### Université de Montréal

Is social phobia characterized by a distinct interpersonal pattern?

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### RÉSUMÉ

Traditionnellement, le construit de la phobie sociale a été défini selon une vision intrapersonnelle, en tant que trouble de l'anxiété. Une autre conception se propose de la définir d'un point de vue interpersonnel, comme un pattern global d'autoprotection. L'objectif principal de cette thèse est de tester des hypothèses tirées du modèle interpersonnel de la phobie sociale.

Deux études, présentées sous forme d'articles, ont permis d'examiner si des patterns spécifiques d'autoprotection, tels que l'impuissance et la soumission, caractérisent le mode de fonctionnement des phobiques sociaux. Les études ont également évalué si l'autoprotection et l'anxiété sont interreliées.

Pour la première étude, les patterns interpersonnels de 132 phobiques sociaux, évalués à l'aide d'une mesure dérivée du Circumplex interpersonnel, ont été comparés à ceux de 85 individus célibataires ayant une dysfonction sexuelle et 105 sujets normaux. La relation entre les patterns d'autoprotection, l'anxiété sociale, la détresse générale et le fonctionnement social a également été examinée chez les phobiques sociaux.

La seconde étude a permis d'examiner l'évolution des patterns d'autoprotection ainsi que de l'anxiété sociale, de la détresse générale et du fonctionnement social, chez 85 phobiques sociaux à quatre moments : avant et après un traitement d'approche interpersonnelle, ainsi qu'aux relances de six mois et d'un an. L'étude a également comparé les participants en rémission et ceux satisfaisant les critères de la phobie sociale un an suivant la fin du traitement.

Les résultats suggèrent que les patterns d'impuissance et de soumission sont caractéristiques de la phobie sociale. Plus précisément, ces patterns décrivent davantage les comportements des phobiques sociaux plutôt que ceux des groupes de comparaison. De plus, une réduction significative de l'autoprotection a été notée au post-traitement et maintenue jusqu'au suivi d'un an, surtout chez les participants en rémission.

En outre, une relation entre l'autoprotection, l'anxiété sociale et la détresse générale a été mise en évidence chez les phobiques sociaux. Une amélioration de l'anxiété, de la détresse subjective et du fonctionnement social cohérente avec la dissolution des patterns d'autoprotection a également été obtenue au post-traitement.

En conclusion, les résultats des deux études appuient une conception interpersonnelle de la phobie sociale.

# **MOTS CLÉS:**

phobie sociale; approche interpersonnelle; pattern d'autoprotection; impuissance; soumission; Circumplex Interpersonnel.

#### **SUMMARY**

Traditionally, the construct of social phobia has been viewed intra-personally, as a disorder of anxiety. In recent years, an alternative interpersonal account of the concept has been proposed, whereby social phobia is characterized as an overall self-protective pattern of specific fearfully self-protective patterns of interpersonal behaviour. The main objective of this dissertation was to test hypotheses drawn from this interpersonal approach.

Two studies, presented in the form of research articles, were devised to examine whether specific self-protective interpersonal patterns of powerlessness and submissiveness are characteristic of the overall socially phobic pattern. The studies also examined whether self-protectiveness is interrelated with anxiousness.

The first study compared the interpersonal patterns, assessed using an Interpersonal Circumplex measure, of 132 socially phobic individuals to those of 85 single sexually dysfunctional and 105 normal control participants. The relationship between self-protective patterns and social anxiety, general distress, and social functioning were also examined in the socially phobic group.

The second study examined the evolution of self-protectiveness, as well as social anxiety, general distress, and social functioning, in 85 socially phobic individuals at four time-points: Prior to being treated by an interpersonal approach, post-treatment, as well as at a sixmonth and one-year follow-up. Remitted and non-remitted participants at the one-year follow-up were also compared.

Results support the hypothesis that social phobia is characterized by self-protective patterns of powerlessness and submissiveness. Specifically, these interpersonal patterns were found to characterize the socially phobic group to a larger extent than either of the two contrast groups. They were also shown to improve meaningfully after treatment, especially in participants who achieved remission one year later.

In addition, a relationship between the self-protective patterns and increased levels of social anxiety and subjective distress was found in the socially phobic group. Results also showed an improvement in anxiety, general distress, and social functioning consistent with the shrinking in self-protectiveness after treatment.

In conclusion, the findings are consistent with predictions drawn from an interpersonal approach and provide support for this alternative conceptualization of social phobia.

# **KEYWORDS**:

social phobia; interpersonal approach; self-protective pattern; powerlessness; submissiveness; Interpersonal Circumplex.

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#### LIST OF ACRONYMS AND ABBREVIATIONS

A Competition/Autocracy

ADIS-R Revised Anxiety Disorders Interview Schedule

AF Affiliation

AGG Aggressiveness
AGR Agreeableness

ANOVA Univariate Analysis of Variance

APA American Psychiatric Association

B Management/Exploitation

C Criticism/Hostility

D Skepticism/Mistrust

DOM Dominance

DSM-III Third Edition of the Diagnostic and Statistical Manual of Mental

Disorders

DSM-III-R Third Revised Edition of the Diagnostic and Statistical Manual of

Mental Disorders

DSM-IV Fourth Edition of the Diagnostic and Statistical Manual of Mental

Disorders

DSM-IV-TR Fourth Text-Revised Edition of the Diagnostic and Statistical Manual of

Mental Disorders

DSM-5 Fifth Edition of the Diagnostic and Statistical Manual of Mental

Disorders

E Modesty/Self-Effacement

F Docility/Dependence

FNE Fear of Negative Evaluation

G Generosity/Normativeness

H Friendliness/Compliance

ICD-10 Tenth Revision of the International Classification of Diseases

IPC Interpersonal Circumplex

MANOVA Multivariate Analysis of Variance

N Normal

PO Power

SAD Social Avoidance and Distress

SAS-R Revised Social Adjustment Scale

SCL Symptom Check-List

SP Socially Phobic

SSD Single Sexually Dysfunctional

SUB Submissiveness

TERCI "Test d'évaluation du répertoire des construits interpersonnels"

WHO World Health Organization

WL Waiting List

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# INTRODUCTION1

"[...] All the world's a stage, And all the men and women merely players: They have their exits and their entrances; And one man in his time plays many parts [...]". — Shakespeare (circa 1600, As You Like It)

In this passage, William Shakespeare captures the essence of social relationships. Living in the social world is not unlike taking part in a play. People fulfill or are expected to fulfill many social roles in their daily lives and throughout their lifespan. Each social role is anchored in institutions (Zurcher, 1983; e.g., marriage, education) and is adapted according to the nature of the interaction (Gardner, 1988; e.g., formal *versus* informal). While some roles may be enacted in an intimate and private setting (e.g., spouse, parent, child, friend), others are performed in the public domain (e.g., teacher, student, boss, employee; Stravynski, 2014). All acts are embedded in social roles.

Through actions, people strive to fit into society and develop meaningful as well as satisfying connections with others. The ability to enact various social roles however, does not come without cost to everyone. Like an actor in a play experiencing stage fright, some people become paralyzed in the very social roles they embody or hope to embody in fear of criticism, rejection, or humiliation. Social rituals and practices (e.g., courting, public speaking, asking for help when needed, greeting a neighbour) that most people would consider trivial and not worth a second thought, may be viewed as insurmountable obstacles in the achievement of goals and can be experienced with grave distress (see also Gibbs & Kyparissis, 2009). In the clinical branch of psychology, we have come to label such individuals socially phobic. From a scientific point of view however, what exactly is social phobia?

The inability to lead satisfying social lives is the essence of social phobia. How is this impairment in social functioning however characterized? Current conceptualizations of the

<sup>&</sup>lt;sup>1</sup> Permission was obtained to write the current work in English. The authorization letter is presented in Appendix A.

construct are of an *intra*personal nature; they view social phobia as the result of an inner process called anxiety. Based on research conducted from this stance, little is however known on the social conduct of socially phobic individuals, with the exception of their tendency to engage in avoidance.

In recent years, Stravynski (2014; 2007) has rejected the received view on social phobia and has proposed an alternative account, which considers the entire living creature in his or her natural habitat. From this *inter*personal outlook, social phobia is conceptualized as an overall interpersonal pattern of more specific fearfully *self-protective* patterns of behaviour.

The focus of the present dissertation was to test hypotheses drawn from the interpersonal model (Stravynski, 2014; 2007).

### Document Organization

This document is divided into three parts:

The first part provides a general theoretical context of the subject matter at hand. It is divided into three separate chapters. Chapter 1 overviews the evolution of the concept of social phobia and concludes by addressing issues regarding the view of social phobia as a disorder of anxiety. Chapter 2 critically reviews studies examining social phobia through intrapersonal lenses. Finally, Chapter 3 presents the alternative interpersonal account of social phobia, which served as the basis of the current research.

The second part of the dissertation consists of two studies that aimed at testing the interpersonal conceptualization of social phobia, as well as supplementary methodological information and statistical analyses. It is made up of four chapters. Chapter 4 is provided for informational purposes; it comprises a more elaborate description of the measure that was used to assess patterns of interpersonal behaviour. Chapters 5 and 6 present the two research studies in the form of articles. Each chapter comprises an abstract, introduction, method,

results, and discussion section. Lastly, Chapter 7 outlines the results of additional analyses that were conducted to refine the findings of the two research papers.

The third and final part contains a general discussion. It consists of three separate chapters. Chapter 8 reviews the thesis of this dissertation and summarizes the outcome of the studies. Chapter 9 examines the current findings in relation to the literature. Finally, Chapter 10 discusses the contributions and the limitations of the study. It also details considerations for future research.

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# -PART I-GENERAL THEORETICAL CONTEXT

## Chapter 1

# **Evolution of the Concept of Social Phobia**

"Mental illness, of course, is not literally a "thing" or physical object— and hence it can "exist" only in the same sort of way in which other theoretical concepts exist."

— Szasz (1960, p. 113)<sup>1</sup>

For it to be possible to study a psychological construct, it is first essential to define it. In this chapter, we will provide an overview of the concept of social phobia as it evolved over time. We will then present current extensive defining criteria of the term, and finally, the chapter will conclude by highlighting the limitations of these criteria and the conceptual framework from which they were derived.

The History of the Construct of Social Phobia

Literary accounts of social phobia or analogous occurrences (e.g., shyness, timidity, social anxiety) date back to Ancient Greece, where Hippocrates described a case of a man who:

"[...] through bashfulness, suspicion, and timorousness, will not be seen abroad; loves darkness as life and cannot endure the light or to sit in lightsome places; his hat still in his eyes, he will neither see, nor be seen by his goodwill [...] He dare not come in company for fear he should be misused, disgraced, overshoot himself in gesture or speeches, or be sick; he thinks every man observes him" (cited in Burton, 1881, p. 253).

It was not until the turn of the 20<sup>th</sup> century however, that the term "social phobia" was coined by the French psychologist, Pierre Janet. In his work, he provided clinical case examples of various phobic fears, of which he distinguished between two types of situational phobias: One of physical spaces, and one of social contexts. In the first were categorized

<sup>&</sup>lt;sup>1</sup> Szasz, T. (1960). The myth of mental illness. *American Psychologist*, 15, 113-118.

agoraphobic or claustrophobic fears, whereas the second consisted mainly of fears of blushing (ereuthophobia; Janet & Raymond, 1903). With regards to these latter phobias, it was stated that:

"Le caractère essentiel qui se retrouve en effet dans toutes ces phobies, c'est le sentiment d'être devant des hommes, d'être en public et le fait d'avoir à agir en public. [...] Tous ces malades n'ont aucune peur de rougir ou de pâlir, ou de grimacer, ou de sourire ou de ne pas sourire quand ils sont seuls et la rougeur ou la grimace, si elle survenait à ce moment, ne les impressionnerait aucunement. On pourrait donc appeler ces phénomènes des phobies sociales ou des phobies de la société [original emphasis]" (Janet, 1908, p. 217).

Basically, it was emphasized that the distinguishing element of these social or societal phobias was the fact of being in front of others or having to behave in public. According to Janet (1908), the mere tendency of blushing or grimacing alone – without the presence of an observing audience – did not generate any fearful responses.

In the 1920's, a similar phenomenon, called *taijin kyofusho*, was described by Morita in Japan (cited in Iwase, Nakao, Takaishi, Yorifuji, Ikezawa, et al., 2000). This concept was originally divided into two sub-types: The classical (or Morita) type and the offensive (or severe) type. The first was defined as the fear of showing anxiety in public and as a consequence being looked down upon by others. The second was characterized, not by the fear of being scrutinized, but rather the fear of offending others with one's anxious appearance. A third, the avoidant type, was later added and consisted of a fear of rejection, which resulted in the tendency to seek shelter from others, despite the desire to establish interpersonal connections with them.

It has been suggested that the Morita and avoidant types are roughly equivalent concepts to social phobia, in that all three share as a common denominator the fear that one's anxious appearance will have negative consequences on oneself. By contrast, the offensive type is considered a distinct construct, because the content of its fear is the impact of one's anxious appearance on others (Iwase, et al., 2000).

In Great Britain, the term social phobia was consistently used in the 1960's (Rapee, 1995). Marks and Gelder (1966) were however the first to empirically consider it as a separate entity. In one study, they distinguished between four types of phobias exhibited by individuals: Specific animal phobias (e.g., birds, dogs, insects), specific situational phobias (e.g., heights, thunder), agoraphobias (e.g., closed spaces, being alone in crowds), and social anxieties, which consisted of individuals who were afraid of attending parties, meeting new people, eating, trembling, or blushing in front of others.

It was not until the 1980's however, that social phobia received official status in the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-III*; American Psychiatric Association, 1980). It is worth noting that this categorical classification system was originally developed in a medical setting. It has its roots in the gradual medicalization of abnormal behaviour that occurred in the 19<sup>th</sup> century with the influence of work published by Dr. Emil Kraeplin (1883, cited in Hergenhahn, 2005), a German physician, in which various "mental disorders" were considered as disease entities and were enumerated in a list. In this disease model approach, hypothetical constructs of psychopathology are assumed to represent actual underlying illnesses or disease entities (Hergenhahn, 2005). The foundation of this scientific reasoning evolved out of the philosophy of Cartesian dualism (also known as substance dualism), which separates the mind (a hypothetical concept situated in some abstract mental space) from the machine (the physical human body)<sup>2</sup>; and the principle of reductionism, which assumes that causality flows from lower to higher levels; notions originally advocated by the French philosopher, René Descartes (Hergenhahn, 2005; Palmer, 2002; see also Stravynski, 2014).

Within the disease model framework, social phobia was conceptualized as a specific phobia (Rapee, 1995) in the *DSM-III* (APA, 1980). Its description was generally limited to fears that were related to performance difficulties, such as eating or drinking in public (Rapee, 1995). This was in contrast to difficulties in relating with others that was, at the time, more

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<sup>&</sup>lt;sup>2</sup> Historically, the origins of mind-body dualism can be traced back to Plato and Augustine, who from a religious point of view, dichotomized the notions of body and soul (Hergenhahn, 2005).

typical of the description of avoidant personality disorder (Millon, 1991). An individual had to meet the following three criteria to be considered socially phobic:

- "A. A persistent, irrational fear of, and compelling desire to avoid, a situation in which the individual is exposed to possible scrutiny by others and fears that he or she may act in a way that will be humiliating or embarrassing.
- B. Significant distress because of the disturbance and recognition by the individual that his or her fear is excessive or unreasonable.
- C. Not due to another mental disorder, such as Major Depression or Avoidant Personality Disorder" (*DSM-III*; APA, 1980, p. 228).

Although the *DSM-III* (APA, 1980) laid the foundation for all future defining criteria of social phobia, considerable changes were brought to the criteria in the revised version of the manual (*DSM-III-R*; APA, 1987). For instance, a behavioural element of the socially phobic response was noted. It was specified that the feared social situation could either be endured with intense distress or *avoided*. Impairment in social functioning as a result of the avoidant behaviour was also listed as an alternative dimension to marked distress, allowing for either to be present for someone to meet criteria for social phobia. Other significant changes that were made to the *DSM-III-R* (1987) criteria for social phobia were: The introduction of the notion of a generalized sub-type, and the removal of avoidant personality disorder as an exclusion criterion. These modifications however, raised many questions and were surrounded by much debate.

### To Generalize or Not to Generalize?

The generalized specifier required that "the phobic situation includes *most* social situations [emphasis added]" (APA, 1987, p. 243). Although meant to broaden the definition that had prior been limited to performance anxiety, much confusion surrounded the meaning of "most social situations", as it was interpreted in multiple ways.

Some researchers defined "most social situations," as suggesting the type of social situation feared, i.e., performance (e.g., speaking or drinking in public) *versus* social

interaction (e.g., conversation). For example, Turner, Beidel, and Townsley (1992) attempted to operationalize it as "fears of the most commonly occurring social situations (e.g., conversations), as opposed to only performance-oriented situations (e.g., speeches) [original emphasis]" (p. 327). A generalized sub-type was therefore assigned to individuals who corresponded to this definition, and individuals who feared circumscribed situations (e.g., speaking, urinating, writing in public) were assigned a specific sub-type. Similarly, Levin, Saoud, Strauman, Gorman, Fyer, and colleagues (1993) classified socially phobic individuals into either a generalized or discrete sub-type. Participants in the former category were those "who showed marked impairment in most performance and socialization settings" (p. 209) and the latter, those who "had difficulty principally in performance situations (e.g. public speaking or musical performance) rather than social situations" (p. 209).

By contrast, other researchers quantified "most social situations" by the number of social situations feared. This number varied from one study to another. For example, some studies set a cut-off of seven out of thirteen situations as indicative of most social situations (e.g., Chartrand, Cox, El-Gabalawy, & Clara, 2011), while others established a threshold of eight out of fourteen situations (e.g., El-Gabalawy, Cox, Clara, & Mackenzie, 2010).

In an attempt to reconcile both qualitative and quantitative interpretations of the definition, Heimberg, Holt, Schneier, Spitzer, and Liebowitz (1993) proposed a tripartite subtype system, consisting of performance, generalized, and limited interactional types. The performance type corresponded to socially phobic individuals whose fears were restricted to performance situations (similar to the discrete, circumscribed, or specific sub-types described earlier), whereas the generalized type was used to identify individuals who feared a relatively large number of social situations. The limited interactional type was a cross between the two other types, as it included individuals whose fears were limited to one or two situations of socially interactive nature.

In support of the tripartite classification system, a cluster analytical study (Furmark, Tillfors, Stattin, Ekselius, & Fredrikson, 2000) classified 188 socially phobic participants into three groups: A generalized socially phobic group that feared a broad range of social

situations, a discrete group, and finally, a non-generalized intermediate. By contrast, another cluster analytical study (Iwase, et al., 2000) of 87 participants meeting criteria for social phobia or *taijin kyofusho* revealed a different set of sub-types. In addition to the performance and generalized types, the third cluster was characterized by offensive-type fears.

Further uncertainty with regards to social phobia sub-typing was produced by a study (Perugi, Nassini, Maremmani, Madaro, Toni, et al., 2001) that conducted factor analyses on the social anxiety scores – assessed by the Liebowitz Social Anxiety Scale (LSAS; Liebowitz, 1987) – of 153 socially phobic participants. Findings from this study revealed five (not two or three) qualitatively different sub-types based on the nature of the anxiety (interpersonal contact, formal speech, stranger-authority contact, eating and drinking while being observed, and public performance).

Finally, in an attempt to improve the construct validity of social phobia, the generalized sub-type was removed in the most recent version of the manual (*DSM-5*; APA, 2013) and rather, a specification of performance only social anxiety was added. In general however, the reviewed literature brings to light the difficulty of accurately identifying social phobia and its sub-types based on the proposed definitions. Further complications arise when avoidant personality disorder is drawn into the picture.

#### With or Without Avoidant Personality Disorder?

In the revised criteria (*DSM-III-R*; APA, 1987), avoidant personality disorder was omitted as an excluding factor for social phobia; thus allowing, from this point forward, the co-occurrence of the two hypothetical entities of psychopathology. Co-occurrence however appeared inevitable, as the key feature of avoidant personality disorder became a fear of negative evaluation and discomfort in social situations, which echoed dramatically what was considered socially phobic, especially with regards to the generalized sub-type (Turner, et al., 1992). Further, while the two concepts were officially recognized as separate entities, their criteria overlapped considerably (Heimberg, et al., 1993). In great similarity to social phobia, avoidant personality disorder included avoidance of social activities that involved

interpersonal contact, reticence in social settings in fear of saying inappropriate or foolish comments, and fear of being embarrassed as a result of showing visible signs of anxiety (e.g., blushing, crying). Studies examining the relationship between the two constructs have generally found that many cases of generalized social phobia co-occur with avoidant personality disorder; the reverse (i.e., avoidant personality disorder without a simultaneous presence of social phobia) is however exceptional (Heimberg, et al., 1993; Reich, 2000).

In general, much controversy has surrounded the issue of whether social phobia, especially the generalized sub-type, is a distinct construct from avoidant personality disorder. Some authors have suggested that they are variants on the same continuum, differing only in the severity of impairment. In this view, avoidant personality disorder would lie at the more severe end of the spectrum (Schneier, Blanco, Antia, & Liebowitz, 2002). Other investigators have however proposed that they are two sub-types of the same construct (Johnson & Lydiard, 1995; Reich, 2000). Although the category for personality disorders is currently no longer classified on a separate axis from other indexed psychopathological constructs, social phobia and avoidant personality disorder are still regarded as distinctive entities (*DSM-5*; APA, 2013).

### Current Defining Criteria used to Assess the Construct of Social Phobia

In spite of the various authors highlighting the ambiguity concerning the question of social phobia sub-types, as well as the distinction (or connection) between the concepts of social phobia and avoidant personality disorder, the defining criteria for social phobia remained relatively untouched in the following versions of the *DSM*, i.e., *DSM-IV* (APA, 1994) and later *DSM-IV-TR* (APA, 2000). One noteworthy modification that was however introduced in the *DSM-IV* (APA, 1994) was the notion of social phobia as a disorder of anxiety, as for the first time, the term "social anxiety disorder" appeared in parentheses next to social phobia. Most recently, a transformation in the title was seen with the publication of the *DSM-5* (APA, 2013), where the concept of social phobia now appearing in parentheses, was replaced by the term social anxiety disorder. The wording of one of the criteria was also reworked to state more explicitly that: "The fear, anxiety, or avoidance *causes* clinically

significant distress or impairment in social, occupational, or other important areas of functioning [emphasis added]" (p. 203). These adjustments are consistent with a disease model framework, suggesting that an underlying mechanism, namely anxiety, activates social phobia. The complete list of criteria can be found in Appendix B.

Finally, the World Health Organization (WHO) published its own set of criteria for social phobia (listed in Appendix C) in the tenth revision of the *International Classification of Diseases* (*ICD-10*; 1993) around the same time as the publication of the *DSM-IV* (APA, 1994). Although the content of the criteria are fairly similar to those of the *DSM*, these tend to be more selective, particularly because specific anxious physiological responses (e.g., blushing, nausea, urgency to urinate or defecate) are required to satisfy criteria for social phobia.

