想要針對您的參與或對本研究的疑慮進行討論，請寄電子郵件至

roarkjer@wsu.edu或撥打 0970-188-033〔7月2日前〕或 509-592-2081〔7月2日後〕聯絡 Jeremy Roark。

同意聲明：

我保證我的身心健康狀況良好，目前沒有服用任何治療精神異常的藥物或違禁藥物。我不曾被診斷出患有心理或精神科方面的疾病。我知道受試條件，我的疑問也已得到解答。我了解我可以詢問其他問題或在任何時候終止本試驗。我也了解我會拿到本同意書的影本以作為記錄保存。

我已經閱讀過上述資訊，並同意參加本試驗。在上述條件下，我同意接受本試驗。**我了解**如果對此計畫有疑問或疑慮，可以用上述的方法聯絡研究人員。

華盛頓州立大學制定審查委員會〔The Institutional Review Board of Washington State University〕已批准本項研究可以有受試者參與。如果我對此研究有疑問，可以聯絡研究人員。如果我對受試者的權力有疑問，可以寄電子郵件至 irb@wsu.edu 或撥打 509-335-9661聯絡華盛頓州立大學制定審查委員會〔The Institutional Review Board of Washington State University〕。

受試者簽名 _____ 日期 _____

感謝您撥空參與。

_____

Jeremy Roark

0970-188-033

509-592-2081
roarkjer@wsu.edu

華盛頓州立大學

Appendix M - Debunking the Myths about Hypnosis (English Version)

Removing misconceptions about hypnosis is an important part of any research involving hypnotizability testing and should be discussed prior to participation (Barber & Wilson, 1979). Spiegel and Spiegel (2004) present several of these common misconceptions about hypnosis as well as points of clarification.

Hypnosis is an active process all people learn to varying degrees as a coping skill (Gfeller, 1993).

Special process – "No absolute dividing line exists between nonhypnotic and hypnotic alterations in consciousness, but altered, dissociated, or hypnotic-like experiences clearly occur in everyday life and provide a useful backdrop for understanding the hypnotic experience". (pg 3, Spiegel & Spiegel, 2004) Hypnosis is a cognitive experience not much different from many everyday life experiences (Gfeller, 1993).

"Hypnosis is not something done to a person; it is rather a state that can be evoked-either alone or in the presence of others-in persons with the capacity for a certain style of concentration" (pg xix, Spiegel & Spiegel, 2004).

Therapy – "Hypnosis is not in itself a therapy. It is not a miracle cure for physical or psychological issues; however, it can facilitate a therapeutic strategy tremendously" (pg xix, Spiegel & Spiegel, 2004).

Hypnosis is an altered state of consciousness, not sleeping. In fact the hypnotizee becomes more alert and awake and is in control (Spiegel & Spiegel, 2004).

Hypnosis does not equal suggestion. It is more than simply suggestion or placebo (Barabasz & Watkins, 2005). For example, according to Holroyd (1996) highly hypnotizable persons have a higher pain tolerance than low hypnotizables.

Resistance to hypnosis is not a sign of strength or willpower – In fact, there are 3 possible responses to hypnotic suggestion. First, you can easily prevent yourself from entering a state of hypnosis by responding to suggestion either by saying negative things to yourself or by simply deciding not to participate. Second, you could passively wait for things to happen, and they may or may not happen. Third, you can experience those things that are suggested if you let yourself think and imagine along with the themes of the suggestions (Barber & Wilson, 1979).

Hypnosis is not dangerous. The use of hypnosis as an adjunct to certain treatments has been sanctioned by the American Psychiatric Association and the American Medical Association (Spiegel & Spiegel, 2004).

Hypnosis is not merely a superficial psychological phenomenon. It is a neurophysiological state the trait ability to enter into which is determined by both biological and psychological factors (Spiegel & Spiegel, 2004).

Appendix N - Debunking Information (Mandarin Chinese Version)

認識催眠

- 催眠的狀態：
  - ✧ 意識和潛意識同時進行。
    - ➢ 感覺處在2個不同的情境或時空。
  - ✧ 不等於睡著，也不是失去意識。
    - ➢ 可以清楚地意識到催眠的過程以及週遭的環境。

- 催眠的要件：
  - ✧ 被催眠者願意:
    - ➢ 進入催眠的狀態、接受催眠的暗示。
    - ➢ 專心傾聽催眠師說話。
    - ➢ 主動積極地運用想像力。

- 催眠感應能力：
  - ✧ 大部份是與生俱來。
  - ✧ 程度高低，因人而易。

- 控制：
  - ✧ 催眠師並不能控制被催眠者。
  - ✧ 被催眠者自己決定要不要進入催眠的狀態、要不要接受催眠的暗示。

- 催眠的引導及暗示：
  - ✧ 提供一個環境或是一個催化劑，幫助被催眠者啟動潛意識的引擎，自由自在地體驗他〔她〕所願意進入的催眠情境。

受試者簽名 _____ 日期 _____