## Summary and Conclusion

As illustrated in the present chapter, various lists of criteria for social phobia have been formulated and currently exist in the psychological literature. According to McNeil (2001), there is little consensus however as to which classification system is appropriate. Additionally, past and current defining criteria for social phobia have placed a great importance on the context of the feared situations, whether it has been the type (e.g., performance *versus* social interactions) or the number (e.g., most *versus* one or two) of situations. These however, have often been vague and have generated little clarity into the concept of social phobia. The varying and sometimes imprecise defining criteria of social phobia have expectedly been problematic in terms of its assessment (Leary, 1983). This is illustrated by the difficulty encountered in trying to obtain consistent prevalence rates for social phobia from one study to another, and from country to country (Furmark, 2002; Stein, Ruscio, Lee, Petukhova, Alonso, et al., 2010)<sup>3</sup>. Aside cultural influences, the considerable variability in lifetime prevalence

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<sup>&</sup>lt;sup>3</sup> In a systematic review of 43 epidemiological studies, Furmark (2002) found a lifetime prevalence of social phobia ranging from 1.7% to 13.3% in North America, from 1.0% to 16.0% in Europe (45.6% in Russia), and a substantially lower average rate in Asia (0.5%). Similarly, a population-wide epidemiological study by Stein and colleagues (2010) found a significantly higher lifetime prevalence of social phobia in developed countries (6.1%) than in developing countries (2.1%) In this study, the United States, Belgium, France, Italy, the Netherlands, Spain, Germany, Japan, and New Zealand represented developed countries, whereas Brazil, India, Bulgaria,

rates, highlights the flawed nature of the definitions provided to assess the concept of social phobia.

Further, most of the focus has mainly been on a particular dimension of social phobia, namely anxiety. In consistency with a reductionistic/disease model ideology, which "maintains that the behavior of the whole person [...], is best explained by the inherent characteristics of certain constituent elements or processes" (Stravynski, 2014, Chapter 1), social phobia is viewed *intra*-personally. More specifically, social phobia is considered as a "disorder" (or "disease") resulting from the emergence of anxiety; a process that arises from within the individual. From this viewpoint, anxiety is a state of mind that is abstracted from the living human organism that interacts constantly with his or her environment (Stravynski, 2007)<sup>4</sup>. On the face of it, a potential criticism of the intrapersonal perspective (see Stravynski, 2014; 2007), is that there is nothing about anxiety that is proprietary to social phobia, i.e., anxiety appears to be the principal defining element associated to all the hypothetical constructs classified as anxiety disorders (specific phobias, generalized anxiety disorder, panic disorder, agoraphobia), including social phobia (*DSM-5*; APA, 2013).

Additionally, as anxiety is considered by the intrapersonal view to be at the heart of social phobia, little importance is given to social conduct. Viewed intra-personally, discrete anxious behaviours (e.g., trembling, averted eye gaze) are considered to be the mere behavioural consequence of anxiety (Alden & Taylor, 2004; Clark & Wells, 1995), whereby elevated levels of anxiety inhibit adequate behaviour. This notion is reflected in the previously reviewed assessment criteria for social phobia, which reveal that behaviourally, the emphasis has been put entirely on one single response, that of avoidance. From this perspective, it would appear that avoidance is the sole behaviour responsible for impairment in social functioning. In reality however, it is highly implausible that socially phobic individuals would retract themselves entirely from the social world. As no descriptive account of social phobia is

Lebanon, Mexico, China, Nigeria, South Africa, Colombia, Romania, and Ukraine represented developing countries.

<sup>&</sup>lt;sup>4</sup> From a reductionistic point of view, the inner process of anxiety is in turn produced by some more specific hypothetical inner defect (e.g., cognitive distortions; Alden & Taylor, 2004; Clark & Wells, 1995), which in turn is also caused by a more fundamental deficiency (e.g., neurochemical unbalance, genetic abnormality; see Moutier & Stein, 2001; Nickell & Uhde, 1995; Saudino, 2001), etc.

provided, the intrapersonal view provides little insight into what these individuals do (or do not do) to protect themselves from harm (e.g., criticism, rejection) as they go about trying to live in society (see Stravynski, 2014; 2007).

Despite inherent drawbacks to current defining criteria for social phobia, the majority of the studies in the literature have been developed from an intrapersonal stance. Can we learn anything about socially phobic behaviour from research conducted within an intrapersonal framework, and do these studies support the notion that social phobia is a disorder of anxiety? A critical review of these studies is provided in Chapter 2.

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## Chapter 2

# Social Phobia Viewed Intra-Personally: A Critical Review of the Literature

This section will provide an overview of the literature examining social phobia through intrapersonal lenses.

To find relevant studies, PsychInfo and Medline databases were searched using index words that included "social phobia or social anxiety disorder," and "anxiety," and "self-report," or "behaviour or social behaviour or social skill," or "psychophysical measurement". All publications by a number of key researchers in the area were also reviewed for pertinence to the subject. A total of 21 studies were selected according to the following guidelines:

- Studies concerning solely social phobia as the group of interest were chosen, i.e., studies examining mixed samples, sub-clinical socially anxious participants, and analogous study populations (e.g., shy, avoidant) were excluded;
- Studies including only adult samples were retained, i.e., studies of socially phobic children and adolescents 17 years old and younger were not reviewed;
- Studies including subjective (e.g., self-reported anxiety, and/or self-reported anxious behaviours) and/or objective (e.g., observed anxious appearance, observed discrete anxious behaviours, and/or physiological arousal) measures of anxiety were included;
- Only comparative studies, i.e., comparing socially phobic individuals to a normative control group, and, if available, a clinical contrast group, were selected.
   Comparisons between sub-groups of social phobia were also accepted; and
- Studies written in either the English, French or Greek languages were reviewed.

The found studies largely assessed anxiety levels and discrete behaviours in the context of simulated role-play tasks. In general, results were quantified through self- and/or observer ratings of the anxious and behavioural responses. Some studies also provided an objective physiological measure of anxiety (e.g., heart rate).

Studies examining differences within socially phobia, i.e., sub-types, will be addressed first. Second, a review of studies comparing socially phobic to normal individuals will be provided. Third, studies contrasting socially phobic individuals to a clinical control group, in addition to a normative control group will be presented.

The chapter will conclude by summarizing the results of these studies and their relation with regards to an intrapersonal account of social phobia. Finally, an alternative theoretical outlook will be introduced.

# A Comparison between Sub-Types of Social Phobia

To begin, Heimberg, Hope, Dodge, and Becker (1990) compared 35 generalized socially phobic to 22 public speaking phobic participants in terms of anxiety and overall performance adequacy (self- and observer-rated), as well as physiological reactivity (heart rate) during a simulated task. Specifically, participants categorized in the generalized sub-type participated in a conversation with a confederate, and participants in the public speaking category gave a presentation. The generalized group reported higher baseline social anxiety and general anxiety levels than the public speaking group on three out of five measures. During the role-play task, the generalized socially phobic participants appeared more anxious and gave a worse performance than the public speaking phobic participants according to observer ratings only; subjective ratings did not significantly differentiate the two groups. Physiologically, heart rate was significantly higher in the public speaking group.

Another study (Turner, Beidel, & Townsley, 1992) compared 28 specific socially phobic and 61 generalized socially phobic participants in terms of self-reported social anxiety, and social functioning, as well as observer ratings of various behaviours (e.g., voice tone,

facial gaze, frequency of verbal initiations) during two unstructured interpersonal interactions and an impromptu speech. Results showed that although the generalized sub-type reported higher levels of social anxiety and impairment in social functioning than the specific sub-type, both groups displayed similar behaviours during the tasks.

Lastly, a study by Tran and Chambless (1995) compared 17 specific socially phobic and 29 generalized socially phobic participants on self-reported social anxiety, clinician rated social impairment, and the quality of the overall performance (observer- and self-ratings) during three tasks (one speech and two conversations). Findings revealed that the generalized group reported higher degrees of anxiety and were rated by clinicians as having greater social impairment at baseline that the specific group. Although the generalized group reported less subjective anxiety during the speech task, no differences were however found in the conversation tasks. In addition, the groups did not differ at the behavioural level in any of the tasks.

In general, although subjective anxiety was shown to vary depending on the simulated social endeavour, sub-types of social phobia were indistinguishable in terms of enacted behaviours, with the exception that the overall quality of the performance of the generalized socially phobic group was rated as being poorer than the public speaking group in the study by Heimberg and colleagues (1990). It is noteworthy however, that the type of behavioural enactments constituting the overall performance was not specified in this study. Physiological indicators of anxiety (i.e., heart rate) provide further inconsistency in the findings, as a higher degree of arousal was shown in public speaking socially phobic individuals than in generalized ones. Overall, the findings are inconsistent with the notion that anxiety causes dysfunctional behaviour. Additionally, aside the quality of the performance, little is contributed to the behavioural description of social phobia.

#### A Comparison between Socially Phobic and Normal Individuals

In a study by Rapee and Lim (1992), 33 socially phobic and 33 normal controls were compared in terms of social anxiety and the quality of the overall performance during a speech

performed in front of a small audience. Results showed that socially phobic participants reported higher levels of anxiety and were rated as giving a poorer public performance than the normal participants.

In another study (Levin, Saoud, Strauman, Gorman, Fyer, et al., 1993), independent blind observers monitored the behavioural response of 36 socially phobic (28 generalized and 8 discrete) and 14 normal participants during a simulated speech. In addition, anxiety was measured subjectively, through self-report, as well as objectively, through physiological reactivity (e.g., heart rate). Results showed that discrete socially phobic participants reported higher baseline anxiety levels than either the normal or the generalized socially phobic participants, who did not differ. Physiologically however, the generalized socially phobic group had a higher heart rate at baseline than the other two groups, who did not differ. In the speech task, the generalized group reported the most anxiety, displayed the most visible indicators of anxiousness (e.g., sweating, trembling, blushing), and had the highest heart rate, while the two other groups did not differ.

Alden and Wallace (1995) randomly assigned 32 generalized socially phobic and 32 non-clinical control subjects to either a positive or a negative social interaction with an opposite-sex confederate. To create a positive interaction, confederates were encouraging, and they showed interest in the conversation through verbal (e.g., frequently asked questions, filled silences) and non-verbal (e.g., maintained eye contact, nodded frequently) cues. In the negative conversation, the confederates behaved in the opposite fashion (e.g., asked few questions, left long pauses, avoided eye contact). The experimenter, the confederate, and the participants provided behavioural ratings on non-verbal indications of anxiety, positive non-verbal behaviour, verbal behaviour, and overall likeability. Baseline anxiety scores were higher for the socially phobic than the normative control group. Behaviourally, both socially phobic and normal individuals performed more effectively in the positive than the negative task. The socially phobic participants however displayed less adequate behaviour (e.g., less warmth and interest, more visible signs of anxiety) and were less likeable than the normal individuals, in all the experimental conditions and across all raters.

One study investigated the difference in anxiety levels (measured through self-report and physiological reactivity) between 30 socially phobic individuals with a fear of public speaking and 22 normal control subjects during various social performance tasks (e.g., small talk, speaking in front of a small audience). Findings showed that socially phobic participants reported higher anxiety levels than normal participants on only one out of five measures of social anxiety. Similarly, the two groups differed in only one physiological measure of anxiety (heart rate), and during only one experimental phase (speech task; Hofmann, Newman, Ehlers, & Roth, 1995).

A study by Hofmann and Roth (1996) examined the self-reported anxiety levels of 24 socially phobic (public speaking) and 22 normal participants. They divided each group of participants into sub-groups: Those who feared either one (non-generalized) or several social situations (generalized). All the participants in this study reported a fear of speaking in front of others. Clinical group membership was determined based on DSM-III-R (American Psychiatric Association, 1987) criteria for social phobia, i.e., participants who met these criteria were labelled socially phobic, whereas those who did not were considered as control subjects. Partitioning of the groups into generalized and non-generalized sub-types was determined on the basis of their subjective fear ratings of specific social situations. A generalized sub-type was assigned to both socially phobic and control participants who rated four or more social situations (out of a possible six) as at least moderately fear-provoking on a 10-point Likert-type scale. This cut-off was based on the authors' interpretation of the criterion "most social situations" specified in the DSM-III-R. Results showed that generalized socially phobic participants reported the highest level of anxiety, while non-generalized controls the lowest. In an intermediate position were situated generalized control and nongeneralized socially phobic subjects, who did not differ significantly.

Furthermore, 24 socially phobic participants with a fear of speech performance, and 25 non-clinical control subjects were compared in terms of subjective anxiety, as well as observer-rated gaze behaviour and speech disturbances, during a series of simulated tasks (talking with the experimenter, preparing a speech, sitting in front of an audience, and presenting a 10-minute speech in front of the audience). Although socially phobic subjects

reported higher levels of anxiety and showed greater speech disturbances (e.g., long pauses) compared to control participants, the groups did not differ in the adequacy of gaze behaviour (e.g., eye-contact duration). Additionally, both groups had equally worse gaze behaviours when delivering a speech than when either sitting in front of an audience or talking with the experimenter. In terms of the fluctuation of anxiety across tasks, a similar increase in anxiety levels was noted in both groups during the speech task on one measure of social anxiety, but a greater increase in the socially phobic group was found with another measure (Hofmann, Gerlach, Wender, & Roth, 1997).

Gerlach, Wilhelm, Gruber, and Roth (2001) compared 30 socially phobic (15 with fear of blushing and 15 without) to 15 normal participants on self-reported anxiety; observer-rated anxious appearance, blushing, speech pauses, and gaze behaviour; as well as physiological reactivity (heart rate, skin conductance, and blushing) during three tasks (watching an embarrassing video, holding a conversation, and giving a talk). Findings showed that, in general, both groups of socially phobic participants reported a higher degree of anxiety and fear of blushing than the normal group. Similar results were obtained for observer-rated anxiety and blushing, but only in the speech task. The groups did not differ on gaze behaviour and speech pauses. Physiologically, the two groups did not generally differ in terms of blushing or skin conductance. Socially phobic participants with a fear of blushing however had the highest heart rate, followed by their counter-parts without this fear and normal controls, who did not differ significantly from each other.

Another study compared 30 socially phobic and 30 normal control participants on subjective as well as physiological measures of anxiety during a speech task. Results showed that socially phobic individuals reported more anxiety during a baseline assessment and showed a greater increase in anxiety during a speech presentation task than the normal individuals. Physiological measures (e.g., heart rate, blood pressure) however, did not generally differentiate the two groups (Grossman, Wilhelm, Kawachi, & Sparrow, 2001).

In a study by Voncken and Bögels (2008), the social performance of 48 generalized socially phobic and 27 normal control subjects was examined during an impromptu speech in

front of a small audience and during a "getting acquainted" conversation task with two confederates. Results showed that the two groups did not differ in anxious appearance (e.g., trembling, stuttering, appearing nervous), social behaviour (e.g., making eye contact, completing sentences, coherence, listening), and general social performance in the speech task. In the conversation task however, the normal group displayed more adequate social behaviour, appeared less anxious, and was rated as having a better general social performance than the generalized socially phobic group.

In another study (Beidel, Rao, Scharfstein, Wong, & Alfano, 2010), 119 generalized socially phobic, 60 non-generalized socially phobic, and 200 normal individuals participated in three tasks: 1) A social interaction, which included four positive scenarios (social assertiveness, hetero-social contact, interpersonal warmth, and receiving compliments) and four negative scenarios (expression of disapproval or criticism, confrontation and anger, expression of conflict or rejection, and interpersonal loss); 2) two unstructured conversations (one with a same-sex confederate and one with an opposite-sex confederate); and 3) an impromptu speech. In addition to self-reported anxiety levels, independent observers provided ratings on the degree of anxiety and skillful behaviour (e.g., self-disclosure, appropriate transitioning, fluidity, engagement in the interaction) displayed in each task. Results revealed that in the eight social interactions and the two conversations, normal participants were rated as least anxious and most skilled. They were followed by the non-generalized participants, and the generalized socially phobic participants were rated as most anxious and least skilled. In the speech performance, normal participants were rated as least anxious, and the generalized socially phobic participants as most anxious. In terms of observer ratings of skill however, the normal group was rated as more skilled than either of the two socially phobic groups, who did not differ.

Moreover, 103 socially phobic participants were compared to 23 normal controls on anxiety levels (self- and observer-rated), specific "safety behaviours" (e.g., avoiding eye contact), and the overall quality of the social performance during a simulated conversation with a stranger (Stevens, Hofmann, Kiko, Mall, Steil, et al., 2010). Safety behaviours, a concept derived from the cognitive model of social anxiety, are viewed as the behavioural

consequence of anxiety (Alden & Taylor, 2004; Clark & Wells, 1995). They are defined as actions, triggered by anxiety, intended to manage and reduce anxiety (Wells, Clark, Salkovskis, Ludgate, Hackmann, et al. 1995) as well as avert perceived threat (Salkovskis, 1991). Results from the study (Stevens, et al., 2010) showed that socially phobic participants were more anxious, displayed more safety behaviours, and performed more poorly than the normal group.

A study by Schneier, Rodenbaugh, Blanco, Lewin, and Liebowitz (2011) compared 44 generalized socially phobic individuals to 17 normal controls on self-reported fear and avoidance of eye contact during various situations (e.g., greeting an acquaintance, expressing a disagreement, receiving a compliment). Self-reported social anxiety levels, and submissive behaviours (e.g., avoidance of eye contact) were also assessed. The findings demonstrated that the generalized socially phobic group reported higher levels of fear and avoidance of eye contact, social anxiety, and submissive behaviours than the normal group.

Lastly, 18 generalized socially phobic and 18 normative controls were asked to speak in front of a small audience. Observers provided ratings for five social behaviours and the overall performance during the task. While the socially phobic group displayed poorer voice intonation, fluency of speech, and overall performance than the normal group, the two groups did not differ in the quality of their visual contact, their gestures, and their facial expressions. The groups also did not differ in self-rated quality of the performance (Levitan, Falcone, Placido, Krieger, Pinheiro, et al., 2012).

Based on these studies, socially phobic participants reported higher levels of anxiety than normal participants in various social scenarios, although the differences were not as apparent in comparisons between sub-types of social phobia and normal participants (e.g., Hofmann & Roth, 1996). Additionally, socially phobic participants, especially nongeneralized ones, did not consistently differ from normal controls when anxiety levels were measured objectively through physiological reactivity (e.g., Gerlach, et al., 2001; Grossman, et al., 2011; Hofmann, et al., 1995; Levin, et al., 1993). Behaviourally, socially phobic participants generally tended to exhibit an anxious appearance and certain specific anxious

behaviours to a higher degree than normal individuals in simulated social situations. In some cases however, poor social behaviours have been found to characterize both groups to a similar degree (e.g., Hofmann, et al., 1997) and yet in other cases, no differences in the behaviours enacted by the two groups were shown (e.g., Levitan, et al., 2012; Voncken & Bögels, 2008). In sum, these studies do not consistently support an intrapersonal conceptualization of social phobia. Rather, the results are conflicting.

# A Comparison between Socially Phobic, Normal, and Other Clinical Contrast Groups

Fydrich, Chambless, Perry, Buergener, and Beazley (1998) asked 34 socially phobic participants, 28 normal participants, and 14 participants meeting *DSM-III-R* (APA, 1987) criteria for various other anxiety disorders (10 panic disorder, 1 generalized anxiety disorder, 1 obsessive-compulsive disorder, and 2 specific phobia) to initiate and maintain a conversation with a confederate of the opposite sex during two role-play tasks. Observers rated the quality of their overall social performance based on various behaviours (e.g., eye gaze, vocal quality, conversation flow). Socially phobic participants obtained poorer performance ratings than either of the two control groups, who did not differ significantly.

In a study by Baker and Edelmann (2002), independent observers rated the duration of skill-related behaviours (time spent talking, silence, smiling, eye contact while talking, eye contact while listening, and manipulative gestures) and the adequacy of behaviours (adequacy of gestures, adequacy of eye contact, adequacy of smiling, clarity of speech, fluency of speech, and overall adequacy of the performance) of 18 generalized socially phobic participants, 18 normal individuals, and 18 individuals meeting *DSM-IV* (APA, 1994) criteria for other anxiety disorders (8 panic disorder, 6 generalized anxiety disorder, 4 specific phobia) during a simulated interaction. Observers determined the adequacy of the behaviours using a rating scale ranging from 1 (not at all adequate) to 7 (very adequate). Findings showed that the generalized socially phobic participants reported, on average, higher levels of social anxiety than the clinically anxious and non-clinical groups, who did not differ. They however only reported higher general anxiety levels than the normative group, but similar levels to their clinically anxious counter-parts. Results also suggested that generalized socially phobic

participants displayed less adequate behaviour than the clinically anxious groups, who in turn behaved less adequately in comparison to normal controls in some cases (e.g., adequacy of gestures, adequacy of speech fluency), but not in other cases (e.g., time spent talking, time spent in silence).

Another study by the same authors (Edelmann & Baker, 2002) compared the physiological responses (e.g., heart rate, skin conductance, face and neck temperature) of 18 generalized social phobic, 18 normal, and 18 clinically anxious but not socially phobic participants during various social and non-social tasks. Results revealed no significant differences between the three groups.

Lastly, observers examined the social performance of 20 generalized socially phobic, 17 normal, and 14 non-socially phobic but clinically anxious participants during a conversation and a speech task. Heart rate was also measured and participants provided an additional rating of their "safety behaviours" (e.g., avoiding eye contact, trying to act normal) and anxiety levels. Results showed that, across role-play tasks, the generalized socially phobic group reported using safety behaviours to a greater extent and reported higher levels of anxiety than the other two groups, who did not differ. Observer's also rated the generalized socially phobic group as displaying less positive behaviours (e.g., friendliness) and more negative behaviours (e.g., nervousness) than the other two groups, who did not differ. Resting heart rate levels were higher for the socially phobic than the normal group; they were however comparable to those of the clinically anxious contrast group. In addition, heart rate increased in a similar fashion for all three groups during the experimental tasks (Stangier, Heidenreich, & Schermelleh-Engel, 2006).

In general, these studies showed that socially phobic participants reported higher social anxiety levels (but not general anxiety levels) and displayed poorer social behaviours than normal and clinically anxious participants. These results seem to be in degree rather than in type, as these other groups also displayed such responses, although to a smaller extent. Further, no group differences were generally found in terms of the physiological assessment of

anxiety. Altogether, the findings did not reliably provide support for the premise that social phobia is a disturbance that emergence as a result of anxiety.

Theoretically, one can even challenge the rational of grouping all other anxiety disorders into one comparison group. On what basis is this considered justifiable? From an intrapersonal perspective, where anxiety is thought to be the source of disruptive behaviour, it is logical to group psychopathological "entities" that share anxiety as a common element into one category and to contrast these to social phobia. One can however make the case that these individuals, who generally do not differ from normal controls, are a questionable contrast group to socially phobic individuals in studies that assess social behaviour and social performance. To illustrate, is there any reason to believe that someone with a clinical fear of snakes, would exhibit poor social behaviours during a conversation with another person? Based on this argument, a more plausible comparison group would rather be one that displays problematic social behaviours and impairment in social functioning as do socially phobic individuals (e.g., depressive, sexually dysfunctional, dysmorphophobic individuals).

One such study by Norton and Hope (2001) compared 54 socially phobic, 28 normal, and 23 dysthymic individuals in terms of anxiety levels, anxiety appearance, and the overall quality of performance during a brief speech, an unstructured conversation, and a structured conversation. In all three tasks, the socially phobic group reported higher levels of anxiety, appeared more anxious, and performed more poorly than the dysthymic group, who in turn obtained poorer scores than the normative group.

# Summary and Conclusion

These studies show that socially phobic individuals are generally more subjectively socially anxious than normal individuals and other clinical contrast groups. The differences however seem to be in degree rather than kind, as no type of abnormal social anxiety has been found specifically in social phobia. Other groups report the same type of social anxiety, albeit to a lesser degree (see also Stravynski, 2007). In some cases however, normal control individuals (considered as having a non-clinical fear of most social situations) have reported

equivalent levels of social anxiety to non-generalized socially phobic individuals. Additionally, anxiety measured objectively through physiological reactivity does not consistently differentiate social phobia from other groups (see Edelmann & Baker, 2002; Grossman, et al., 2001). These findings undermine the intrapersonal premise that social phobia is a disorder of anxiety, as anxiety does not consistently distinguish the construct of social phobia from other psychological constructs.

In relation to social performance, subjective anxiety was shown to be related to poor behaviour in some cases, but in others, it was not. In support, Beidel, and colleagues (2010) found that group differences in terms of the adequacy of exhibited behaviour remained even after controlling for the level of anxiety (observer and self-reported). The authors interpreted these findings as evidence suggesting that behavioural difficulties remain regardless of the influence of anxiety. Similarly, Baker and Edelmann (2002) examined the relationship between anxiety and specific disruptive behaviours and found only few significant correlations (e.g., higher anxiety was related to less eye contact). This relationship was however not specific to social phobia, as the same result was also found in the clinically anxious comparison group.

Furthermore, socially phobic participants have been found in some instances, to give weaker social performances than normal and clinical contrast groups. These dissimilarities however, appear once again to be in degree rather than in type. In this light, Alden and Wallace (1995) stated that: "Although social phobics tend to display less effective social behavior than nonanxious individuals, their level of effectiveness varies across situations, and they handle some social encounters well". In some other cases however, no behavioural differences were underlined: Non-socially phobic individuals were actually found to display similar specific behaviours to socially phobic individuals. Consistently, Baker and Edelmann (2002) concluded that: "there were [...] few differences between socially phobic participants, and the clinically anxious and non-clinical comparison groups on measures of duration of specific skill-related behaviours" (p. 253). The authors also noted:

"a marked overlap in performance. At least two of the social phobic individuals were perceived as being at least as adequate as the most adequate non-clinical participants, whereas one of the non-clinical participants was perceived as being only slightly more adequate in their overall behavioural performance than the least adequate social phobic participant" (p. 254).

In general, the reviewed findings call into question the intrapersonal notion that anxiety causes dysfunctional social behaviour in social phobia.

Moreover, it is difficult to draw conclusions on the type of behaviours that typify social phobia based on the reviewed studies, as the assessed behaviours are often lumped into global scores indicating the quality of the overall performance (poor *versus* adequate), which are often interpreted as indications of social skillfulness (or the deficiency in skill). A large variety of behaviours are also assessed and found to varying degrees in each study. Not one specific behaviour appears to characterize consistently and repeatedly all socially phobic individuals.

In sum, the reviewed studies fail to consistently support the intrapersonal notion that social phobia is a disorder of anxiety. Further, little clarity is shed onto the behavioural conduct of socially phobic individuals. In this light, Stravynski (2014; 2007) rejects the intrapersonal standpoint of social phobia. Put more directly, he stated that: "With the exception of perhaps avoidance of social interactions, neither specific social phobic behavior nor complex patterns have been brought into sharper relief by the construct of anxiety" (2007, p. 61). He added that: "... the notion of anxiety contributes little to illuminate either the minutiae of concrete social phobic behaviors or its manner of organization in patterns as well as the variety of their manifestations in different social contexts" (2007, p. 62).

If we accept the conclusion that the view of social phobia as a disorder of anxiety is erroneous, how then can we characterize social phobia?

An alternative, holistic, way of characterizing social phobia has been proposed by Stravynski (2014; 2007), whereby anxiety and dysfunctional behaviours are construed as facets of a larger self-protective interpersonal pattern that arises in a dynamic environment.

This interpersonal perspective, tested in the present dissertation (see Part II), is elaborated in the following chapter.

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# Chapter 3

# An Interpersonal Conceptualization of Social Phobia

"The whole is greater than the sum of its parts."

— Aristotle (*circa* 350 B.C., *Metaphysics*)

An Interpersonal Perspective

Human beings are social creatures<sup>1</sup>, and thus from an interpersonal viewpoint (Stravynski, 2014; 2007)<sup>2</sup>, their actions can only be understood in the social context within which they take place. This approach does not ignore inner intrapersonal processes nor does it however specifically focus on them, rather it is an integrative outlook, which views them as parts of a whole organism that interacts with his or her environment. Consequently, the interpersonal approach rejects the philosophy of Cartesian dualism, which separates the mind (a hypothetical concept situated in some abstract mental space) from the machine (the physical human body (Hergenhahn, 2005; Palmer, 2002); a notion that has served as the basic inspiration for intrapersonal, disease model based, conceptualizations of psychopathology, including social phobia (see also Stravynski, 2014). More specifically, the interpersonal perspective:

"... maintains that living organisms are best understood as a fully integrated organic whole. This holistic view lays stress on the organization of an organism and the structure of its activities, rather than its composition [...]. Seen holistically, the unitary organic whole, determines the activities of the parts and their interrelationships. In this sense, it is a mirror image of the (reductionistic) mechanistic perspective in which any part has an impact and therefore determines the functioning of the whole." (Stravynski, 2014, Chapter 1).

In this light, anxiety and social behaviours are considered as embedded in the social environment and the dynamic interactions that occur within it, i.e., between people as well as

<sup>&</sup>lt;sup>1</sup> This notion dates back to Ancient Greece, where Aristotle suggested that "Man is by nature a social animal..." (*circa* 350 B.C., *Politics*).

<sup>&</sup>lt;sup>2</sup> A more elaborate description of the interpersonal approach can be found more specifically in Stravynski (2014, Chapter 1) and Stravynski (2007, pp. 3-15; 35-36; 41-43; 285-286; 347-355).

between people and their environment. Socially phobic responses are therefore evoked by various triggering social events and not by some inner process (Stravynski, 2014; 2007).

Within this theoretical outlook, social phobia may be described as having both an interpersonal and a somatic locus. It is foremost characterized by an overall pattern of more specific self-protective patterns of interpersonal behaviour. This is coupled with a state of heightened arousal (e.g., elevated levels of anxiety). In this view, specific disruptive behaviours are intertwined and inseparable from social anxiety, and both are elements of a larger interpersonal pattern that serves the function of self-protection in the face of threat. The purpose of heightened arousal is to facilitate the organism to act defensively when threatened (Stravynski, 2014; 2007).

Self-protective patterns are best viewed as individualized and developed historically through various personal experiences specific to each person (Stravynski, 2014; 2007). Individuals develop different ways of defending themselves against situations deemed threatening and over the course of their lives put into place the tactics that most effectively protect them. These however vary from one person to another. Because of this variability in self-protective behaviours, the interpersonal approach emphasizes the importance of quantifying socially phobic behaviour on the broader, holistic, level, i.e., at the level of the pattern. That is, rather than looking at specific behaviours that vary from one individual to another, the alternative outlook is to attempt to depict the overall pattern of interpersonal conduct. For instance, avoidance of eye contact may be a specific behaviour part of a larger pattern that has an overall function of self-protection. Therefore, instead of focusing on eye gaze, which may vary not only from one socially phobic individual to another, but also across various clinical and normative populations (as was illustrated in the previous chapter), the broader self-protective pattern in which it may be embedded (e.g., powerlessness, submissiveness, self-effacement) is stressed.

As mentioned, social phobia viewed interpersonally, is characterized as an overall interpersonal pattern of more specific self-protective patterns of behaviour (Stravynski, 2014; 2007). The purpose of self-protectiveness is to maximize safety and to guard against threat. Threat from a socially phobic standpoint, is the potential for criticism, rejection, humiliation, or conflict. This may also include the risk that one will be the object of disrespect, ridicule, mockery, or degradation, in a particular social situation. In some situations, self-protectiveness may even simply aim at deterring unwanted attention. Postulated specific self-protective patterns include distancing, submissiveness, and powerlessness.

Distancing is a tactic that aims at averting the possibility of finding oneself in an unwanted situation. It consists of establishing a safe perimeter between one's personal comfort zone and others (Stravynski, 2014). The much studied behaviour of avoidance is one way of distancing oneself from others, as it consists of the blunt non-participation in social life (Stravynski, 2007); however it is not the only sub-pattern of distancing. Others include, but are not limited to escape, evasiveness, invisibility, immobility, and concealment (Stravynski, 2014).

When distancing oneself from a social encounter is however impossible, two main behavioural patterns are assumed to come into play: Submissiveness and powerlessness. Although both have the purpose of obtaining approval from others and disarming potential harm, the first is based on acted behaviours (what is done), whereas the second is evident from omitted behaviours (what is not done; Stravynski, 2014). Examples of submissive-type subpatterns are *acts* of docility, self-effacement, passivity, deference, modesty, and humbleness. In contrast, powerlessness is illustrated by the *absence* of dominance, criticism, assertiveness, decisiveness, dismissiveness, and management (Stravynski, 2014; 2007).

Finally, last resort strategies may be exercised. These can take the form of over-agreeableness or the suppression of aggressiveness even when confronted to minimize the potential for conflict. Conversely, individuals may however inhibit affiliative tendencies –

e.g., refrain from seeking social contact even when desired – or exhibit angry or hostile behaviour as to push others away (Stravynski, 2014; 2007).

## Aim of the Present Study

The goal of the present study was to test postulates drawn from an interpersonal perspective. Foremost, I aimed at examining the notion that specific self-protective patterns of powerlessness and submissiveness are characteristic of the overall socially phobic pattern. As a secondary objective, I sought to explore whether other self-protective stances, such as affiliation, agreeableness, and aggressiveness, also characterize the socially phobic pattern. Finally, I looked to examine the relationship between these self-protective interpersonal patterns and social anxiousness.

The method for quantifying the socially phobic pattern that is most coherent with an interpersonal theoretical outlook is an ethological and ecological one. To ideally characterize social phobia, one would have to constantly observe the social conduct of socially phobic individuals in a developmental and historical manner, i.e., over the course of their entire lives. Realistically and practically speaking however, research of such magnitude and value are impossible. We therefore must rely on indirect methods to test the interpersonal model's hypotheses.

Two methods can be used to test whether these interpersonal patterns are specific to social phobia: The first is to compare the patterns of interpersonal behaviours of socially phobic individuals to those of normative and clinical control groups. The second is to examine the interpersonal behavioural patterns of socially phobic individuals prior to and after the completion of an interpersonal approach (IA) to treatment aimed at improving social functioning.

If self-protectiveness against threat (e.g., criticism, rejection, humiliation) is particularly socially phobic (Stravynski, 2014, Chapter 1), patterns characterized by powerlessness and submissiveness should be found to a higher degree in socially phobic

individuals than either of the two control groups and should dissipate as a result of effective treatment.

Based on these two methods, two studies were devised as tests of the interpersonal model's postulates:

- 1) *Study 1* (research article<sup>3</sup> presented in Chapter 5), compared the socially phobic interpersonal pattern to that of a clinical contrast group of sexually dysfunctional singles, and a normative control group; and
- 2) *Study 2* (research article presented in Chapter 6), compared the interpersonal patterns of socially phobic individuals at four points over time (pre-treatment, post-treatment, six-month follow-up, and one-year follow-up). At the last follow-up, comparisons between remitted and non-remitted individuals were also conducted.

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<sup>&</sup>lt;sup>3</sup> Approval was granted to write the present dissertation in article format. The letter of authorization can be found in Appendix D.

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| -PART II- METHODOLOGY BACKGROUND, ARTICLES, AND ADDIT | TIONAL ANALYSES |
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## Chapter 4

# The Interpersonal Circumplex: A Method for Quantifying Patterns of Interpersonal Behaviour

"[...] in the members of a temple there ought to be the greatest harmony in the symmetrical relations of the different parts to the general magnitude of the whole. Then again, in the human body the central point is naturally the navel. For if a man can be placed flat on his back, with his hands and feet extended, and a pair of compasses centered at his navel, the fingers and toes of his two hands and feet will touch the circumference of a circle described therefrom. And just as the human body yields a circular outline, so too a square figure may be found from it. For if we measure the distance from the soles of the feet to the top of the head, and then apply that measure to the outstretched arms, the breadth will be found to be the same as the height, as in the case of plane surfaces which are completely square."

— Vitruvius (circa 15 B.C., On Architecture)

Before delving into the two research articles that aimed at testing the interpersonal approach's postulates concerning the socially phobic pattern, I felt it necessary to provide the readers with background information on the tool that was used to measure the patterns of interpersonal behaviour in the two studies. The current chapter is divided into three sections: The first describes the Interpersonal Circumplex (IPC) model; the second briefly comments on the various measures that have been developed to quantify interpersonal behaviour within the conceptual framework of the IPC; and the third introduces the measure used in the current studies.

## A Circumplex Classification of Interpersonal Behaviour

The origins of the IPC stem from the work of Freedman, Leary, Ossorio, and Coffey (1951), who postulated that interpersonal behaviour, could be organized on two independent planes: One, which encompassed behaviours that ranged from dominance to submissiveness;

and the other that covered behavioural expressions of emotions that spanned from love to hate. In his own right, Harry Stack Sullivan (1953), often credited for beginning the IPC tradition, wondered whether interpersonal behaviours were continuous constructs that overlapped with each other in varying degrees or whether they were distinct and separate elements. Schematically, his dilemma rested on whether interpersonal behaviours should be classified in a circular (dimensional) or a quadratic (categorical) space (Wiggins, 1996).

Based these considerations, Leary (1957) put forth the first IPC model classifying interpersonal behaviour into a two-dimensional circular space reflecting the joint action of two basic interpersonal patterns, namely control and affiliation (Kiesler, 1983; Leary, 1957). Schematically, the circle was constructed with two orthogonal axes crossing at the center: The vertical axis represented control, which ranged from dominance (top) to submissiveness (bottom), and the horizontal axis represented affiliation, which ranged from hostility (left) to friendliness (right). The area of the circle could be divided into 16 overlapping segments (i.e., managerial, autocratic, responsible, hyper-normal, over-conventional, cooperative, dependent, docile, masochistic, self-effacing, distrustful, rebellious, aggressive, sadistic, competitive, and narcissistic) that represented various combinations of dominance-hostility, dominance-friendliness, submissiveness-hostility, and submissiveness-friendliness (Leary, 1957).

According to Kiesler and Auerbach (2003):

"Psychological theory and research have established that human interpersonal transactions represent various blends of two basic dimensions of behavior, control (power, dominance) and affiliation (friendliness, agreeableness). When persons interact, they continually negotiate two major relationship issues: how friendly or hostile they will be with each other, and how much in charge or control each will be during their transactions" (p. 1712).

Reviews of factor analytical studies of interpersonal behaviour (Foa, 1961) and of studies using various measures and methods to assess interpersonal behaviour (Kiesler, 1983; Wiggins, 1982) in various population groups (e.g., army teams, mother-child dyads, psychiatric patients) have provided support for this notion. In general, these studies have

concluded that interpersonal behaviour can be described using the two basic dimensions of dominance-submissiveness and love-hostility (see also Hould, 1980; Leary, 1957). The two dimensions have also obtained extensive support from literature on parent-child relations (see Becker & Krug, 1964).

In addition to providing a classification system for interpersonal behaviours, the IPC also allows for the intensity of the behaviour to be specified, thus offering information about whether the primary interpersonal patterns are adaptive or maladaptive. More precisely, the radius of the circle represents the intensity (or maladjustment) of the corresponding interpersonal behaviour. The degree of maladjustment is represented by its distance from the midpoint of the circle (Hould, 1980; Kiesler, 1983; Leary, 1957; LaForge & Suczek, 1955); therefore, the closer to the center of the Circumplex, the more adaptive the interpersonal behaviours, and the further from the center of the Circumplex, the more extreme and maladaptive the interpersonal behaviours (Hould, 1980). Further details are provided in Chapters 5 and 6.

Since the original version, other adaptations of the model have been developed. For example, Benjamin (1974) proposed a three-Circumplex scheme that independently organized three types of behaviours: Actions independent of the presence of others, behavioural reactions to the actions of others, and intrapsychic interpretations of behaviour. In this model, the horizontal axis spanned from hate to love. The vertical axis however ranged from a different aspect of enmeshment to a different facet of differentiation in each of the three Circumplexes. With the exception of Benjamin's three-Circumplex model (1974) that deviated significantly from the original IPC framework, most variations kept in line with Leary's (1957) form. The names of the main IPC constructs of control and affiliation and their respective nodal points have varied depending on the authors (e.g., control: power, status, dominance, agency; affiliation: solidarity, communion, status<sup>1</sup>; hostility-friendliness: hate-

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<sup>&</sup>lt;sup>1</sup> In contrast to the wider IPC literature that uses the term "status" to denote the vertical (or control) axis of the Circumplex, Kemper and Collins (1990) use this term to describe the horizontal (or affiliation) axis. From their sociological point-of view, status in a social relationship is defined as "conduct by which actors give voluntary compliance to other actors and [it] is marked by willing deference, acceptance, and liking. It involves the voluntary provision of rewards, benefits, and gratifications without threat or coercion. The ultimate form of status

love, hostility-nurturance, aggressiveness-friendliness); however, the variants have generally been considered to represent roughly equivalent constructs to the original ones (Foa, 1961; Kemper & Collins, 1990).

# Interpersonal Circumplex Measures

The IPC is a tool that offers a framework within which it is possible to study interpersonal behaviours. IPC measures were initially used as part of psychoanalytic practice, as instruments to be used in the clinic (Benjamin, 1996) and interpreted as indicative of stable characteristics (personality traits). Since their original development, the instruments have however also served as measures of interpersonal behaviour in research on psychopathology, psychotherapy, and have been used by various schools of thought, including cognitive and behavioural (Benjamin, 1994).

The first IPC instrument created to measure interpersonal behaviour was the Interpersonal Check List (ICL; LaForge & Suczek, 1955). The ICL is a 128-item list of adjectives based on a wide range of interpersonal behaviours that are divided into Leary's (1957) original 16 segments. Since then, various adaptations have been developed (see Table I, p. 48), some adhering to the dimensional view of interpersonal behaviours and others quantifying behaviours categorically. Similarly, some IPC inventories consist of 16 sub-scales; however others are limited to eight sub-scales, combining the 16 segments into octants. These latter instruments have demonstrated superior reliability and validity (Kiesler & Auerbach, 2003). There also exists a measure limiting assessment to four qualitatively distinct (Moskowitz, 2005) dimensions (i.e., dominance, submissiveness, quarrelsomeness, and agreeableness). Finally, most inventories are self-rated. As subjective reports do not always coincide with actual occurrences during social situations (Benjamin, 1996), some instruments have been extended into versions that can be completed by independent observers and/or by the other person involved in the interaction (interactant).

accord is love" (p. 34). Therefore, although the term "status" is usually used to represent control in the literature, it has also been used as a synonym of affiliation.

| Table I   |                  |  |                          |
|---|------------------|--|--------------------------|
| List of Interpersonal Circumplex Measures   |                  |  |                          |
| Instrument  | Number of Scales | Measure of                             | Type of Rating           |
| Dimensional   |                  |  |                          |
| Interpersonal Check List (ICL;<br>LaForge & Suczek, 1955)   | 16               | Interpersonal adjectives               | Self;<br>Other           |
| Interpersonal Behaviors Inventory (IBI; Lorr & McNair, 1967)  | 15               | Interpersonal behaviours               | Self                     |
| The Check List of Interpersonal<br>Transactions (CLOIT; Kiesler, 1984)<br>CLOIT–Revised (CLOIT-R; Kiesler,<br>1987a)  | 16               | Interpersonal behaviours               | Observer;<br>Interactant |
| The Impact Message Inventory (IMI <sup>a</sup> ; IMI-IIA; Kiesler, 1987b)   | 15               | Emotional experiences                  | Self;<br>Observer        |
| "Test d'évaluation du répertoire des<br>construits interpersonnels" (TERCI;<br>Hould, 1980)   | 8                | Patterns of interpersonal behaviour    | Self                     |
| Inventory of Interpersonal Problems (IIP; Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988) IIP–64 Items (IIP-64; Horowitz, Alden, Wiggins, & Pincus, 2000) | 8                | Interpersonal<br>Problems /            | Self                     |
| IIP-Circumplex Scales (IIP-C; Alden, Wiggins, & Pincus, 1990)   |                  | Interpersonal behaviours               |                          |
| Categorical   |                  |  |                          |
| The Structural Analysis of Social<br>Behavior (SASB; Benjamin, 1974)  | 8                | Actions,<br>Reactions,<br>Introjection | Self;<br>Observer        |
| Interpersonal Adjective Scale (IAS; Wiggins, 1979)  IAS–Revised (IAS-R; Wiggins, Trapnell, & Phillips, 1988; see also Wiggins, 1995)                            | 8                | Interpersonal adjectives               | Self                     |
| Event-Contingent Recording of<br>Interpersonal Behaviour (Moskowitz,<br>1994)   | 4                | Interpersonal<br>Behaviours            | Self (Daily diaries)     |

Note. <sup>a</sup> The instrument was created based on Lorr and McNair's (1967) IBI.

There are several advantages to using an IPC instrument to measure interpersonal behaviour. First, such instruments provide a systematic quantification of interpersonal behaviours. Given the complexity of human behaviours, IPC measures are highly practical, because they can capture a wide array of interpersonal behaviours into two primary patterns as well as into more specific dimensions (Sadler & Woody, 2003). Second, these measures can capture changes in behaviour from pre- to post-treatment (Benjamin, 1994; Henry, 1997). Finally, studies that use such measures generate findings that can be directly compared to other studies using similarly calibrated measures, thus allowing the replication and accumulation of findings on a particular subject matter (Kiesler & Auerbach, 2003).

The "Test d'évaluation du répertoire des construits interpersonnels"

The TERCI (Hould, 1980) is a self-report questionnaire comprising 88 statements, which are a representative sample of interpersonal behaviours. It evolved out of LaForge and Suczek's (1955) ICL. The 128 ICL items were translated into French and were administered to 25 couples consulting in marriage counselling. Findings from this procedure allowed for the reduction of the 16 segments measured by the ICL into eight octants, eliminating 40 items from the initial instrument. The new list comprised 88 interpersonal adjectives, which were converted into interpersonal behaviours and were administered to college students and to two additional normative samples of 100 participants. Based on the results, a definitive list of 88 items was constructed with each octant scale comprising 11 items. The questionnaire is presented in Appendix E.

The principal constructs measured by the TERCI are power and affiliation. The pattern of power encompasses behaviours, in which one dominates or takes charge of others (Kemper & Collins, 1990) and establishes rank in relation to others (Moskowitz & Zuroff, 2005; Lorr, 1996). The dimension of affiliation encompasses behaviours oriented towards friendliness, caring and cooperating with others (Kemper & Collins, 1990), and promoting interpersonal relations (Moskowitz & Zuroff, 2005). These two primary patterns can be divided into four dimensions (dominance, submissiveness, aggressiveness, and agreeableness), which can be further divided into eight octants. Adaptive as well as maladaptive descriptions of each of

these behavioural patterns are described in Table II (p. 51). Further details on the TERCI are presented in Chapters 5 and 6.

| Table II   |                                 |  |  |  |  |  |
|--|---------------------------------|--|--|--|--|--|
| Description of the TERCI Octant Constructs (Hould, 1980) |                                 |  |  |  |  |  |
| <u>Octant</u>  | Label                           | <b>Description</b>   |  |  |  |  |
| A  | Competition/<br>Autocracy       | Adaptive: Expressions of self-worth, pride, strength, an confidence; displays of independence and playfu competitiveness.  Maladaptive: Displays of insensitivity and self-centeredness rejection of others.   |  |  |  |  |
| В  | Management/<br>Exploitation     | Adaptive: Displays of energetic, strong, organized, and authoritative behaviours that elicit respect and approval from others.  Maladaptive: Exaggerated displays of competence and efficiency that may not reflect reality; acts of rigidity and control. |  |  |  |  |
|  | O::4::-:/                       | Adaptive: Displays of anger, irritability, and negativity.   |  |  |  |  |
| С  | Criticism/<br>Hostility         | <b>Maladaptive:</b> Acts of aggression and violence; punitive, disciplinary, and sarcastic displays.   |  |  |  |  |
| D  | Skepticism/<br>Mistrust         | Adaptive: Cynical and bitter enactments; expressions of resentment; rebellion against social conventions; defiance of taboos.  Maladaptive: Expressions of hatred; denial of intimacy and friendship; vengeful behaviours.                                 |  |  |  |  |
|  |                                 | Adaptive: Expressions of modesty and reservation.  |  |  |  |  |
| Е  | Modesty/<br>Self-<br>Effacement | Maladaptive: Acts characterized by omission rather than commission: Effacement, self-depreciation, withdrawal, and distancing from others.   |  |  |  |  |
|  |                                 | Adaptive: Expressions of respect and trust.  |  |  |  |  |
| Docality/  |                                 | <b>Maladaptive:</b> Powerlessness and dependence; absence of hostility, power, and independence.   |  |  |  |  |
|  | Canarasital                     | <b>Adaptive:</b> Displays of tenderness, kindness, goodwill, helpfulness, and responsibility.  |  |  |  |  |
| G  | Generosity/<br>Normativeness    | <b>Maladaptive:</b> Inability to ask for help when needed; tendency to accept responsibilities despite being overwhelmed; personal sacrifices for the sake of others.  |  |  |  |  |
|  | Friendliness/<br>Compliance     | Adaptive: Acts of cooperation and compromise; exhibits of conventional and agreeable behaviour.  |  |  |  |  |
| Н  |                                 | <b>Maladaptive:</b> Constant friendliness and agreeableness; search to please, appease, reconcile, and give a good impression regardless of the situation.   |  |  |  |  |

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## Chapter 5

Is Social Phobia Characterized by a Distinct Interpersonal Pattern? A Comparison between Socially Phobic, Single Sexually Dysfunctional, and Normal Individuals

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#### ABSTRACT

This study aimed at testing an interpersonal conceptualization of social phobia as an overall pattern of fearfully self-protective patterns of powerlessness and submissiveness. 132 socially phobic, 85 single sexually dysfunctional and 105 normal individuals completed an adaptation of the Interpersonal Check List. Socially phobic participants also completed measures of social anxiety, social functioning, and general psychopathology. As predicted, the socially phobic group reported a larger degree of powerlessness and submissiveness than the two control groups, and a lesser degree of affiliation than the sexually dysfunctional singles. Furthermore, relationships between powerless and submissive interpersonal patterns and social anxiety and general psychopathology were found. Qualitatively, the results suggest that socially phobic individuals enact powerlessness in a maladaptive fashion. Altogether, these findings corroborate hypotheses drawn from an interpersonal perspective. The study's limitations and directions for future research are discussed.

## **KEYWORDS**:

social phobia; interpersonal approach; self-protective pattern; powerlessness; submissiveness; Interpersonal Circumplex.

### **INTRODUCTION**

Social phobia is characterized by an intense concern over being incoherent, speechless, or visibly fearful (e.g., blushing, sweating, trembling), and as a consequence generating negative reactions in others (e.g., criticism, mockery). Its hallmark is a tendency to dread or avoid social interactions (e.g., public presentations, conversations) in which one's performance is scrutinized and evaluated. It is associated with conduct that impairs social functioning. This is recognized in criterion G of the *DSM-5* (American Psychiatric Association, 2013, p. 203) criteria for social phobia, which specifies that "the fear, anxiety, or avoidance causes clinically significant [...] impairment in social, occupational, or other important areas of functioning".

Although the *DSM* emphasizes avoidance, a number of studies have shown that socially phobic individuals exhibit a variety of dysfunctional social behaviours (e.g., fidgeting, monotony of the voice) when in fear-evoking social situations (e.g., Beidel, Rao, Scharfstein, Wong, & Alfano, 2010; Heiser, Turner, Beidel, & Roberson-Nay, 2009; Levitan, Falcone, Placido, Krieger, Pinheiro, et al., 2012; Stevens, Hofmann, Kiko, Mall, Steil, et al., 2010; Voncken & Bögels, 2008). Similarly, a review of studies examining the social behaviours of socially phobic and analogue populations concluded that "people with social anxiety and with social phobia display distinctive and less functional social behavior than people without those conditions" (Alden & Taylor, 2004, p. 862).

There is a broad consensus that dysfunctional social behaviours are present in social phobia. It is unclear however, what these amount to theoretically. One view (e.g., Alden & Taylor, 2004, p. 857; Clark & Wells, 1995; *DSM-5*; APA, 2013) is that dysfunctional social behaviours are the interpersonal consequence of anxiety. An alternative, more holistic, perspective (Stravynski, 2014; 2007) suggests that inadequate behaviour is intertwined and inseparable from social anxiety, and that both are elements of a larger purposeful interpersonal pattern that serves a function of self-protection in the face of threat (Stravynski, 2014; 2007). The essential theoretical difference is that the former paradigm postulates that competent behaviour is inhibited by elevated levels of anxiety, which in turn are caused by some

underlying internal factor (e.g., cognitive distortions; Clark & Wells, 1995), whereas the latter interpersonal approach proposes that the purpose of heightened arousal is to facilitate the organism to act defensively when threatened (Stravynski, 2014; 2007). In this view, the overall socially phobic pattern is made up of specific *self-protective* patterns of interpersonal behaviours that are generated by various triggering situations rather than by internal structures or processes (Stravynski, 2014; 2007).

According to the model, one method of self-protection in social phobia is distancing oneself from potentially threatening situations (e.g., avoidance). When this is however not a feasible option, socially phobic individuals passively participate in social scenarios (e.g., child's birthday party, important staff meeting) of necessity. Under these circumstances, self-protective patterns characterized primarily by submissiveness and powerlessness predominate. Submissiveness in this view encompasses specific sub-patterns including docility, self-effacement, and the search for approval from others. On the flipside, the broader pattern of powerlessness comprises sub-patterns where displays of dominance, criticism, and assertiveness are absent. It is also suggested that secondary self-protective measures may come into play in social settings when previously mentioned self-protective tactics have been exhausted. For instance, the socially phobic may behave in an overly agreeable fashion and even suppress acts of anger, hostility, and aggressiveness when confronted to minimize the potential for conflict. Conversely, they may however inhibit affiliative tendencies (e.g., refrain from seeking social contact even when desired) to keep others at a safe distance (Stravynski, 2014; 2007).

These dimensions have been previously examined in social phobia. Results generally indicate that socially phobic individuals mainly characterize themselves as engaging in submissive<sup>1</sup> interpersonal styles (Cain, Pincus, & Holtforth, 2010; Schneier, Rodenbaugh,

<sup>&</sup>lt;sup>1</sup> The labels assigned to the various Interpersonal Circumplex components vary depending on the authors, but all evolved out of the original constructs defined by Leary (1957) and are assumed to designate roughly equivalent constructs (Foa, 1961; Kemper & Collins, 1990). For consistency purposes and to facilitate the transition between the literature and the methodology in the present study, the labels used throughout this entire article are based on Hould's (1980) behavioural adaptation of Leary's Circumplex constructs. Hould's labels more closely tie into the interpersonal model of self-protective behaviours (Stravynski, 2014; 2007) examined in the present study, and thus, are a relevant nomenclature.

Blanco, Lewin, & Liebowitz, 2011). One study however, revealed two clusters of interpersonal patterns in a socially phobic sample of highly functioning undergraduate students: One characterized by submissiveness and the other (minority of the sample) by dominance (Kachin, Newman, & Pincus, 2001). Mixed findings have been found in terms of affiliative interpersonal patterns, in that studies using cluster analyses have found that some socially phobic tend towards friendliness while others towards coldness and aggressiveness (Cain, et al., 2010; Kachin, et al., 2001).

Studies using analogue populations have provided similar results. These studies have shown that socially avoidant<sup>2</sup> (Alden & Capreol, 1993; Soldz, Budman, Demby, & Merry, 1993) and highly socially anxious individuals characterize their conduct as submissive (Oakman, Gifford, & Chlebowsky, 2003; Alden & Phillips, 1990). Consistent findings have been obtained with independent observer and confederate ratings of highly socially anxious women (Oakman, et al., 2003). Discrepant findings have however been produced in terms of affiliative behavioural styles, showing that both groups of participants are agreeable and warm in some cases, but aggressive in others (Alden & Capreol, 1993; Alden & Phillips, 1990; Oakman, et al., 2003; Soldz, et al., 1993).

To determine however whether such interpersonal patterns of behaviour are characteristic of the socially phobic pattern, comparisons between socially phobic individuals and contrast groups are crucial. In this light, a preliminary series of "ethnographic" single case studies (Amado, Kyparissis, & Stravynski, 2014), highlighted a broad self-protective pattern characterized by evasiveness and self-effacement in every socially phobic participant (n = 4), which was not evident in two control groups – shy (n = 2) and normal (n = 2) individuals – who rather displayed an overall pattern that sought out a connection with others. A study by a different research group (Russell, Moskowitz, Zuroff, Bleau, Pinard, et al., 2011) contrasted the interpersonal behaviours of socially phobic participants to those of a normative group and found that the socially phobic group characterized itself with higher degrees of

<sup>&</sup>lt;sup>2</sup> Social phobia and avoidant personality disorder have been considered variants on the same continuum, where avoidant personality disorder is the more severe of the two (Schneier, Blanco, Antia, & Liebowitz, 2002). We therefore reported results obtained with a group of socially avoidant participants as evidence that can be applied to social phobia.

submissiveness, especially when in fear-evoking social situations, and lower degrees of dominance. In this study, both groups reported low levels of agreeableness in feared situations, and high levels of agreeableness as well as quarrelsomeness in secure situations. Finally, another study compared socially phobic and depressed individuals in terms of their self-reported interpersonal problems. Results revealed that the socially phobic group reported powerlessness, non-assertiveness, and a lack of dominance to a significantly higher degree than depressed individuals, whereas no differences in terms of affiliative tendencies were found (Stangier, Esser, Leber, Risch, & Heidenreich, 2006).

In sum, these studies lend preliminary support to the notion that social phobia, viewed interpersonally is characterized primarily by submissive and powerless behavioural patterns. A great variability in affiliative behaviour (agreeableness and aggressiveness), indistinguishable to that of normal (Russell, et al., 2011) and depressed (Stangier, et al., 2006) individuals, has however been found. Studies have respectively used normal (e.g., Amado, et al., 2014; Russell, et al., 2011) and clinical control groups (Stangier, et al., 2006); however, research has yet to directly compare the socially phobic interpersonal pattern to both normal and clinical contrast groups (a limitation pointed out by Alden & Taylor, 2004). Further, the potential for generalizability is limited in the study by Amado and colleagues (2014), due to the small sample size. The present study attempted to account for these limitations by examining the socially phobic pattern to that of a normative and a clinical control group on a large scale.

### **Aim of the Present Study**

The present study's aim was twofold: Firstly, it sought to examine the interpersonal model's postulates that social phobia is characterized by self-protective interpersonal patterns of submissiveness and powerlessness. A first set of hypotheses predicted that 1) in comparison to a normative control group, the socially phobic group would report interpersonal patterns and sub-patterns characterized by (a) higher levels of submissiveness, and (b) lower levels of dominance.

In an attempt to provide more robust evidence that submissiveness and powerlessness are characteristic of the socially phobic pattern, the socially phobic group was also compared to a clinical contrast group of sexually dysfunctional individuals without partners. We chose sexually dysfunctional singles as a contrast group on the basis of an interpersonal conceptualization of psychopathology, within which difficulties in initiating and maintaining relationships are prominent in these individuals as is the case for the socially phobic. Their common difficulties are neither anxiety nor sexual dysfunction, but rather interpersonal functioning (or dysfunction); the difference between the two groups lying only in the spheres of life affected: The interpersonal difficulties of sexually dysfunctional singles tend to be restricted to the intimate sphere of social life, concerning specifically seeking contact with others in personal and private settings, whereas those of the socially phobic range across various social situations mostly in the public domain of social life (Cole, 1986; Stravynski, 1986; Stravynski, Clerc, Gaudette, Fabian, Lesage, et al., 1993; see also Stravynski, Gaudette, Lesage, Arbel, Bounader, et al., 2007; Stravynski, Gaudette, Lesage, Arbel, Petit, et al., 1997). In this light, a second set of hypotheses predicted that 2) in comparison to the single sexually dysfunctional group, the socially phobic group would display interpersonal patterns and subpatterns characterized by (a) higher levels of submissiveness, (b) and lower levels of dominance.

No specific predictions were made in terms of affiliative-, agreeable-, and aggressive-type interpersonal patterns as no clear position can be taken based on theory and previous research, which has provided mixed findings. The three groups were therefore compared on these patterns in an exploratory fashion.

According to the interpersonal model, anxiousness results from the interplay between the threat in the environment and one's ability to successfully protect him or herself against that threat. In this light, it arises in conjunction with self-protective interpersonal patterns of behaviour – which are indicative of poor social functioning – and it sustains their course of action (Stravynski, 2014; 2007). A secondary aim of the present study was therefore to examine the relationship of social anxiety, general psychopathology, and social functioning with interpersonal patterns of behaviour in social phobia. A third set of hypotheses predicted

that 3) social anxiety, general psychopathology, and impairment in social functioning would be (a) positively related to submissive patterns of behaviour, and (b) inversely related to dominant patterns. Relationships with regards to affiliation, agreeableness, and aggressiveness were also explored.

### **METHOD**

## **Participants**

The study included three groups of participants: Socially phobic, single sexually dysfunctional and normal individuals. The groups were constituted from participants of several research projects carried out at the "Centre de recherche de l'Institut universitaire en santé mentale de Montréal". Social phobic individuals were taken from Stravynski, Arbel, Bounader, Gaudette, Lachance, and colleagues (2000), and Stravynski, Arbel, Gaudette, and Lachance (2013). Sexually dysfunctional singles were drawn from Stravynski, and colleagues (2007; 1997), and normal participants came from Bounader (1998) and Sayegh (2001).

Participants were recruited mostly through the local (greater Montreal) media. Socially phobic and single sexually dysfunctional participants were also recruited through referrals from mental health professionals.

At intake, participants were screened in a brief telephone interview. They were excluded if they were unreachable, if their main clinical complaint was not of socially phobic (70 out of 217) or of sexually dysfunctional (23 out of 137) nature for the two clinical samples, or if they presented any significant clinical complaint (93 out of 199) for the normal sample.

Remaining participants then participated in an assessment interview conducted by a psychiatrist and were included in their respective samples if they met criteria for social phobia (*DSM-IV*; APA, 1994), any *DSM-III-R* (1987) sexual dysfunction, or if they failed to meet criteria of any disorder (for the normative sample). Different versions of the *DSM* were used

because the various studies, for which participants were originally recruited, were conducted at different times<sup>3</sup>. Other inclusion criteria for the sexually dysfunctional group included in this study consisted of being heterosexual and without a stable partner for at least six months.

Individuals meeting criteria for any other predominant (usually major depression) or co-occurring disorder (schizophrenia, affective, paranoid, or organic mental disorder; or severe personality disorder) were excluded. Taking psychotropic medication, and abusing alcohol and/or drugs were also grounds for exclusion. Sexually dysfunctional singles were also excluded if a possible organic basis for their sexual difficulties was identified during a medical examination by an internist. On the basis of these criteria, 14 participants were excluded from the socially phobic sample, 25 from the sexually dysfunctional sample, and 1 from the normative sample.

Socially phobic participants were then reassessed by an experienced clinical psychologist by means of the Revised Anxiety Disorders Interview Schedule<sup>4</sup> (ADIS-R; Di Nardo, Moras, & Barlow, 1993) as a measure of cross validation. In case of disagreement with the original psychiatric assessment, they were automatically excluded from the study. Disagreement concerning the type of sexual dysfunction was resolved through discussion. No socially phobic participants were excluded at this step (although one dropped out after the assessment) and four sexually dysfunctional participants were excluded.

The final samples consisted of 132 socially phobic individuals, a clinical control group of 85 sexually dysfunctional singles, and a normal control group of 105 individuals. The three groups were of comparable age, F(2, 319) = 0.02, ns, gender,  $\chi^2(2) = 1.45$ , ns, education level,  $\chi^2(6) = 7.28$ , ns, and employment status,  $\chi^2(4) = 2.71$ , ns. The groups differed in terms of marital status,  $\chi^2(10) = 82.26$ , p < 0.001, as the sexually dysfunctional individuals were chosen on the basis of their being single. Also, a higher percentage of socially phobic individuals

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<sup>&</sup>lt;sup>3</sup> DSM-IV (APA, 1994) criteria for social phobia and DSM-III-R (APA, 1987) criteria for each of the nine sexual dysfunctions are displayed in Appendices F and G, respectively.

<sup>&</sup>lt;sup>4</sup> According to Cohen's (2003) standards, strong test-retest reliability has been found for the social phobia scale of the ADIS-IV (ranging from  $\kappa = 0.73$  to  $\kappa = 0.77$ ; Brown, Di Nardo, & Barlow, 1994; Brown, Di Nardo, Lehman, & Campbell, 2001).

were married/common law or cohabiting in comparison to the normal individuals. The demographic characteristics of the samples can be found in Table I (p. 65).

Specific clinical characteristics were as follows: In the socially phobic sample, 71.4% of participants could be classified under the generalized sub-type (*DSM-IV*; APA, 1994). With regards to the types of social fears, the main complaint was a fear of public performance (93.3%); however a large majority of participants also reported interpersonal fears (83.3%). Concerns over displaying inadequate behaviour (35.5%), blushing (39.2%), shaking (25.0%), and sweating (9.2%) in front of others, as well as using public restrooms (4.2%) were also reported. A minority of participants reported instances of panic during these types of situations (3.3%).

All sexual dysfunctions were represented in the single sexually dysfunctional group: 23.5% of participants met criteria for hypoactive sexual desire disorder, 16.5% for male erectile disorder, 2.4% for male orgasmic disorder, 27.1% for premature ejaculation, 1.2% for sexual aversion disorder, 14.1% for female sexual arousal disorder, 31.8% for female orgasmic disorder, 7.1% for dyspareunia, and 2.4% for vaginismus. There was co-occurrence of at least two sexual dysfunctions in 23.5% of cases.

Table I

Demographic Characteristics of the Socially Phobic, Single Sexually Dysfunctional, and Normal Individuals

|   | Groups    |          |           |
|---|-----------|----------|-----------|
|   | SP SSD    |          | N         |
|   | (n = 132) | (n = 85) | (n = 105) |
| Gender  |           |          |           |
| Men   | 45.5%     | 44.7%    | 38.1%     |
| Women   | 54.5%     | 55.3%    | 61.9%     |
| Marital Status                                  |           |          |           |
| Married/Common Law                              | 28.8%     | 0.0%     | 17.1%     |
| Cohabiting                                      | 22.7%     | 0.0%     | 20.0%     |
| Separated/Divorced                              | 9.8%      | 44.7%    | 30.5%     |
| Widowed   | 2.3%      | 0.0%     | 0.0%      |
| Single (have previously been in a relationship) | 17.4%     | 21.2%    | 17.1%     |
| Single (have never been in a relationship)      | 18.9%     | 34.1%    | 15.2%     |
| Highest Level of Education                      |           |          |           |
| < 12 years                                      | 9.1%      | 12.9%    | 18.1%     |
| High School Diploma                             | 25.0%     | 27.1%    | 21.9%     |
| Certificate/Non-University Diploma              | 18.9%     | 18.8%    | 24.8%     |
| University Degree                               | 47.0%     | 41.2%    | 35.2%     |
| Employment Status                               |           |          |           |
| Employed  | 78.8%     | 82.4%    | 82.9%     |
| Unemployed                                      | 12.1%     | 7.1%     | 6.7%      |
| Student   | 9.1%      | 10.6%    | 10.5%     |
| Age   |           |          |           |
| M   | 38.58     | 38.32    | 38.41     |
| SD  | 8.33      | 9.41     | 9.39      |

Note. SP = Socially Phobic; SSD = Single Sexually Dysfunctional; N = Normal.

#### Measures

## Patterns of Interpersonal Behaviour

The "Test d'évaluation du répertoire des construits interpersonnels". The TERCI (Hould, 1980) is a French-language self-report measure of interpersonal behaviours adapted from the Interpersonal Check List (LaForge & Suczek, 1955), an Interpersonal Circumplex (IPC) instrument based on Leary's (1957) original Circumplex. The IPC (displayed in Figure 1, p. 68) is a circular conceptual tool that organizes interpersonal behaviours on a twodimensional space reflecting the interaction of two basic interpersonal patterns – power and affiliation (Becker & Krug, 1964; Foa, 1961; Hould, 1980; Kiesler, 1983; LaForge & Suczek, 1955; Leary, 1957; Moskowitz, 2005; Wiggins, 1991; 1982). These two overarching behavioural patterns (axes) correspond to the most comprehensive structural level of the three comprised in the TERCI. Schematically, they are represented by two orthogonal axes intersecting at the center of the interpersonal circle. At the intermediate structural level, these behavioural patterns can be respectively sub-divided into four sub-patterns (dimensions) representing dominance and submissiveness, aggressiveness and agreeableness. At the most specific level, the dimensions can be further divided into eight subscales (octants), representing more specific patterns of power and affiliation: competition/autocracy, management/exploitation, criticism/hostility, skepticism/mistrust, modesty/self-effacement, docility/dependence, generosity/normativeness, and friendliness/compliance (see Hould, 1980; and Leary, 1957, for definitions of the octant constructs).

Participants responded by "yes" or "no" to 88 statements describing interpersonal behaviours, while considering their own conduct<sup>5</sup>. Raw scores on the TERCI were initially weighted and summed to obtain the octant scores. These were standardized and combined to form the dimensional scores [dominance = competition/autocracy + 0.70(management/exploitation + friendliness/compliance); submissiveness = modesty/self-

<sup>&</sup>lt;sup>5</sup> The TERCI comprises three additional sections, which ask participants to respond to the same 88 statements, while considering the interpersonal behaviours of their partners, mothers, and fathers. These sections are not discussed here, as they are not relevant to the present research questions.

effacement + 0.70(docility/dependence + skepticism/mistrust); aggressiveness = criticism/hostility + 0.70(skepticism/mistrust + management/exploitation); agreeableness = generosity/normativeness + 0.70(friendliness/compliance + docility/dependence)]. These scores formed the axes scores when further combined (power = dominance – submissiveness; affiliation = agreeableness – aggressiveness; see Hould, 1980, for more information on the scoring procedures). Schematically, the position of the axis scores on the IPC area indicates whether the primary interpersonal patterns of functioning are adaptive or maladaptive. Axis scores closest to the origin, reflect adaptive patterns, whereas scores falling outside the central area represent maladaptive behavioural styles, increasing in severity in proportion with the distance from the center of the circle (see Figure 1, p. 68).

Strong construct validity, ranging from r = 0.76 to r = 0.88, has been reported for the TERCI, as well as satisfactory circumplexity (r = 0.41 for adjacent octants, r = -0.31 for opposing octants, r = 0.27 for adjacent dimensions, r = -0.27 for opposing dimensions, and r = -0.35 for the relationship between the axes)<sup>6</sup>. Strong test-retest reliability after a four-month lapse of time has been shown for the power and affiliation axes (r = 0.84 and r = 0.79, respectively), the dimensions (ranging from r = 0.76 to r = 0.82), and the octants (ranging from r = 0.73 to r = 0.82) with the exception of skeptical/mistrustful behaviours (r = 0.53). Satisfactory internal consistency (ranging from r = 0.88 to r = 0.92) has also been shown for the octant scales (Hould, 1980). In the present study, Guttman reliability coefficients ranged from r = 0.55 to r = 0.79.

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<sup>&</sup>lt;sup>6</sup> Theoretically, correlations between pairs of scales should decrease as a function of the distance between them on the circle. Perfect Circumplex factor structure would entail that the mean correlation between two scales corresponding to adjacent octants equals r = 0.70. It should equal r = 0.00 when they are separated by another octant, and r = -0.70 when two correlated octants are inserted between them. Finally, the mean correlation between two vectors representing opposite octants should be equivalent to r = -1.00.

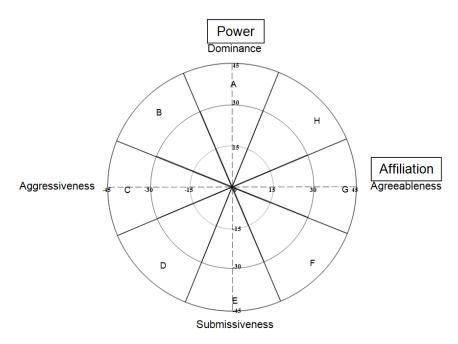


Figure 1. Interpersonal Circumplex Diagram (Hould, 1980).

Notes. ----- = Axes; A = Competition/Autocracy; B = Management/Exploitation; C = Criticism/Hostility; D = Skepticism/Mistrust; E = Modesty/Self-Effacement; F = Docility/Dependence; G = Generosity/Normativeness; H = Friendliness/Compliance.

Power is represented by the vertical axis; it ranges from dominance to submissiveness.

Affiliation is represented by the horizontal axis; it ranges from aggressiveness to agreeableness.

Axis scores falling within the area of the central ring (ranging between -15 and 15), represent adaptive modes of interpersonal functioning.

Axis scores falling within the area of the second ring (ranging between -30 and -15 or between 15 and 30), represent maladaptive modes of functioning.

Axis scores falling within the area of the peripheral ring (< -30 or > 30), represent severely maladaptive modes of functioning.

### Social Anxiety

The Social Avoidance and Distress scale. The SAD<sup>7</sup> (Watson & Friend, 1969) is a 28item true or false inventory that evaluates avoidance and subjective distress during interpersonal situations. Strong test-retest reliability, ranging from r = 0.68 to r = 0.79 (Leary, 1991; Watson & Friend, 1969), and internal consistency, ranging from  $\alpha = 0.77$  to  $\alpha = 0.94$ (Leary, 1991; Oei, Kenna, & Evans, 1991; Watson & Friend, 1969) have been reported for the SAD. Similar psychometric properties have been found for the French version of the instrument (internal consistency of 0.95; Douilliez, Baeyens, & Philippot, 2008). Coefficient alpha in the present study was 0.96.

The Fear of Negative Evaluation questionnaire. The FNE<sup>8</sup> (Watson & Friend, 1969) is a 30-item true or false inventory concerned with negative evaluations of the self and of social life. Strong test-retest reliability (r = 0.75; Watson & Friend, 1969) and internal consistency (ranging from  $\alpha = 0.72$  to  $\alpha = 0.96$ ; Leary, 1991; Oei, et al., 1991; Watson & Friend, 1969) have been found for this instrument. The French version has also shown strong internal consistency ( $\alpha = 0.94$ ; Douilliez, et al., 2008). In the present study, coefficient alpha was 0.95.

## General Psychopathology

The Symptom Check-List. The SCL<sup>9</sup> (Derogatis, Lipman, & Covi, 1973) is a 90-item questionnaire that assesses subjective reports of psychopathology. Participants are asked to rate on a scale from 0 to 5, where 0 represents "not at all" and 5 represents "extremely", the point to which they were bothered by the listed problems, during the last seven days. A general score for distress is tabulated based on the responses provided. Strong test-retest reliability, ranging from r = 0.71 to r = 0.94, and satisfactory internal consistency ( $\alpha = 0.95$  and  $\alpha = 0.96$ ) have been found for the SCL (Derogatis, et al., 1973; Edwards, Yarvis, Mueller, Zingale, & Wagman, 1978). Equivalent psychometric properties have been found for the

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<sup>&</sup>lt;sup>7</sup> The SAD questionnaire is shown in Appendix H.

<sup>&</sup>lt;sup>8</sup> The FNE questionnaire is displayed in Appendix I.

<sup>&</sup>lt;sup>9</sup> The SCL questionnaire can be found in Appendix J.

French version of the instrument (test-retest reliability, ranging from r = 0.90 to r = 0.93, and internal consistency of 0.96; Fortin & Coutu-Wakulczyk, 1985). In the present study, the coefficient alpha was 0.98.

## Social Functioning

The Revised Social Adjustment Scale. The SAS-R<sup>10</sup> (Schooler, Hogarty, & Weissman, 1979) is a 58-item scale that assesses social functioning in various spheres of life, such as work, home, family life, leisure, and general adjustment. In addition to these five global scores, the SAS-R also assesses marital relations, social adjustment, and sexual adjustment. This instrument has shown strong test-retest reliability (r = 0.80; McDowell & Newell, 1996) and satisfactory internal consistency ( $\alpha = 0.74$ ; Edwards, et al., 1978; McDowell & Newell, 1996). The French version of the SAS-R has shown test-retest reliability, ranging between r = 0.69 and r = 0.90 (Toupin, Cyr, Lesage, & Valiquette, 1993), and internal consistency, ranging between 0.39 and 0.75 (Waintraud, Guelfi, Lancrenon, & Rouillon, 1995). Internal reliability in the present study was 0.85.

### **Procedure**

Participants were asked to complete the battery of questionnaires on a single occasion at the laboratory. Administration of the questionnaires was counterbalanced.

Participants were informed that they could withdraw from the study at any moment and informed consent was obtained. As compensation for their participation in the study, participants in the clinical samples were offered treatment for their difficulties and normal individuals received \$20.00. Approval for this project was granted by the Institutional Ethics Committee.

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<sup>&</sup>lt;sup>10</sup> The SAS-R questionnaire is shown in Appendix K.

#### RESULTS

## **Preliminary Analyses**

Participants with Partners versus Participants without Partners<sup>11</sup>

To achieve sufficiently large sample sizes, both participants with and without partners were included in the socially phobic and normative samples. We compared single socially phobic participants to those in relationships to determine whether they reported comparable interpersonal patterns and scores on the secondary measures. The same comparisons were repeated with the normal participants.

Three separate MANOVAs were conducted on the TERCI scores of socially phobic individuals with and without partners. Using Wilk's statistic, the groups were comparable on all levels<sup>12</sup>. Similarly, separate independent-samples *t*-tests yielded no significant differences in social anxiety, and general distress<sup>13</sup>. Socially phobic individuals with partners however reported larger impairment in social functioning, t(130) = -3.34, p < 0.01, d = 0.59.

Three separate MANOVAs were also conducted on the TERCI scores of normal individuals with and without partners. Using Pillai's Trace<sup>14</sup>, the groups were comparable on all levels<sup>15</sup>. Similarly, separate independent-samples *t*-tests yielded no significant differences in social anxiety, general distress, and impairment in social functioning<sup>16</sup>.

<sup>&</sup>lt;sup>11</sup> Means and standard deviations for these comparisons are displayed in Appendix L.

<sup>&</sup>lt;sup>12</sup> Axis,  $\Lambda = 0.96$ , F(2, 129) = 0.30, ns; dimension,  $\Lambda = 0.97$ , F(4, 127) = 1.06, ns; and octant,  $\Lambda = 0.89$ , F(8, 123) = 1.93, ns.

<sup>&</sup>lt;sup>13</sup> SAD, t(130) = -0.02, ns; FNE, t(130) = -1.42, ns; and SCL, t(130) = 0.09, ns.

<sup>&</sup>lt;sup>14</sup> The *n*s of the two comparison groups were uneven (ratio: 1.69). In accordance with Tabachnick and Fidell's (2007) recommendations, Pillai's Trace was reported for these MANOVAs, as it is a more conservative statistic. <sup>15</sup> Axes, V = 0.01, F(2, 102) = 0.66, *ns*; dimensions, V = 0.03, F(4, 100) = 0.66, *ns*; and octants, V = 0.13, F(8, 96)

Axes, V = 0.01, F(2, 102) = 0.66, ns; dimensions, V = 0.03, F(4, 100) = 0.66, ns; and octants, V = 0.13, F(8, 96) = 1.76, ns.

<sup>&</sup>lt;sup>16</sup> SAD, t(82.55) = 1.95, ns; FNE, t(90.33) = 0.64, ns; SCL, t(72.94) = 0.55, ns; and SAS-R, t(97.61) = -0.05, ns.

In general, socially phobic and normal individuals in relationships were comparable to their counter-parts without partners. Both individuals with and without partners were therefore included in the socially phobic and normative samples for the purpose of the main analyses<sup>17</sup>.

## **Principal Analyses**

Between-Group Differences on Patterns of Interpersonal Behaviour

Three MANOVAs were conducted to determine respectively whether the groups at study differed on TERCI axis, dimension, and octant scores. Using Wilk's statistic, significant differences between the groups on axis,  $\Lambda=0.75$ , F(4, 636)=25.20, p<0.001,  $\eta^2=0.14$ , dimension,  $\Lambda=0.70$ , F(8, 632)=15.56, p<0.001,  $\eta^2=0.17$ , and octant scores,  $\Lambda=0.65$ , F(16, 624)=9.25, p<0.001,  $\eta^2=0.19$ , were found. Separate Univariate ANOVAs revealed that the power, F(2, 319)=46.46, p<0.001, and affiliation axes, F(2, 319)=4.25, p<0.05, the dominance, F(2, 319)=11.11, p<0.001, submissiveness, F(2, 319)=41.02, p<0.001, and agreeableness dimensions, F(2, 319)=7.22, p<0.01, and the competitive/autocratic, F(2, 319)=5.39, p<0.01, skeptical/mistrustful, F(2, 319)=8.39, p<0.001, modest/self-effacing, F(2, 319)=54.77, p<0.001, docile/dependent, F(2, 319)=12.03, p<0.001, generous/normative, F(2, 319)=8.01, p<0.001, and friendly/compliant, F(2, 319)=12.35, p<0.001, octants significantly differentiated the groups. No other Univariate differences were found.

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<sup>&</sup>lt;sup>17</sup> TERCI data were available for 21 sexually dysfunctional individual with partners who, although excluded from the present study, were recruited to participate in another study (Sayegh, 2001). Three separate MANOVAs were conducted to compare this data to the TERCI scores of the sexually dysfunctional individuals without partners included in the present study. Following Tabachnick and Fidell's (2007) recommendation when comparison group sizes are uneven (ratio: 4.05), Pillai's Trace was reported. Results revealed that the groups were comparable on the dimensional, V = 0.09, F(4, 101) = 2.36, ns; and octant, V = 0.11, F(8, 97) = 1.15, ns, levels. A significant group difference was however found at the axis level, V = 0.69, F(2, 103) = 3.84, p < 0.05,  $\eta^2 = 0.07$ . Single sexually dysfunctional individuals reported a significantly higher degree of powerlessness (M = -6.85, SD = 17.19) than their counter-parts in relationships (M = 4.33, SD = 13.01), F(1, 104) = 7.39, p < 0.01, d = -0.80; the difference represented a large-sized effect (Cohen, 2003). These results support the notion that sexually dysfunctional singles are characterized by a dysfunctional interpersonal style that is not evident in those with stable partners.

Socially Phobic versus Normal Individuals. Tukey HSD Post-Hoc t-tests revealed that the socially phobic group reported, on average, significantly less powerful behaviours than the normal group, t(234) = -9.64, p < 0.001, d = -1.26 (see Table II, p. 74, for means, and standard deviations). Specifically, compared to normal individuals, socially phobic individuals reported significantly more submissive, t(234) = 8.99, p < 0.001, d = 1.17, modest/self-effacing, t(234) = 10.46, p < 0.001, d = 1.38, skeptical/mistrustful, t(234) = 4.03, p < 0.001, d = 0.51, and docile/dependent, t(234) = 3.97, p < 0.001, d = 0.53, behaviours. These differences represented medium- and large-sized effects<sup>18</sup>. Similarly, they also reported less dominant, t(234) = -4.60, p < 0.001, d = -0.59, and competitive/autocratic, t(234) = -3.28, p < 0.01, d = -0.43, behaviours than normal individuals; the differences respectively represented medium and small effect sizes.

No significant differences were found between the socially phobic and normal groups in terms of affiliation. This finding is consistent with the results found for the dimensions (i.e., aggressiveness and agreeableness) and the octants (i.e., management/exploitation, criticism/hostility, and generosity/normativeness) constituting the affiliation axis, with the exception that socially phobic individuals were found to be less friendly/compliant, t(234) = -4.73, p < 0.001, d = -0.60. The difference represented a medium effect size.

Socially Phobic versus Single Sexually Dysfunctional Individuals. Consistent with the differences found with the normal group, the socially phobic group reported significantly less behaviours related to power, t(214) = -3.80, p < 0.001, d = -0.54, than the sexually dysfunctional singles. Specifically, they obtained higher scores on submissiveness, t(214) = 2.74, p < 0.05, d = 0.38, and modesty/self-effacement, t(214) = 4.59, p < 0.001, d = 0.63, and lower scores on dominance, t(214) = -2.83, p < 0.05, d = -0.42, than the single sexually dysfunctional group; the differences represented small and medium effect sizes.

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<sup>&</sup>lt;sup>18</sup> Cohen's (2003) criteria for small (d = 0.20), medium (d = 0.50), and large (d = 0.80) effect sizes were used to determine the effects of the group differences.

Table II

Means, Standard Deviations, and Effect Sizes of Patterns of Interpersonal Behaviour in Socially Phobic, Single Sexually Dysfunctional, and Normal Individuals

|     | SP (n               | = 132)  | SSD (              | n = 85) | N (n =            | = 105)  |               |
|-----|---------------------|---------|--------------------|---------|-------------------|---------|---------------|
|     | M                   | (SD)    | M                  | (SD)    | M                 | (SD)    | $d^{\dagger}$ |
| PO  | -15.94 <sub>a</sub> | (16.74) | -6.85 <sub>b</sub> | (17.19) | 5.74 <sub>c</sub> | (17.76) | -0.72         |
| AF  | $9.59_{a}$          | (17.15) | $16.33_{b}$        | (15.56) | 12.59             | (16.86) |               |
| DOM | $26.29_{a}$         | (9.71)  | $30.36_{b}$        | (9.59)  | $32.51_{b}$       | (11.57) |               |
| AGG | 27.65               | (11.61) | 27.19              | (10.82) | 26.78             | (10.96) |               |
| SUB | $42.23_{a}$         | (13.59) | $37.21_{b}$        | (12.84) | $26.77_{c}$       | (12.82) | 0.81          |
| AGR | $37.24_{a}$         | (11.96) | $43.52_{b}$        | (11.16) | $39.37_{a}$       | (12.38) | 0.35          |
| A   | $8.97_{a}$          | (5.68)  | 10.22              | (6.18)  | $11.55_{b}$       | (6.30)  |               |
| В   | 11.53               | (7.08)  | 12.71              | (6.15)  | 12.93             | (6.44)  |               |
| C   | 10.05               | (5.98)  | 9.35               | (5.50)  | 10.43             | (5.21)  |               |
| D   | $13.62_{a}$         | (6.38)  | $12.78_{a}$        | (5.41)  | $10.43_{b}$       | (6.15)  | 0.40          |
| E   | $20.42_{a}$         | (8.01)  | $15.38_{b}$        | (8.08)  | $9.61_{\rm c}$    | (7.63)  | 0.86          |
| F   | $17.52_{a}$         | (6.33)  | $18.41_{a}$        | (6.99)  | $14.09_{b}$       | (6.67)  | 0.63          |
| G   | $15.73_{a}$         | (6.99)  | $19.39_{b}$        | (6.39)  | 17.61             | (6.39)  |               |
| Н   | 13.21 <sub>a</sub>  | (5.90)  | $16.06_{b}$        | (5.47)  | $17.00_{b}$       | (6.84)  |               |

Notes. SP = Socially Phobic; SSD = Single Sexually Dysfunctional; N = Normal; PO = Power; AF = Affiliation; DOM = Dominance; AGG = Aggressiveness; SUB = Submissiveness; AGR = Agreeableness; A = Competition/Autocracy; B = Management/Exploitation; C = Criticism/Hostility; D = Skepticism/Mistrust; E = Modesty/Self-Effacement; F = Docility/Dependence; G = Generosity/Normativeness; H = Friendliness/Compliance.

Means with a different subscript differ significantly at p < 0.05 or better.

Means with the same subscript or with no subscript do not differ significantly.

<sup>†</sup> Effect sizes for significant differences between the sexually dysfunctional singles and the normal participants.

In contrast to the results found in the comparisons with the normal individuals, socially phobic individuals were less affiliative, t(214) = -2.91, p < 0.05, d = -0.41, than sexually dysfunctional singles; the difference however, represented a small-sized effect. Results obtained with the sub-patterns of affiliation support this difference, i.e., socially phobic individuals were found to be significantly less agreeable, t(214) = -3.79, p < 0.01, d = -0.51, generous/normative, t(214) = -3.96, p < 0.001, d = -0.54, and friendly/compliant, t(214) = -3.35, p < 0.01, d = -0.50, than sexually dysfunctional singles. These differences represent small- and medium-sized effects. No other significant differences were found.

Relationship between Patterns of Interpersonal Behaviour and Social Anxiety, General Psychopathology, and Social Functioning in Social Phobia

Separate multiple linear regression analyses were conducted to determine the respective relationships between patterns of interpersonal behaviour and measures of social anxiety, social functioning, and general psychopathology in socially phobic participants. Separate regressions were conducted for the axes, dimensions, and octants to control for possible biases associated with multicollinearity that can arise when predictors are highly correlated with each other (e.g., submissiveness and modesty/self-effacement, dominance and power).

Results showed that powerlessness, submissiveness, and modesty/self-effacement were significantly related to increased levels of social anxiety (on both the SAD and FNE, with the exception that submissiveness and FNE scores did not significantly correlate), and general psychopathology. The relationships represented moderate<sup>19</sup> and large effect sizes. No other interpersonal patterns correlated significantly with social anxiety and general distress. No significant relationships were found between any of the interpersonal patterns and impairment in social functioning as measured by the SAS-R. Results are displayed in Table III (p. 76).

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<sup>&</sup>lt;sup>19</sup> Cohen's (2003) criteria for small (r = 0.02), medium (r = 0.15), and large (r = 0.35) effect sizes were used to determine the effects of the multiple regressions.

Table III

Multiple Linear Regression Analyses of Patterns of Interpersonal Behaviour, Social Anxiety, Social Functioning, and General Psychopathology in Social Phobia

|     | SAD                 | FNE                 | SAS-R               | SCL                  |
|-----|---------------------|---------------------|---------------------|----------------------|
|     | $\beta (R^2 = .03)$ | $\beta (R^2 = .04)$ | $\beta (R^2 = .03)$ | $\beta (R^2 = .12)$  |
| PO  | 20*                 | 19*                 | 17                  | 35***                |
| AF  | 11                  | .02                 | 07                  | 12                   |
|     | $\beta (R^2 = .03)$ | $\beta (R^2 = .05)$ | $\beta (R^2 = .04)$ | $\beta (R^2 = .17)$  |
| DOM | .04                 | 13                  | 01                  | 10                   |
| AGG | 07                  | .10                 | 04                  | .15                  |
| SUB | .30*                | .10                 | .22                 | .33**                |
| AGR | 18                  | .13                 | 11                  | .01                  |
|     | $\beta (R^2 = .03)$ | $\beta (R^2 = .09)$ | $\beta (R^2 = .05)$ | $\beta (R^2 = 0.24)$ |
| A   | 07                  | 13                  | .06                 | 04                   |
| В   | .02                 | .05                 | 04                  | .01                  |
| C   | .05                 | .05                 | 03                  | .09                  |
| D   | 04                  | 01                  | 01                  | .06                  |
| E   | .36**               | .25*                | .22                 | .43***               |
| F   | 19                  | 11                  | 01                  | 14                   |
| G   | .11                 | .16                 | .05                 | .17                  |
| Н   | .11                 | 01                  | 15                  | 08                   |

Notes. SAD = Social Avoidance and Distress; FNE = Fear of Negative Evaluation; SAS-R = Social Adjustment Scale – Revised; SCL = Symptom Check-List; PO = Power; AF = Affiliation; DOM = Dominance; AGG = Aggressiveness; SUB = Submissiveness; AGR = Agreeableness; A = Competition/Autocracy; B = Management/Exploitation; C = Criticism/Hostility; D = Skepticism/Mistrust; E = Modesty/Self-Effacement; F = Docility/Dependence; G = Generosity/Normativeness; H = Friendliness/Compliance. \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001.

#### DISCUSSION

Overall, results supported the main hypotheses that socially phobic individuals would report engaging in patterns of powerlessness to a larger extent than normal and single sexually dysfunctional individuals. Specifically, they reported submissive displays to a larger degree and patterns characterized by dominance to a smaller degree than the other two groups. The differences were most salient between the socially phobic and normal individuals and less so with the single sexually dysfunctional individuals, who were, as was expected from the current theoretical standpoint, generally in an intermediate position<sup>20</sup>.

The relative distinction in power between the groups can be further refined if the axis means are examined qualitatively. As illustrated in Figure 2 (p. 79), the axis scores for all three groups were located below the horizontal axis suggesting that they reported typically engaging in power*less* behaviour, and not power*ful* behaviour, as would have been the case if their axis scores were positioned in the superior area of the circle. The groups differed however, in that the socially phobic group's mode of functioning fell slightly within the maladaptive area of the IPC, whereas the interpersonal functioning of the two contrast groups tended to be adaptive. Although all three groups displayed powerlessness to a certain degree, the normative and single sexually dysfunctional groups appear to use this interpersonal style in an non-protective way, likely in situations where it is deemed acceptable (e.g., compliance with an employer's request). The display of powerlessness in the socially phobic by contrast, seems to lean more towards a self-protective use that perhaps generalizes to situations where acquiescence is considered unusual (e.g., falling silent upon the arrival of an unfamiliar person). Given that the socially phobic individuals deviated only minimally into the maladaptive area of the IPC, it may be possible that they use powerlessness in primarily a maladaptive way, but also in an adaptive fashion depending on the situation.

Taken together, these results are consistent with the notion that interpersonally, socially phobic individuals foremost seek to protect themselves against threat while in a state

<sup>&</sup>lt;sup>20</sup> Comparisons between the single sexually dysfunctional and normal groups are discussed more elaborately elsewhere as they are not the main focus of the present paper.

of relative powerlessness (Amado, et al., 2014; Stravynski, 2014; 2007). These are also consistent with previous findings showing that the interpersonal functioning of socially phobic individuals is typically characterized by submissive acts (Cain, et al., 2010; Kachin, et al., 2001; Russell, et al., 2011; Schneier, et al., 2011; Stangier, et al., 2006).

No specific hypotheses concerning affiliative patterns and sub-patterns of agreeableness and aggressiveness were put forward. In contrast to the meaningful group differences obtained between the socially phobic and normal groups in terms of powerlessness and submissiveness, the groups did not differ on affiliation at any level, with the exception of friendly/compliant behaviours. In comparison to the sexually dysfunctional singles however, the socially phobic reported displaying less affiliative and agreeable-type behavioural patterns. They however did not differ in terms of aggressiveness. In absolute terms (see Figure 2, p. 79), the three groups tended towards agreeable-type behaviours, as they were all located in the right sphere of the IPC. In this case, the socially phobic, as well as the normative groups fell within the adaptive area of functioning, whereas the sexually dysfunctional singles seemed to engage in this pattern in a fairly more maladaptive way.

These findings are not contradictory to the notion that interpersonally, socially phobic individuals may engage in agreeable-type behaviours, but also conversely may seek out a safe distance from others (Stravynski, 2014; 2007); i.e., expressing neither friendliness nor hostility to engage others in interaction. However, these appear to be adaptive and comparable to those of normal individuals (as also found by Russell, et al., 2011), thus not necessarily operating as a means of self-protection. In light of these results and previous research, which has produced discrepant findings on the issue (Cain, et al., 2010; Kachin et al., 2001; Stangier, et al., 2006), it remains unclear whether affiliative, agreeable, or aggressive interpersonal modes are elements typical of the socially phobic pattern. Further research on the matter is needed.

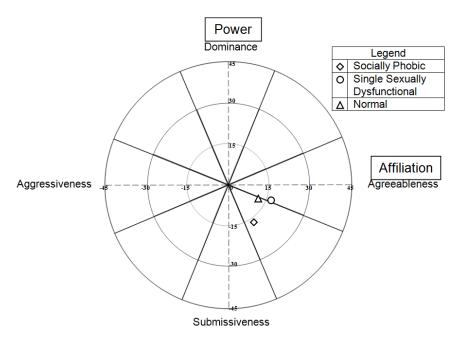


Figure 2. Interpersonal Axis Means of Socially Phobic, Single Sexually Dysfunctional, and Normal Participants Plotted onto the IPC Area.

It is interesting to note however, that the sexually dysfunctional singles reported greater affiliative and agreeable tendencies than the socially phobic group, and seemed to use these in a rather maladaptive manner. From this perspective, one may speculate whether this group of individuals may be characterized by a self-protective pattern of over-friendliness. Caution is however warranted in interpreting these results as only a trend in this direction was observed in comparison to the normal participants. Similarly, qualitative examinations of the results indicate that sexually dysfunctional singles only slightly deviated into the maladaptive area of the IPC. Further research into the subject matter is needed.

Results partially supported our secondary hypothesis. It was shown that social anxiety and general psychopathology were related to interpersonal patterns characterized primarily by powerlessness, submissiveness, and modestly/self-effacement. However, these were not inversely related to patterns and sub-patterns of dominance and no relationships were obtained with affiliation at any level. These results are consistent with the view that social anxiety and general distress are interrelated with self-protectiveness in social phobia (Stravynski, 2014; 2007). In similar fashion, previous research has shown that these types of patterns (e.g., submissiveness) coincide with high situational anxiety, and dissipate with a fall in levels of anxiety in socially phobic (but not normal) individuals (Russell, et al., 2011). A study (Davila & Beck, 2002) of 168 normal Undergraduate students also showed that social anxiety was positively correlated with interpersonal dysfunction (e.g., avoidance, unassertiveness, overreliance on others). These findings have interesting theoretical implications; in that they are consistent with the postulate that anxiety and dysfunctional behaviour are facets of a larger self-protective interpersonal pattern specific to social phobia. This notion however necessitates further investigation.

In contrast to our expectations, impairment in social functioning was found to be unrelated to interpersonal patterns. At first glance, the lack of significance in the relationship may appear incongruous, however a possible explanation is that the SAS-R (Schooler, et al., 1979) measures spheres of life affected, and that although individuals may be powerless, submissive, or self-effacing in their social endeavours, their mere participation in them, albeit

passive, may appear functional on the surface and thus fail to be registered as impaired on the SAS-R. A measure reconciling this incongruity is necessary.

# Strengths, Limitations, and Directions for Future Research

Advantages of the present study consist of large sample sizes and the use of a normative as well as a psychopathological contrast group. Single sexually dysfunctional individuals display similar interpersonal difficulties to socially phobic individuals – the difference being only in the spheres of life affected – therefore the found differences provide strong evidence that powerlessness and submissiveness are characteristic of the social phobic pattern. It would be important however, for future research to replicate these findings with other clinical contrast groups that are similar to social phobia in terms of social dysfunction (e.g., depression, body dysmorphic disorder) and anxiety levels (e.g., generalized anxiety disorder, panic disorder).

A limitation to the current study is that below average internal reliability (Hould, 1980) was obtained for some of the octant scales (e.g., criticism/hostility, skepticism/mistrust). Caution is thus warranted in the interpretation of the results obtained on those specific scales. Hould (1980) however explains that the dimensional scales are more psychometrically reliable than their octant sub-scales, as they encompass a larger number of interpersonal behaviours. Additionally, scales more relevant to the main hypotheses (e.g., modesty/self-effacement) produced relatively satisfactory internal consistency. We therefore do not believe that our main results were biased. Furthermore, a strong relationship was found between general distress (measured by the SCL; Derogatis, Lipman, & Covi, 1973) and interpersonal patterns of powerlessness, submissiveness, and modesty/self-effacement. Based on these results, the found between-group differences in self-protectiveness may have been influenced by a general level of psychopathology rather than specifically by social phobia group membership. Further analyses controlling for SCL scores are thus necessary to draw more confident conclusions about the uniqueness of these self-protective patterns to social phobia. Another limitation is that the method used for gathering information on self-protection relied solely on self-report, and thus may not necessarily represent an accurate description of the participants' actual

functioning in everyday life (Benjamin, 1996). Future studies are thus needed to corroborate the results obtained in this study. These studies should attempt to observe socially phobic patterns in more ecologically valid contexts, either in real life (e.g., Amado, et al., 2014) or during role-play tasks. Finally, due to instrumental limitations, the present study focused on a limited number of self-protective interpersonal sub-patterns (submissiveness, powerlessness) postulated to characterize the overall pattern in social phobia. Further research ought to observe other patterns of behaviour (e.g., distancing oneself from others, fleeing and avoiding social situations, conformity), to better account for individual differences and attempt to more precisely depict an overall pattern of self-protection in social phobia.

### **Conclusions**

The present study investigated self-protective patterns of behaviour among socially phobic individuals using predictions drawn from an interpersonal theoretical framework (Stravynski, 2014; 2007). Comparisons with single sexually dysfunctional and normative contrast groups revealed that social phobia is characterized by maladaptive self-protective patterns of powerlessness – e.g., absence of dominance – and submissiveness. Results further indicated that these main self-protective patterns are associated with elevated levels of social anxiety and general distress in social phobia. These findings are consistent with previous research examining these dimensions in social phobia and with the interpersonal perspective's postulate that self-protectiveness and social anxiety are facets of a larger socially phobic pattern.

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# Chapter 6

# Does an Interpersonal Approach to Treatment Improve the Dysfunctional Interpersonal Pattern in Social Phobia? A One-Year Follow-Up

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#### **ABSTRACT**

**Objectives.** Conceived interpersonally, social phobia is characterized as an overall pattern of specific self-protective patterns of behaviour (e.g., powerlessness, submissiveness) entwined with heightened levels of anxiousness. The present study aimed at testing this premise by examining whether self-protective patterns dissolve following effective treatment and whether anxiousness decreases as a result of such an improvement.

**Design & Methods.** A long-term within-subject design was used to assess change in self-reported patterns of interpersonal behaviour, social anxiety, social functioning, and severity of general psychopathology at four time-points (pre-treatment, post-treatment, six-month and one-year follow-ups) in 85 socially phobic individuals who underwent treatment guided by the interpersonal approach (IA). Between-subject comparisons were also conducted at the one-year follow-up between remitted and non-remitted participants.

**Results.** In comparison to pre-treatment, a significant decrease in self-protective patterns and sub-patterns of powerlessness and submissiveness was found at post-treatment. Gains were maintained one year later, and were greater for remitted than non-remitted participants. Improvement in social anxiety, social functioning, and general psychopathology was also found at post-treatment. This was maintained until the one-year follow-up. Participants in remission reported significantly less social anxiety, and general distress than did their socially phobic counter-parts; their improvement in social functioning was however equivalent.

**Conclusions.** This study offers support for an interpersonal account of the socially phobic pattern, as self-protectiveness was shown to dissipate post-treatment, and especially at a later stage when remission was achieved. The findings also provide support for the theoretical postulate that anxiousness decreases as self-protectiveness declines.

#### **KEYWORDS**:

social phobia; interpersonal approach; self-protective pattern; powerlessness; submissiveness; Interpersonal Circumplex.

#### **Practitioner Points:**

- The application of an interpersonal approach (IA) to the treatment of social phobia resulted in a significant dissolution of specific self-protective interpersonal patterns, improvement in global impairment in social functioning, and relief of social anxiety as well as general distress.
- Post-treatment gains were maintained on a long-term basis (one year).
- The study highlights the importance of addressing specific self-protective patterns of interpersonal behaviour (e.g., powerlessness, submissiveness) in addition to avoidance, and other facets of social phobia (e.g., anxiety, general distress, affected spheres of life) in its study, as well as in its treatment.
- The study showed that, although significantly improved, non-remitted participants
  reported a higher degree of residual self-protectiveness, as well as social anxiety,
  and general psychopathology at the one-year follow-up than those in remission,
  suggesting that they may require additional intervention for a more optimal
  clinical improvement.
- Below normal internal consistency was obtained for the competition/autocracy, criticism/hostility, and skepticism/distrust sub-scales of the TERCI, which assesses patterns of interpersonal behaviour, potentially diminishing the reliability of the scores obtained on those scales.
- Comparisons of the post-treatment and follow-up improvements in the socially phobic pattern to the interpersonal patterns of a normative group are not addressed in this paper. These would allow for the change to be quantified in a more clinically meaningful way.

#### INTRODUCTION

Social phobia is characterized by an intense fear over being incoherent, speechless, or showing visible signs of distress (e.g., blushing), and consequently eliciting negative reactions in others (e.g., criticism). Social situations, in which one's performance is assessed (e.g., public presentations, conversations) are dreaded or avoided entirely. Impairment in social functioning – defined as the manner of participating in social life, the quality of the social performance, and fitting-in (Beattie & Stevenson, 1984) – is also evident (Simon, Otto, Korbly, Peters, Nicolaou, et al., 2002; Wittchen & Fehm, 2003) in various spheres of life (e.g., romantic, academic/professional; Stein, Torgrud, & Walker, 2000) and in daily activities (e.g., running errands; Stein & Kean, 2000).

A theoretical model defining social phobia in interpersonal terms – as a problem in social functioning – has been proposed by Stravynski (2014; 2007). According to this approach, social phobia has simultaneously an interpersonal and a somatic locus. On the one hand, specific self-protective patterns of behaviour are triggered by various emotionally threatening events, and on the other hand, anxiousness is a state of heightened arousal preparing the organism to act defensively in the face of threat. Self-protective behaviours and social anxiety are considered as intertwined facets of the larger socially phobic pattern.

In this view, one mode of self-protection used by socially phobic individuals is to distance oneself from others (Stravynski, 2014; 2007). Distancing strategies include, but are not limited to, avoidance, escape, invisibility, and immobility. Although few socially phobic individuals chose to withdraw completely from society, much of the literature in social phobia has focused on avoidance (Hazen & Stein, 1995) – the blunt non-participation in social life. In parallel, little has been put forth about the specific self-protective strategies that may characterize the socially phobic pattern when avoidance and/or other distancing tactics are not viable options.

The interpersonal approach postulates that, in social interactions, the socially phobic adopt self-protective patterns characterized foremost by submissiveness and powerlessness.

Submissive-type tendencies comprise docility, self-effacement, and the search for approval from others. Conversely, the broader pattern of powerlessness encompasses sub-patterns where expressions of dominance, criticism, and assertiveness are absent. Alternatively, the socially phobic may act in an agreeable fashion as a means to appease and avoid conflict. They may however paradoxically behave in a non-affiliative manner, presenting a cold exterior to keep others at a safe distance (Stravynski, 2014; 2007).

One way to examine whether such patterns are characteristic of social phobia is to contrast them to those of control groups. A study by Kyparissis, Stravynski, and Lachance (2014) showed that socially phobic participants described themselves as engaging in submissiveness and powerlessness to a higher extent than two contrast groups (the sexually dysfunctional single and normal). They reported affiliation and agreeableness to a similar degree as the normative group, but to a lesser degree than the sexually dysfunctional singles. Similarly, independent research groups have found that socially phobic individuals reported higher levels of submissiveness during fear-evoking situations than normative controls (Russell, Moskowitz, Zuroff, Bleau, Pinard, et al., 2011) and lower degrees of power, dominance, and assertiveness than depressed individuals (Stangier, Esser, Leber, Risch, & Heidenreich, 2006)<sup>1</sup>. Affiliation and agreeableness did not significantly differentiate the socially phobic from the comparison groups in these studies.

An alternative method for testing whether these patterns are specific to social phobia is to compare socially phobic interpersonal styles prior to and after the completion of a course of treatment guided by the interpersonal approach (IA; Stravynski, 2014; 2007). This treatment aims primarily at improving social functioning by disabling self-protective patterns of interpersonal behaviour and encouraging behaviours that seek out social/interpersonal contact, without directly targeting a reduction in anxiety<sup>2</sup>. An outcome study (Stravynski, Arbel,

<sup>&</sup>lt;sup>1</sup> It is noteworthy to mention that the two cited studies (Russell, et al., 2011; Stangier, et al., 2006) were not conducted with the purpose of directly testing the interpersonal approach brought forth by Stravynski (2014; 2007).

<sup>&</sup>lt;sup>2</sup> IA is not to be confused with other treatments bearing an "interpersonal" title, namely Interpersonal Psychotherapy (IPT; Lipsitz, Markowitz, & Cherry, 1997) and Interpersonal Cognitive Behavioural Treatment (ICBT; Alden & Taylor, 2011). In contrast to IA, IPT stems from a psychodynamic framework aimed for "symptomatic relief" (Blanco, Clougherty, Lipsitz, Mufson, & Weissman, 2006, p. 202) through the in-session

Bounader, Gaudette, Lachance, et al., 2000) provided support for the efficacy of this approach in treating social phobia by showing that, one-year after initially receiving group treatment, socially phobic participants reported significant improvements in social functioning, social anxiety, avoidance, and overall severity of psychopathology. The improvements were comparable to those of participants that underwent IA in combination with Social Skills Training (SST), suggesting that SST did not add to the benefits obtained with IA alone.

Theoretically, patterns of self-protectiveness should dissipate as a result of effective treatment. A preliminary collection of single case studies (Amado, Kyparissis, & Stravynski, 2014) examined the shift in self-protective patterns from pre- to post-treatment. Results showed that the distinct self-protective pattern characterized notably by evasiveness and self-effacement tendencies, initially observed in four socially phobic participants, was replaced by a pattern characteristic of two control groups – shy (n = 2) and normal (n = 2) – that sought out a connection with others.

Although supportive of the model, the studies directly testing the interpersonal approach are few in numbers and can gain greater strength if replicated. The study by Amado and colleagues (2014) possesses strong ecological validity; it is however limited in its potential for generalizability due to the small sample size. It further only examined short-term changes as no follow-up assessments were conducted. To account for these limitations, the present study aimed at further testing the interpersonal model's postulates, by comparing on a larger scale, the self-protective interpersonal patterns of socially phobic participants before and after IA, as well as up to one year follow-up.

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exploration of interpersonal problems in four domains originally developed for the treatment of depression (Weissman, Markowitz, & Klerman, 2000): Grief (e.g., death of a loved one), role dispute (e.g., conflict in a significant relationship), role transition (e.g., divorce), and interpersonal deficits (e.g., few social contacts; Lipsitz, Gur, Vermes, Petkova, Cheng, et al., 2008). In ICBT, an interpersonal component targeting difficulties in interpersonal functioning (e.g., behavioural experimentation during problematic situations; observation of the social response elicited in others) is added to traditional CBT aiming mainly for a reduction in social anxiety (e.g., strategies including expectation and belief modification; self-monitoring of safety behaviours). As opposed to IA, ICBT has a dualistic approach to treatment, as it uses separate methods for improving social anxiety and social functioning.

On a first level of analysis, we expected improvement in self-protectiveness over time. Specifically, it was hypothesized that, in comparison to pre-treatment, significant improvements in submissiveness and powerlessness would be reported at the end of treatment; the gains would be maintained at the six-month and one-year follow-ups. As a more robust test of the model, we also sought to investigate the differences between remitted and non-remitted participants one year following the end of treatment. We predicted that the remitted group would report a significantly larger improvement in self-protectiveness compared to their non-remitted counter-parts.

Based on theory and previous research, the extent to which agreeable and/or affiliative patterns are involved in social phobia is unclear; therefore no specific predictions were made on their behalf. We rather examined the evolution of these patterns over time, and compared the differences between remitted and non-remitted individuals at the one-year follow-up, in an exploratory fashion.

Finally, as interpersonal functioning shifts from self-protection towards active social participation, anxiousness should theoretically likewise decrease (Stravynski, 2014; 2007). On a second level of analysis, we therefore expected improvement in subjective reports of anxious distress over time. It was hypothesized that, in comparison to pre-treatment, significant improvements in social anxiety, impaired social functioning, and severity of psychopathology would be reported at post-treatment, with gains maintaining at both follow-ups. Consistent with theory, participants in remission should report significantly less subjective distress than their non-remitted counter-parts.

#### **METHOD**

# **Participants**

The present sample was comprised of participants from Kyparissis and colleagues (2014). They were recruited largely through the local media (e.g., newspaper advertisements) and through referrals from mental health professionals.

Participants were initially contacted for a brief screening interview and were excluded if their main clinical complaint was not socially phobic in nature. Remaining participants were interviewed by a psychiatrist; those meeting *DSM-IV* (American Psychiatric Association, 1994) criteria for social phobia were reassessed by an experienced clinical psychologist with the Revised Anxiety Disorders Interview Schedule<sup>3</sup> (ADIS-R; Di Nardo, Moras, & Barlow, 1993) as a measure of cross-validation<sup>4</sup>. Individuals meeting criteria for any other predominant (usually major depression) or co-occurring disorder (schizophrenia, affective, paranoid, or organic mental disorder; or severe personality disorder) were excluded. Taking psychotropic medication, abusing alcohol and/or drugs, and the non-completion of all intake assessment steps were also grounds for exclusion. Participants were informed that they could withdraw from the study at any moment and informed consent was obtained. Of the 132 participants assessed at pre-treatment, 85 returned for the one-year follow-up. Figure 1 (p. 96) displays the sample's flow through the study. Demographic and clinical characteristics are presented in Table I (p. 97).

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<sup>&</sup>lt;sup>3</sup> According to Cohen's (2003) standards, strong test-retest reliability has been found for the social phobia scale of the ADIS-IV (ranging from  $\kappa = 0.73$  to  $\kappa = 0.77$ ; Brown, Di Nardo, & Barlow, 1994; Brown, Di Nardo, Lehman, & Campbell, 2001).

<sup>&</sup>lt;sup>4</sup> Participants would have been automatically excluded in the case of disagreement. Inter-rater reliability was however 100% in the present study, as there were no exclusions on the basis of social phobia status.

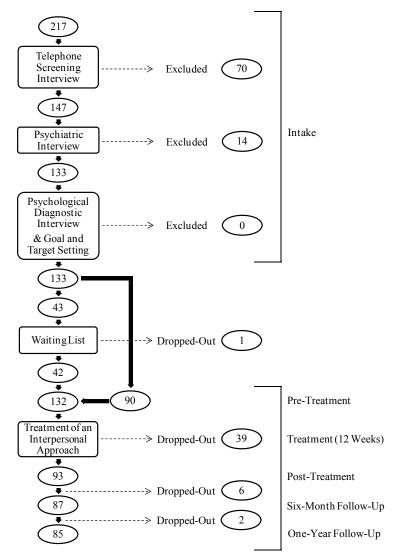


Figure 1. Flow Chart of Study Participants.

Note.  $\bigcirc = n$ .

| Table I  |             |               |
|--|-------------|---------------|
| Demographic and Clinical Characteristics of the Soci | ally Phobic | : Individuals |
| Demographic Characteristics                          |             |               |
| Gender   |             |               |
| Men  |             | 43.5%         |
| Women  |             | 56.5%         |
| Marital Status                                       |             |               |
| Married/Common Law or Cohabiting                     |             | 52.9%         |
| Separated or Divorced                                |             | 9.2%          |
| Widowed  |             | 1.2%          |
| Single (has previously been in a relationship)       |             | 15.3%         |
| Single (has never been in a relationship)            |             | 22.4%         |
| Highest Level of Education                           |             |               |
| < 12 years   |             | 7.1%          |
| High School Diploma                                  |             | 22.4%         |
| Certificate/Non-University Diploma                   |             | 15.3%         |
| University Degree                                    |             | 55.3%         |
| Employment Status                                    |             |               |
| Employed   |             | 80.0%         |
| Unemployed   |             | 11.8%         |
| Student  |             | 8.2%          |
| Age  |             |               |
|  | M           | 38.12         |
|  | SD          | 8.40          |
| Clinical Characteristics                             |             |               |
| Sub-Type of Social Phobia                            |             |               |
| Generalized  |             | 76.5%         |
| Non-Generalized                                      |             | 23.5%         |
| Type of Social Fear                                  |             |               |
| Public Performance                                   |             | 92.7%         |
| Interpersonal Interactions                           |             | 81.7%         |
| Exhibiting Poor Social Behaviour                     |             | 31.7%         |
| Blushing   |             | 39.0%         |
| Shaking  |             | 30.5%         |
| Sweating   |             | 7.3%          |
| Using Public Restrooms                               |             | 4.9%          |
| Panic Note: N = 95                                   |             | 3.7%          |

*Note.* N = 85.

#### Measures

## Patterns of Interpersonal Behaviour

The "Test d'évaluation du répertoire des construits interpersonnels". The TERCI (Hould, 1980) is a French-language self-report adaptation of the Interpersonal Check List (LaForge & Suczek, 1955), an instrument which evolved from the Interpersonal Circumplex (IPC; Leary, 1957). Conceptually, the IPC organizes interpersonal behaviours on a two-dimensional circular space reflecting the interaction of two overarching interpersonal patterns – power and affiliation (Becker & Krug, 1964; Foa, 1961; Hould, 1980; Kiesler, 1983; LaForge & Suczek, 1955; Leary, 1957; Moskowitz, 2005; Wiggins, 1991; 1982) – that are schematically represented by two orthogonal axes intersecting at the centre of a circle. The axes correspond to the most comprehensive structural level of the three comprised in the TERCI. At the intermediate level, power and affiliation are respectively sub-divided into four dimensions representing dominance and submissiveness, aggressiveness and agreeableness. At the most specific level, these can be further divided into eight subscales (octants; see Figure 2, p. 100).

Participants were asked to respond by "yes" or "no" to 88 statements describing interpersonal behaviours, while considering their own conduct<sup>5</sup>. Raw scores were initially weighted and summed to obtain the octant scores and were then standardized and combined to form the dimensional scores [e.g., submissiveness = modesty/self-effacement + 0.70(docility/dependence + skepticism/distrust)]. These formed the axes scores when further combined (e.g., power = dominance - submissiveness). Graphically, the location of the axis scores on the IPC indicates whether the primary patterns are utilized in an adaptive or maladaptive fashion. Axis coordinates closest the center of the circle represent adaptive modes of functioning, whereas scores plotted on the outskirts of the central area reflect maladaptive

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<sup>&</sup>lt;sup>5</sup> The TERCI comprises three additional sections, where the same 88 statements are repeated and participants are asked to consider the interpersonal conduct of their partners, mothers, and fathers. These sections are not presented here, as they are not relevant to the purpose of the present study.

patterns, becoming increasingly dysfunctional as the distance from the origin increases (see Figure 2, p. 100).

Satisfactory circumplexity (r = 0.41 for adjacent octants, r = -0.31 for opposing octants, r = 0.27 for adjacent dimensions, r = -0.27 for opposing dimensions, and r = -0.35 for the relationship between the axes)<sup>6</sup>, and strong construct validity, ranging from r = 0.76 to r = 0.88, has been reported for the TERCI. Strong test-retest reliability have been shown for the power (r = 0.84) and affiliation (r = 0.79) axes, the dimensions (ranging from r = 0.76 to r = 0.82), and the octants (ranging from r = 0.73 to r = 0.82) with the exception of skepticism/mistrust (r = 0.53). Satisfactory internal consistency (ranging from  $\lambda = 0.88$  to  $\lambda = 0.92$ ) has also been shown for the octant scales (Hould, 1980). In the present study, Guttman reliability coefficients ranged as follows: Competition/autocracy (0.43 to 0.67); management/exploitation (0.61 to 0.70); criticism/hostility (0.38 to 0.59); skepticism/mistrust (0.41 to 0.59); modesty/self-effacement (0.71 to 0.82); docility/dependence (0.45 to 0.71); generosity/normativeness (0.71 to 0.79); and friendliness/compliance (0.60 to 0.67).

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<sup>&</sup>lt;sup>6</sup> Theoretically, correlations between pairs of scales should decrease as a function of the distance between them on the circle. Perfect Circumplex factor structure would entail that the mean correlation between two scales corresponding to adjacent octants equals r = 0.70. It should equal r = 0.00 when they are separated by another octant, and r = -0.70 when two correlated octants are inserted between them. Finally, the mean correlation between two vectors representing opposite octants should be equivalent to r = -1.00.

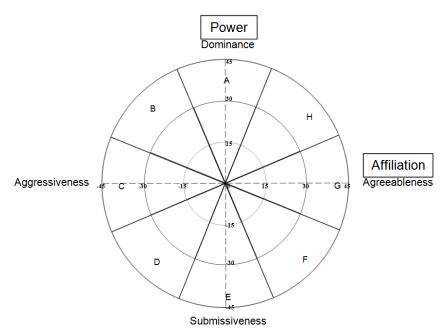


Figure 2. Interpersonal Circumplex Diagram (Hould, 1980).

Notes. ----- = Interpersonal Circumplex Axes; A = Competition/Autocracy; B = Management/Exploitation; C = Criticism/Hostility; D = Skepticism/Mistrust; E = Modesty/Self-Effacement; F = Docility/Dependence; G = Generosity/Normativeness; H = Friendliness/Compliance.

Power is represented by the vertical axis; it ranges from dominance to submissiveness.

Affiliation is represented by the horizontal axis; it ranges from aggressiveness to agreeableness.

Axis scores falling within the area of the central ring (ranging between -15 and 15), represent adaptive modes of interpersonal functioning.

Axis scores falling within the area of the second ring (ranging between -30 and -15 or between 15 and 30), represent maladaptive modes of functioning.

Axis scores falling within the area of the peripheral ring (< -30 or > 30), represent severely maladaptive modes of functioning.

# Social Anxiety

The Social Avoidance and Distress scale. The SAD (Watson & Friend, 1969) is a 28item true or false inventory, which assesses avoidance of and subjective distress in interpersonal situations. Strong test-retest reliability (r = 0.68 to r = 0.79; Leary, 1991; Watson & Friend, 1969), and internal consistency ( $\alpha = 0.77$  to  $\alpha = 0.94$ ; Leary, 1991; Oei, Kenna, & Evans, 1991; Watson & Friend, 1969) have been reported for this instrument. The French version has shown equally satisfactory internal consistency ( $\alpha = 0.91$ ; Douilliez, Baeyens, & Philippot, 2008). Cronbach alpha in the present study ranged from 0.83 to 0.93.

The Fear of Negative Evaluation questionnaire. The FNE (Watson & Friend, 1969) is a 30-item true or false inventory concerned with negative evaluations of one's self and social life. Strong test-retest reliability (r = 0.75; Watson & Friend, 1969) and internal consistency ( $\alpha = 0.72$  to  $\alpha = 0.96$ ; Leary, 1991; Oei, et al., 1991; Watson & Friend, 1969) have been found for this measure. The French version has also shown strong internal consistency ( $\alpha = 0.92$ ; Douilliez, et al., 2008). In the present study, coefficient alpha ranged from 0.85 to 0.93.

# Social Functioning

The Revised Social Adjustment Scale. The SAS-R (Schooler, Hogarty, & Weissman, 1979) is a 58-item scale that assesses social functioning in five global spheres of life – work, home, family, leisure, and general adjustment – as well as marital relations, social adjustment, and sexual adjustment. This instrument has shown strong test-retest reliability (r = 0.80; McDowell & Newell, 1996) and satisfactory internal consistency ( $\alpha = 0.74$ ; Edwards, Yarvis, Mueller, Zingale, & Wagman, 1978; McDowell & Newell, 1996). The French version has shown adequate test-retest reliability (r = 0.69 to r = 0.90; Toupin, Cyr, Lesage, & Valiquette, 1993) and internal consistency ( $\alpha = 0.39$  to  $\alpha = 0.75$ ; Waintraud, Guelfi, Lancrenon, & Rouillon, 1995). Internal consistency in the present study ranged from 0.84 to 0.86.

# General Psychopathology

The Symptom Check-List. The SCL (Derogatis, Lipman, & Covi, 1973) is a 90-item list of clinical complaints assessing subjective reports of psychopathology. Participants were asked to rate the degree to which they were bothered by each listed problem during the previous week, on a scale from 0 to 5, where 0 represents "not at all" and 5 represents "extremely". A general score for distress was tabulated. Strong test-retest reliability, ranging from r = 0.71 to r = 0.94, and satisfactory internal consistency ( $\alpha = 0.95$ ;  $\alpha = 0.96$ ) have been found (Derogatis, et al., 1973; Edwards, et al., 1978). Similarly adequate test-retest reliability (r = 0.90 to r = 0.93), and internal consistency ( $\alpha = 0.96$ ) have been shown for the French version of the test (Fortin & Coutu-Wakulczyk, 1985). In the present study, the coefficient alpha ranged from 0.96 to 0.98.

#### Clinical Status

For a more clinically meaningful outcome, participants were asked to take part in a brief clinical interview to determine whether or not they met *DSM-IV* (1994) criteria for social phobia.

#### **Procedure**

Participants were randomly assigned to a treatment condition or to a waiting list (WL) and were asked to complete the assessment battery at four time-points: One week prior to the commencement of treatment (pre-treatment), one week after its completion (post-treatment), as well as six months and one year post-treatment. WL participants were additionally assessed at the beginning of a waiting period three months prior to pre-treatment, but for ethical considerations were then reoriented towards treatment (see Figure 1, p. 96).

#### **Treatment**

Pre-Treatment Functional Analysis. Participants were individually assessed during a one-hour clinical interview aimed at identifying their self-protective patterns of behaviour in various spheres of life (e.g., work, family). From this process, a list of individual treatment targets was formulated for each participant, i.e., specific interpersonal behaviours which could be used to counter specific problem areas/situations. These guidelines made up the content of the therapy (see Stravynski, Arbel, Bounader, et al., 2000, and Stravynski, Arbel, Lachance, & Todorov, 2000, for details).

The Interpersonal Approach (IA). Therapy consisted of 12 two-hour weekly sessions conducted in groups of six to eight participants and was led by one of three principal clinical psychologists and a co-therapist, who was a clinical psychology/psychiatry trainee. The primary concern of the treatment was to help patients develop new ways of coping with the interpersonal aspects of feared situations, as well as with a wider array of interpersonal problems not necessarily related to the phobic situations. Typically, fearfully self-protective behaviours (e.g., distance-keeping, ingratiating, submission) were replaced by self-assertive and self-expressive enactments of social roles. In general, the treatment was characterized by the following four principles: First, the participants' problems were approached as difficulties in functioning in specific situations. Here, anxiousness was viewed as an element in the difficulties and not their cause. Second, all social spheres of life were considered. Third, functioning in social situations was construed interpersonally and socially (in terms of social roles), which required a continuous and active participation with others regardless of the task assigned. Fourth, therapeutic change was promoted through the practice of individualized treatment targets during sessions and their assignment as tasks to be performed in real life (see also Stravynski, 2014; 2007; Stravynski, Arbel, Bounader, et al., 2000; Stravynski, Arbel, Lachance, et al., 2000)<sup>7</sup>.

Approval for this project was granted by the Institutional Ethics Committee.

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<sup>&</sup>lt;sup>7</sup> A more elaborated description of the treatment is presented in Appendix M.

#### **RESULTS**

# **Preliminary Analyses**

Participants who Completed the Study versus Drop-Outs<sup>8</sup>

We compared participants who completed the one-year follow-up to those who dropped-out (n = 48), to determine whether they were comparable on demographic characteristics. No significant differences emerged<sup>9</sup>.

Three separate MANOVAs were conducted to examine whether both groups had similar pre-treatment TERCI scores. Using Pillai's Trace<sup>10</sup>, the groups were comparable on all levels<sup>11</sup>.

Finally, we verified whether the groups reported comparable scores on the secondary outcome measures. Separate independent-samples *t*-tests yielded no significant differences<sup>12</sup>.

Pre-Treatment versus Waiting List<sup>13</sup>

Three separate repeated-measures MANOVAs were conducted on the WL participants (n = 42) to verify whether self-protective interpersonal patterns spontaneously changed during

Axes, v = 0.01, F(2, 150) = 0.01, ns, dimensions, v = 0.01, F(4, 128) = 0.10, ns, and octants, v = 0.02, F(8, 124) = 0.24, ns.

<sup>&</sup>lt;sup>8</sup> Means and standard deviations for these comparisons are presented in Appendix N.

<sup>&</sup>lt;sup>9</sup> Age, t(131) = 0.73, ns; gender, Pearson's  $\chi^2(1) = 0.24$ , ns; marital status, Pearson's  $\chi^2(5) = 5.84$ , ns; education level, Pearson's  $\chi^2(3) = 5.09$ , ns; and employment status, Pearson's  $\chi^2(3) = 2.04$ , ns.

<sup>&</sup>lt;sup>10</sup> The *n*s of the two comparison groups were uneven (ratio: 1.77) and Levene's test of homogeneity of variance was significant for submissiveness, F(1, 31) = 4.97, p = 0.028. In accordance with Tabachnick and Fidell's (2007) recommendations, Pillai's Trace was reported for these MANOVAs, as it is a more conservative statistic.

<sup>11</sup> Axes, V = 0.01, F(2, 130) = 0.01, *ns*; dimensions, V = 0.01, F(4, 128) = 0.10, *ns*; and octants, V = 0.02, F(8, 128) = 0.10, *ns*; and octants, V = 0.02, V = 0.02

<sup>&</sup>lt;sup>12</sup> Social anxiety [SAD, t(105.26) = -0.12, ns; FNE, t(70.59) = 1.52, ns], social functioning, t(78.15) = -0.34, ns; and general distress, t(78.26) = -1.39, ns.

<sup>&</sup>lt;sup>13</sup> Means and standard deviations for these comparisons are presented in Appendix O.

a waiting period. Using Wilk's statistic, there were no significant improvements on any level<sup>14</sup>.

Separate paired-samples *t*-tests were also conducted to examine whether social anxiety, social functioning, and general psychopathology altered during a WL period. Similar non-significant differences were obtained<sup>15</sup>.

# **Principal Analyses**

Changes in Patterns of Interpersonal Behaviour over Time

Three respective repeated-measures MANOVAs were conducted to investigate whether interpersonal behavioural patterns change across the four assessment times. Using Wilk's statistic, there was a significant difference at the axis,  $\Lambda = 0.66$ , F(6, 502) = 19.23, p < 0.001,  $\eta^2 = 0.19$ ; dimensional,  $\Lambda = 0.53$ , F(12, 659.08) = 15.11, p < 0.001,  $\eta^2 = 0.19$ ; and octant,  $\Lambda = 0.50$ , F(24, 711.18) = 8.12, p < 0.001,  $\eta^2 = 0.21$ , levels over time.

Separate Univariate ANOVAs<sup>16</sup> revealed significant changes in power ( $\varepsilon = 0.99$ ), F(2.98, 250.61) = 42.17, p = 0.001,  $\omega^2 = 0.14$ ; submissiveness ( $\varepsilon = 0.90$ ), F(2.90, 243.46) = 70.93, p = 0.001,  $\omega^2 = 0.23$ ; skepticism/mistrust ( $\varepsilon = 0.99$ ), F(2.95, 248.13) = 20.33, p = 0.001,  $\omega^2 = 0.08$ ; modestly/self-effacement ( $\varepsilon = 0.95$ ), F(2.86, 240.18) = 61.62, p = 0.001,  $\omega^2 = 0.20$ ; and docility/dependence ( $\varepsilon = 1.00$ ), F(3, 251.87) = 25.65, p = 0.001,  $\omega^2 = 0.09$ , over time. Tukey HSD Pairwise comparisons revealed that, in comparison to pre-treatment, reports of behaviours related to power significantly improved at post-treatment, t(84) = -8.45, p < 0.001, d = -0.83 (means and standard deviations are displayed in Table II, p. 108). Specifically, significant declines in submissiveness, t(84) = 11.43, p < 0.001, d = 1.13; skepticism/mistrust, t(84) = 5.62, p < 0.001, d = 0.63; modesty/self-effacement, t(84) = 10.70, p < 0.001, d = 1.14;

<sup>&</sup>lt;sup>14</sup> Axes,  $\Lambda = 0.99$ , F(2, 40) = 0.15, ns; dimensions,  $\Lambda = 0.99$ , F(4, 38) = 0.07, ns; and octants,  $\Lambda = 0.71$ , F(8, 34) = 1.71, ns

<sup>&</sup>lt;sup>15</sup> SAD, t(41) = 1.35, ns; FNE, t(41) = 1.13, ns; SAS-R, t(41) = 1.18, ns; and SCL, t(41) = 0.72, ns.

<sup>&</sup>lt;sup>16</sup> Huynh-Feldt corrected degrees of freedom were reported for all follow-up Univariate analyses, as recommended by Girden (1992) when  $\varepsilon > 0.75$ .

and docility/dependence, t(84) = 6.59, p < 0.001, d = 0.70, were found. Improvements represented medium-<sup>17</sup> and large-sized effects. No significant changes were found for dominance.

Gains were maintained at follow-up, as no significant changes occurred between the post-treatment and follow-up assessments. Statistical differences (representing medium- and large-sized effects) were obtained at the six-month and one-year follow-ups in comparison to pre-treatment alone [power, t(84) = -8.11, p < 0.001, d = -0.78, t(84) = -9.24, p < 0.001, d = -0.91; submissiveness, t(84) = 10.36, p < 0.001, d = 1.12, t(84) = 11.23, p < 0.001, d = 1.16; skepticism/mistrust, t(84) = 5.25, p < 0.001, d = 0.55, t(84) = 6.86, p < 0.001, d = 0.71; modesty/self-effacement, t(84) = 10.12, p < 0.001, d = 1.16, t(84) = 9.73, p < 0.001, d = 1.09; and docility/dependence, t(84) = 6.67, p < 0.001, d = 0.72, t(84) = 6.91, p < 0.001, d = 0.82].

No significant Univariate differences were found in affiliation over time. Changes in agreeableness ( $\varepsilon = 0.89$ ), F(2.87, 241.19) = 7.15, p = 0.001,  $\omega^2 = 0.03$ ; aggressiveness ( $\varepsilon = 0.92$ ), F(2.77, 232.94) = 15.20, p = 0.001,  $\omega^2 = 0.06$ ; and criticism/hostility ( $\varepsilon = 0.96$ ), F(2.88, 241.65) = 4.81, p = 0.01,  $\omega^2 = 0.02$ , were found at the sub-pattern levels; however no other affiliative sub-patterns significantly changed over time. Tukey HSD Pairwise comparisons revealed that, in comparison to pre-treatment, participants reported a decrease in agreeable, t(84) = 4.37, p < 0.001, d = 1.35, aggressive  $^{18}$ , t(84) = 4.49, p < 0.001, d = 0.42, and critical/hostile, t(84) = 2.07, p < 0.05, d = 0.23, behaviours at post-treatment. With the exception of the changes in agreeableness, which represented a large-sized effect, effects were small-sized.

The gains were maintained at both follow-ups. Six-month and one-year follow-up scores on agreeableness [t(84) = 3.92, p < 0.001, d = 0.38; t(84) = 2.85, p < 0.01, d = 0.31]; aggressiveness [t(84) = 4.91, p < 0.001, d = 0.42; t(84) = 5.35, p < 0.001, d = 0.46); and criticism/hostility [t(84) = 3.01, p < 0.01, d = 0.32; t(84) = 3.17, p < 0.01, d = 0.33]

<sup>&</sup>lt;sup>17</sup> Cohen's (2003) criteria for small (d = 0.20), medium (d = 0.50), and large (d = 0.80) effect sizes were used to determine the magnitude of the significant differences.

Mauchly's test indicated that the assumption of sphericity had been violated for aggressiveness,  $\chi^2(5) = 0.84$ , p < 0.05. Bonferroni Pairwise comparisons were therefore reported.

significantly differed from pre-treatment only; the differences corresponded to small-sized effects.

Changes in Social Anxiety, Social Functioning, and General Psychopathology over Time

Separate repeated-measures ANOVAs were conducted to investigate the change in the secondary outcome measures across the four measurement times<sup>19</sup>. Significant differences in social anxiety [SAD ( $\varepsilon = 0.86$ ), F(2.59, 217.55) = 112.07, p = 0.001,  $\omega^2 = 0.34$ ; FNE ( $\varepsilon = 0.82$ ), F(2.46, 206.87) = 71.59, p = 0.001,  $\omega^2 = 0.26$ ]; impairment in social functioning ( $\varepsilon = 0.82$ ), F(2.45, 205.63) = 30.18, p = 0.001,  $\omega^2 = 0.13$ ; and severity of psychopathology ( $\varepsilon = 0.69$ ), F(2.07, 173.92) = 60.51, p = 0.001,  $\omega^2 = 0.26$ , were obtained.

Bonferroni Pairwise comparisons<sup>20</sup> revealed that, in comparison to pre-treatment, a significant improvement in social anxiety [SAD, t(84) = 13.65, p < 0.001, d = 1.62; FNE, t(84) = 10.76, p < 0.001, d = 1.42]; social functioning, t(84) = 7.96, p < 0.001, d = 0.72; and general psychopathology, t(84) = 9.46, p < 0.001, d = 1.09, was found at post-treatment (see Table II, p. 108, for means and standard deviations). The magnitude of change reflected medium- and large-sized effects.

The gains were maintained at the six-month and one-year follow-ups. Significant differences (corresponding to medium- and large-sized effects) were obtained only in comparisons with pre-treatment scores [SAD, t(84) = 13.29, p < 0.001, d = 1.54, t(84) = 12.73, p < 0.001, d = 1.52; FNE, t(84) = 10.33, p < 0.001, d = 1.33, t(84) = 10.06, p < 0.001, d = 1.33; SAS, t(84) = 6.61, p < 0.001, d = 0.63, t(84) = 5.97, p < 0.001, d = 0.63; SCL, t(84) = 8.88, p < 0.001, d = 1.01, t(84) = 8.79, p < 0.001, d = 1.02].

in conformity with recommendations when  $\varepsilon$  < 0.75 (Girden, 1992).

Mauchly's test indicated that the assumption of sphericity had been violated for the SAD,  $\chi^2(5) = 0.74$ , p < 0.001; FNE,  $\chi^2(5) = 0.66$ , p < 0.001; SAS-R,  $\chi^2(5) = 0.66$ , p < 0.001; and SCL,  $\chi^2(5) = 0.53$ , p < 0.001; Bonferroni Pairwise comparisons were therefore conducted for more conservative analyses.

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 $<sup>^{19}</sup>$  Huynh-Feldt corrected degrees of freedom were reported for the repeated-measures ANOVAs conducted on social anxiety and social functioning, as recommended when  $\epsilon > 0.75$  (Girden, 1992). We reported Greenhouse-Geisser corrected degrees of freedom for the repeated-measures ANOVA conducted on general psychopathology

Table II

Means and Standard Deviations of Patterns of Interpersonal Behaviour, Social Anxiety, Social Functioning, and General Psychopathology over Time

|                        | Pre-                        | Post-                      | Six-Month                  | One-Year                   |
|------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|
|                        | Treatment                   | Treatment                  | Follow-Up                  | Follow-Up                  |
|                        | M (SD)                      | M (SD)                     | M (SD)                     | M (SD)                     |
| PO                     | -15.99 <sub>a</sub> (16.08) | -2.39 <sub>b</sub> (16.58) | 3.91 <sub>b</sub> (14.92)  | -2.07 <sub>b</sub> (14.63) |
| $\mathbf{A}\mathbf{F}$ | 9.44 (17.17)                | 9.64 (14.09)               | 10.15 (13.59)              | 11.15 (13.55)              |
| DOM                    | 26.59 (9.96)                | 25.75 (9.10)               | 24.56 (9.41)               | 25.93 (8.65)               |
| AGG                    | 27.97 <sub>a</sub> (11.97)  | $23.59_b$ (8.47)           | $23.02_b$ (9.39)           | $23.78_b$ (8.89)           |
| SUB                    | 42.58 <sub>a</sub> (12.51)  | 28.13 <sub>b</sub> (13.07) | 28.47 <sub>b</sub> (12.76) | 27.99 <sub>b</sub> (12.63) |
| AGR                    | 37.41 <sub>a</sub> (11.35)  | 33.23 <sub>b</sub> (11.12) | 33.17 <sub>b</sub> (11.26) | 33.92 <sub>b</sub> (10.94) |
| A                      | 9.05 (5.87)                 | 8.85 (5.05)                | 8.51 (5.59)                | 8.85 (4.64)                |
| В                      | 11.86 (7.36)                | 10.94 (5.75)               | 10.41 (5.80)               | 10.84 (6.04)               |
| C                      | $10.21_a$ (6.28)            | $8.94_b$ (4.83)            | $8.46_b$ (4.38)            | $8.44_b$ (4.33)            |
| D                      | $13.51_a$ (6.17)            | $9.99_b$ (4.84)            | $10.39_b$ (5.24)           | $9.66_b$ (4.57)            |
| E                      | $20.65_a$ (7.64)            | $11.51_b$ (8.36)           | $11.68_b$ (7.80)           | $11.89_b$ (8.36)           |
| F                      | $17.82_a$ (5.87)            | $13.76_b$ (5.65)           | $13.60_b$ (5.79)           | $13.34_b$ (5.07)           |
| G                      | 15.69 (6.77)                | 14.35 (6.96)               | 14.88 (6.60)               | 15.09 (6.96)               |
| Н                      | 13.20 (6.09)                | 13.20 (5.46)               | 12.53 (5.11)               | 13.56 (5.35)               |
| SAD                    | $21.08_a$ (5.36)            | $11.02_b$ (6.93)           | $11.25_b$ (7.27)           | $11.05_b$ (7.61)           |
| FNE                    | $25.02_a$ (3.87)            | $16.51_b$ (7.52)           | $16.99_b$ (7.62)           | $16.71_b$ (7.92)           |
| SAS-R                  | $1.44_a$ (0.33)             | $1.22_b$ (0.28)            | $1.24_b$ (0.30)            | $1.24_b$ (0.30)            |
| SCL                    | $0.90_a$ (0.54)             | $0.41_b$ (0.33)            | $0.45_{b}$ (0.33)          | $0.44_b$ $(0.34)$          |

Notes. N = 85.

PO = Power; AF = Affiliation; DOM = Dominance; AGG = Aggressiveness; SUB = Submissiveness; AGR = Agreeableness; A = Competition/Autocracy; B = Management/Exploitation; C = Criticism/Hostility; D = Skepticism/Mistrust; E = Modesty/Self-Effacement; F = Docility/Dependence; G = Generosity/Normativeness; H = Friendliness/Compliance; SAD = Social Avoidance and Distress; FNE = Fear of Negative Evaluation; SAS-R = Social Adjustment Scale – Revised; SCL = Symptom Check-List. Means with a different subscript differ significantly at p < 0.05 or better.

Means with the same subscript or with no subscript do not differ significantly.

At the one-year follow-up, 58% of participants were judged to no longer fulfill *DSM-IV* (APA, 1994) criteria for social phobia (n = 48), whereas the remaining 42% were considered socially phobic  $(n = 35)^{21}$ .

Three respective MANOVAs were conducted on the TERCI axes, dimensions, and octants comparing remitted and non-remitted participants. Using Pillai's Trace<sup>22</sup>, there were significant differences between the two groups at the axis, V = 0.24, F(2, 80) = 12.34, p < 0.001,  $\eta^2 = 0.24$ , dimensional, V = 0.24, F(4, 78) = 6.05, p < 0.001,  $\eta^2 = 0.24$ , and octant, V = 0.26, F(8, 74) = 3.27, p = 0.003,  $\eta^2 = 0.26$ , levels.

Follow-up analyses revealed that remitted participants reported a significantly larger degree of improvement in patterns of behaviour related to power than their non-remitted counter-parts, F(1, 81) = 21.05, p < 0.001, d = 1.02. Specifically, they reported significantly less submissiveness, F(1, 81) = 14.36, p < 0.001, d = 0.84; and modesty/self-effacement, F(1, 81) = 17.50, p < 0.001, d = 0.93. The differences represented large-sized effects. No other self-protective pattern significantly differentiated the groups. Means and standard deviations are displayed in Table III (p. 111).

Independent-samples t-tests were conducted to test the between-group differences in social anxiety, social functioning, and general psychopathology. Remitted participants reported significantly less anxiety [SAD, t(81) = -6.58, p < 0.001, d = -1.46; FNE, t(80.97) = -4.46, p < 0.001, d = -0.94], and distress related to general psychopathology, t(81) = -3.17, p < 0.01, d = -0.71, than non-remitted participants; the differences corresponded to medium- and

Levene's test of homogeneity of variance was significant for power, F(1, 81) = 7.68, p = 0.007, and modesty/self-effacement, F(1, 81) = 8.49, p = 0.005, suggesting that there is heterogeneity of the variance. In accordance with Tabachnick and Fidell's (2007) recommendations, Pillai's Trace was therefore reported. Bonferroni corrections were also applied to the separate follow-up Univariate analyses for a more conservative alpha level.

Diagnostic information was missing for two participants; therefore analyses comparing participants in remission to those considered socially phobic were conducted with n = 83.

Levene's test of homogeneity of variance was significant for power, F(1, 81) = 7.68, p = 0.007, and

large-sized effects. No significant differences were reported in terms of social functioning (means and standard deviations are displayed in Table III, p. 111).

Table III

Means and Standard Deviations of Patterns of Interpersonal Behaviour, Social Anxiety, Social Functioning, and General Psychopathology in Remitted and Non-Remitted Participants at the One-Year Follow-Up

|         | Remission                         |         | Social Phobia   |         |
|---------|-----------------------------------|---------|-----------------|---------|
|         | $\underline{\hspace{1cm}}$ $(n =$ | 48)     | (n = 35)        |         |
|         | $\underline{\hspace{1cm}}$        | (SD)    | <u> </u>        | (SD)    |
| PO      | $3.69_{a}$                        | (10.58) | $-9.81_{b}$     | (16.23) |
| AF      | 12.54                             | (11.87) | 9.92            | (15.67) |
| DOM     | 27.45                             | (8.91)  | 23.91           | (7.90)  |
| AGG     | 22.14                             | (8.50)  | 23.40           | (9.28)  |
| SUB     | $23.76_{a}$                       | (10.58) | $33.73_{b}$     | (13.37) |
| AGR     | 34.68                             | (10.92) | 33.33           | (11.08) |
| A       | 9.65                              | (4.95)  | 7.91            | (4.12)  |
| В       | 11.19                             | (5.75)  | 10.17           | (6.11)  |
| C       | 8.31                              | (4.05)  | 8.54            | (4.83)  |
| D       | 8.56                              | (4.61)  | 11.06           | (4.19)  |
| E       | $8.85_a$                          | (6.22)  | $16.03_{\rm b}$ | (9.40)  |
| F       | 12.73                             | (4.91)  | 14.23           | (5.36)  |
| G       | 15.79                             | (6.87)  | 14.49           | (7.01)  |
| H       | 14.25                             | (5.67)  | 12.69           | (4.96)  |
| SAD     | $7.17_{a}$                        | (6.31)  | $16.31_{b}$     | (6.17)  |
| FNE     | $13.92_{a}$                       | (8.00)  | $20.63_{b}$     | (5.70)  |
| SAS-R   | 1.24                              | (0.31)  | 1.25            | (0.29)  |
| SCL     | $0.35_{a}$                        | (0.29)  | $0.58_{\rm b}$  | (0.37)  |
| 17 . DO | D 4.E                             | 4 0011  | DOM D .         | 1.00    |

Notes. PO = Power; AF = Affiliation; DOM = Dominance; AGG = Aggressiveness; SUB = Submissiveness; AGR = Agreeableness; A = Competition/Autocracy; B = Management/Exploitation; C = Criticism/Hostility; D = Skepticism/Mistrust; E = Modesty/Self-Effacement; F = Docility/Dependence; G = Generosity/Normativeness; H = Friendliness/Compliance; SAD = Social Avoidance and Distress; FNE = Fear of Negative Evaluation; SAS-R = Social Adjustment Scale - Revised; SCL = Symptom Check-List.

Means with a different subscript differ significantly at p < 0.05 or better. Means with the same subscript or with no subscript do not differ significantly.

#### DISCUSSION

Overall, socially phobic participants reported less powerlessness and submissiveness (including its sub-patterns), than they did prior to treatment. Consequently, results supported the hypothesis that self-protectiveness was meaningfully diminished after treatment. These gains were maintained up to one year after the end of treatment.

It is noteworthy that although the broader pattern of powerlessness improved post-treatment, dominance, and competition/autocracy remained stable. This is further highlighted when the change in power is examined qualitatively on the IPC. As illustrated in Figure 3 (p. 113), participants reported behaving in a less powerless fashion after treatment; their original maladaptive pattern gravitated towards the center of the circle into the adaptive area of functioning. They did not however report engaging in powerful behaviours, as the shift in behaviour did not cross into the superior region of the circle. It is possible that the self-protective mode of functioning adapted by socially phobic individuals dissipates into a "non-protective" mode (e.g., less powerlessness, self-effacement) after treatment, but does not penetrate the threshold into normative functioning, in which a larger repertoire of interpersonal stances, including expressions of power, can potentially be explored.

In line with our prediction, self-protectiveness was shown to dissolve in individuals who no longer met criteria for social phobia at follow-up. Relatively, these individuals reported less powerlessness, submissiveness, and modesty/self-effacement than non-remitters. A more striking distinction is evident when group differences are assessed in absolute terms. As depicted in Figure 4 (p. 113), the remitted group shifted into the superior quadrant of the IPC, suggesting the use of power*ful* behaviours, whereas the non-remitted group's location remained unaltered, indicating a continued, although adaptive, use of power*less* behaviour.

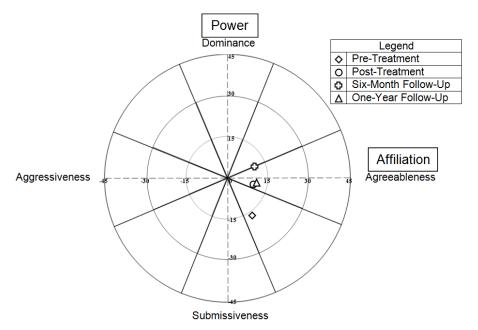


Figure 3. Interpersonal Axis Means at Pre-Treatment, Post-Treatment, Six-Month Follow-Up, and One-Year Follow-Up Plotted onto the IPC Area.

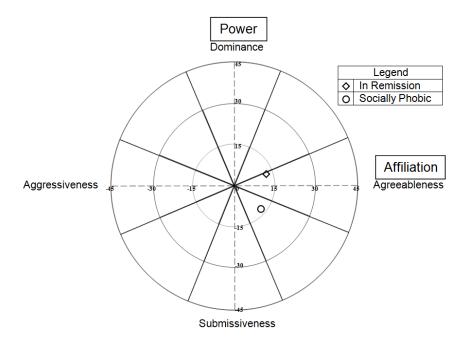


Figure 4. Interpersonal Axis Means of Participants in Remission and Participants Considered Socially Phobic at the One-Year Follow-Up Plotted onto the IPC Area.

In general, these results indirectly support the postulate that an overall self-protective interpersonal pattern is characteristic of social phobia (Stravynski, 2014; 2007), as self-protectiveness was shown to dissipate following treatment, especially when remission was achieved. The findings are also consistent with previous studies that have lent support to an interpersonal conceptualization of social phobia (Amado, et al., 2014; Kyparissis, et al., 2014; Russell, et al., 2011; Stangier, et al., 2006).

No specific predictions were made in terms of affiliative- and agreeable-type patterns. Results showed that the overarching pattern of affiliation remained unchanged over time. Specifically however, agreeable, aggressive, and critical/hostile sub-patterns were reported to a lesser degree at post-treatment; the changes, although of little magnitude, were maintained one year later. No differences on any of these patterns were however found between remitted and non-remitted participants. Graphically, participants were located on the agreeable quadrant of the IPC, within the adaptive area of functioning, at each of the four assessment times (see Figure 3, p. 113), in equivalent fashion for remitters and non-remitters (see Figure 4, p. 113).

Consistent with theory, the results suggest that socially phobic individuals may engage in agreeable-type behaviours; however, these appear to be adaptive and comparable to those of remitted individuals, thus not necessarily operating as a means of self-protection. Similarly, previous studies have shown that socially phobic participants reported behaving in an agreeable and affiliative manner (Cain, Pincus, & Holtforth, 2010; Kachin, Newman, & Pincus, 2001), albeit in similar degrees to normal (Kyparissis, et al., 2014; Russell, et al., 2011) and depressed (Stangier, et al., 2006) controls. Further research is however needed to determine with more confidence whether or not agreeable and/or affiliative behavioural styles are characteristic of the socially phobic pattern.

Results supported the prediction that social anxiety, global impairment in social functioning, and general psychopathology would improve post-treatment and that the gains would be maintained one year later. As no direct intervention aiming for anxiety reduction was implemented during treatment, these findings likely provide support for the postulate that

anxiety decreases in concordance with the shrinking of self-protectiveness (Stravynski, 2014; 2007). The present study replicated findings from a pilot study of five clinical cases (Stravynski, Arbel, Lachance, et al., 2000) and the original IA outcome study (Stravynski, Arbel, Bounader, et al., 2000), which found a decrease in anxiousness post-treatment that was maintained at least one year later. Our findings are also consistent with a long-term follow-up study (Gibbs, Stravynski, & Lachance, 2014), which found similar improvements maintained eight to fifteen years post-treatment. It is however possible that other therapeutic processes (e.g., exposure to social situations, involvement in therapy), may have also influenced the improvement in social anxiety. As no contrast treatment group (e.g., exposure alone) was included in the present study, the relationship between anxiety reduction and improvement in self-protectiveness after IA treatment requires further investigation. Future studies controlling for the influence of additional therapeutic processes are thus warranted. A study directly examining the fluctuation of anxiousness as a function of self-protectiveness over time is also needed.

Findings also revealed that remitted participants reported less social anxiety and distress related to general psychopathology than non-remitted participants. Contrary to expectations and to results indicating that specific patterns of self-protective behaviours remained more problematic for those still considered socially phobic than remitted participants; social functioning improved equally for both groups. These results are consistent with previous findings showing that non-remitted participants reported worse social functioning than remitted participants in only one of eight spheres of life (Stravynski, Arbel, Bounader, et al., 2000). A possible explanation for these seemingly contradictory findings is in the definition of improvement. Behaviours considered improved on a clinical level and schematically on the IPC (e.g., less submissiveness, docility), may create conflict in relationships (e.g., marital, work) and are consequently recorded as deteriorations on the SAS-R (Schooler, et al., 1979). An instrument reconciling this discrepancy is needed.

A limitation of the current study is that some of the TERCI octant scales (e.g., competition/autocracy, criticism/hostility), which normally possess good internal consistency (Hould, 1980), were less reliable than usual. In considering Hould's conclusion that the

dimensional scales are generally more psychometrically sound than their sub-scales, as they assess a wider array of interpersonal behaviours, we do not believe that our results were biased, because large-sized effects were generally obtained for differences at the dimensional and axis levels. Another limitation is that information was gathered solely through self-report. In general, further studies are needed to replicate the present findings; however it would be especially valuable to observe the self-protective socially phobic patterns *in vivo* (e.g., Amado, et al., 2014) with a sufficiently large participation pool as to allow for more ecologically valid and generalizable results.

Finally, post-treatment self-protectiveness (or the lack thereof) should theoretically be equivalent to normative social functioning, especially if remission is achieved. This notion has found preliminary support in currently unpublished data (Kyparissis, 2014)<sup>23</sup>, which showed that socially phobic participants who achieved remission after treatment are statistically equivalent to normal individuals in terms of interpersonal functioning. It would however be interesting on a clinical level to further this investigation by examining the clinical significance of the differences (e.g., Jacobson, Roberts, Berns, & McGlinchey, 1999).

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<sup>&</sup>lt;sup>23</sup> These results are presented in Chapter 7.

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## Chapter 7

#### **Additional Results**

To further the investigation into the notion that the socially phobic pattern is uniquely characterized by powerlessness and submissiveness, the interpersonal behavioural patterns characterizing the socially phobic participants who successfully completed the one-year follow-up after receiving a treatment of an interpersonal approach (n = 85) were compared to those of the normative sample of participants (n = 105). We also sought to compare the patterns of interpersonal behaviour found in the remitted (n = 48) and non-remitted (n = 35) participants at the one-year follow-up to those found in the normative sample. A more detailed description of each of these samples was presented in Chapters 5 and 6.

Socially Phobic Participants One Year Post-Treatment versus Normal Participants

Three separate between-subject MANOVAs were conducted to compare socially phobic participants at the one-year follow-up to a normative control sample on TERCI axis, dimensional, and octant scores. Using Wilk's statistic, there was a significant difference between the two groups at the axis level,  $\Lambda = 0.94$ , F(2, 187) = 5.84, p < 0.01,  $\eta^2 = 0.06$ . Pillai's Trace<sup>1</sup> also revealed significant differences at the dimensional, V = 0.12, F(4, 185) = 6.50, p < 0.001,  $\eta^2 = 0.12$ , and octant, V = 0.15, F(8, 181) = 4.02, p < 0.001,  $\eta^2 = 0.15$ , levels.

Separate Univariate ANOVAs revealed that socially phobic participants reported a higher degree of powerlessness at the one-year follow-up than the normal group, F(1, 188) = 10.59, p < 0.01, d = -0.48; the difference represented a small-sized effect<sup>2</sup>. More specifically, they reported a lesser degree of dominance, F(1, 188) = 10.59, p < 0.01, d = -0.63, and

Levene's test of homogeneity of variance was significant for dominance, F(4, 185) = 8.14, p = 0.005, competition/autocracy, F(1, 188) = 5.73, p = 0.018; skepticism/mistrust, F(1, 188) = 7.16, p = 0.008; docility/dependence, F(1, 188) = 6.93, p = 0.009; and friendliness/compliance, F(1, 188) = 9.23, p = 0.003. In accordance with Tabachnick and Fidell's (2007) recommendations, Pillai's Trace was reported for these MANOVAs, as it is a more conservative statistic. Bonferroni corrections were also applied to the separate follow-up Univariate analyses for a more conservative alpha level.

<sup>&</sup>lt;sup>2</sup> Cohen's (2003) criteria for small (d = 0.20), medium (d = 0.50), and large (d = 0.80) effect sizes were used to determine the effects of the group differences.

competition/autocracy, F(1, 188) = 10.90, p < 0.01, d = -0.48, than the normative group; the differences corresponded to medium and small effect sizes. No significant differences were found in terms of submissiveness and modesty/self-effacement. Means and standard deviations were displayed in Chapters 5 (Table II, p. 74) and 6 (Table II, p. 108).

No significant difference was found between the two groups regarding affiliation, F(1, 188) = 0.41, ns. Socially phobic participants however reported lower levels of aggressiveness, F(1, 188) = 7.39, p < 0.01, d = -0.40, and criticism/hostility, F(1, 188) = 5.27, p < 0.01, d = -0.41, at the one-year follow-up than normal participants. Paradoxically, they also reported a lesser degree of agreeableness, F(1, 188) = 10.06, p < 0.01, d = -0.046, and friendliness/compliance, F(1, 188) = 14.33, p < 0.001, d = -0.055. The differences represented small- and medium-sized effects. No other Univariate differences were found.

Remitted and Non-Remitted Participants One Year Post-Treatment versus Normal Participants

Three separate between-subject MANOVAs were conducted to determine respectively whether the three groups differed on TERCI axis, dimensional, and octant scores. Using Pillai's Trace<sup>3</sup>, there were significant differences between the groups at the axis, V = 0.13, F(4, 370) = 6.69, p < 0.001,  $\eta^2 = 0.07$ , dimensional, V = 0.21, F(8, 366) = 5.28, p < 0.001,  $\eta^2 = 0.10$ , and octant, V = 0.24, F(16, 358) = 3.01, p < 0.001,  $\eta^2 = 0.12$ , levels. Follow-up Univariate analyses showed that power, F(2, 185) = 12.72, p < 0.001; dominance, F(2, 185) = 10.47, p < 0.001; submissiveness, F(2, 185) = 6.76, p < 0.01; competition/autocracy, F(2, 185) = 6.05, p < 0.01; modesty/self-effacement, F(2, 185) = 10.90, p < 0.001; and friendliness/compliance, F(2, 185) = 7.55, p < 0.01, significantly differentiated the groups. No other Univariate differences were found.

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<sup>&</sup>lt;sup>3</sup> The *n*s of the comparison groups were uneven (ratio: 3.00) and Levene's test of homogeneity of variance was significant for dominance, F(2, 185) = 4.87, p = 0.009; competition/autocracy, F(2, 185) = 3.53, p = 0.031; skepticism/mistrust, F(2, 185) = 4.91, p = 0.008; modesty/self-effacement, F(2, 185) = 3.75, p = 0.025; docility/dependence, F(2, 185) = 3.06, p = 0.049; and friendliness/compliance, F(2, 185) = 4.90, p = 0.008. In accordance with Tabachnick and Fidell's (2007) recommendations, Pillai's Trace was reported for these MANOVAs, as it is a more conservative statistic. Bonferroni corrections were also applied to the separate follow-up Univariate analyses for a more conservative alpha level.

Bonferroni post-hoc t-tests revealed that non-remitted participants reported, on average, a significantly higher degree of powerlessness than either the remitted, t(80) = -3.81, p < 0.01, d = -1.02, or normal groups, t(137) = -5.00, p < 0.001, d = -0.89, who did not differ. Specifically, they reported a higher degree of submissiveness and modesty/self-effacement than either of the other two groups [Remitted: t(80) = 3.62, p < 0.01, d = 0.84, and t(80) = 4.21, p < 0.001, d = 0.93, respectively; normative: t(137) = 2.88, p < 0.01, d = 0.54, and t(137) = 4.29, p < 0.001, d = 0.79, respectively], who did not differ. Additionally, the non-remitted participants reported lower levels of dominance, t(137) = 4.26, p < 0.001, d = -0.80, and competition/autocracy, t(137) = -3.31, p < 0.01, d = -0.62, than the normal, but not the remitted group (who was not significantly different from the normal group). The differences corresponded to medium and large effect sizes. Means and standard deviations were displayed in Chapters 5 (Table II, p. 74) and 6 (Table II, p. 108).

Affiliation did not significantly differentiate the groups. Similar non-significant results were obtained at the dimensional and octant sub-pattern levels, with the exception that non-remitted participants reported a smaller degree of friendliness/compliance than the normal group, t(137) = -3.54, p < 0.01, d = -0.67. No other significant differences were obtained.

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# -PART III-GENERAL DISCUSSION

#### Chapter 8

# **An Integration of the Findings**

Review of the Purpose of the Study

The purpose of the present study was to test postulates drawn from an interpersonal conceptualization of social phobia (Stravynski, 2014; 2007). Three main notions were tested:

- 1) I examined the view that the overall socially phobic pattern is characterized by specific self-protective patterns of powerlessness and submissiveness;
- 2) I explored whether other interpersonal patterns i.e., affiliation, agreeableness, and aggressiveness also characterize the socially phobic pattern; and
- 3) I examined the postulate that self-protective behaviours and anxiousness are facets of the socially phobic pattern.

Two studies were devised to test the interpersonal conceptualization of social phobia:

The first study compared the self-reported interpersonal behaviours of social phobic individuals to those of normal and single sexually dysfunctional individuals. The relationship between socially phobic patterns of behaviour and self-reported social anxiety, general distress, and impairment in social functioning were also examined.

The second study examined the interpersonal behaviours of social phobic individuals prior to treatment guided by an interpersonal approach (IA), immediately after treatment, as well as at a six-month and a one-year follow-up assessment time. The change in subjective distress over time was also examined. The self-reported interpersonal patterns of participants in remission one year post-treatment were also compared to those of participants still considered socially phobic. The two groups were also compared on measures of social anxiety, general distress, and impairment in social functioning.

Additional analyses were also conducted comparing the interpersonal patterns of socially phobic individuals at the one-year follow-up to those of the normative control group. More specifically, the interpersonal patterns of remitted and non-remitted participants from Study 2 were contrasted to those of the normal control participants from Study 1.

# Summary of the Findings

In general, the findings from the current research project provide support for an interpersonal conceptualization of social phobia (Stravynski, 2014; 2007). More specifically:

1) Results support the notion that the overall socially phobic pattern is characterized by specific self-protective patterns of powerlessness and submissiveness.

Results from the first study showed that socially phobic individuals reported engaging in patterns of powerlessness and submissiveness to a larger extent than normal and single sexually dysfunctional individuals. Qualitatively, they tended to use these patterns in a moderately more maladaptive and self-protective way, in comparison to the two contrast groups.

Furthermore, powerlessness and submissiveness were shown to improve meaningfully after treatment in the second study and the gains were maintained up to one year after the end of treatment. In comparison to pre-treatment, the mode of functioning of socially phobic individuals shifted from maladaptive to adaptive. Results from the one-year follow-up assessment time revealed that remitted participants reported less powerlessness and submissiveness than non-remitted participants. Although both groups were found to use these patterns adaptively, remitted participants reported the use of powerful behaviours, whereas the non-remitted group reported a continued use of powerless behaviour.

Results from the supplementary analyses showed that the socially phobic participants reported a higher level of powerlessness one year after receiving treatment than the normative control group. The two groups however did not differ in terms of submissiveness. Similarly,

non-remitted participants reported a higher degree of powerlessness and submissiveness than the normal participants; however the remitted group did not differ from the normal group on these behavioural patterns. These results suggest that participants who achieve remission after treatment are comparable to normal individuals in terms of interpersonal functioning, thus providing additional support to the uniqueness of the overall self-protective pattern in social phobia.

As discussed in Chapters 5 and 6, these findings are consistent with previously conducted studies providing support for the notion that the socially phobic pattern is characterized by powerlessness (lack of dominance) and submissiveness (Amado, Kyparissis, & Stravynski, 2014; Cain, Pincus, & Holtforth, 2010; Kachin, Newman, & Pincus, 2001; Russell, Moskowitz, Zuroff, Bleau, Pinard, et al., 2011; Stangier, Esser, Leber, Risch, & Heidenreich, 2006). The findings are also congruent with results from another study (Weisman, Aderka, Marom, Hermesh, & Gilboa-Schechtman, 2011), which compared 42 socially phobic individuals to 47 normal control participants on their submissive behaviours, and experiences in close relationships. Results showed that, in comparison to the normative group, the socially phobic participants reported a significantly higher degree of submissiveness, as well as a self-protective tendency to distance themselves from romantic partners and close friends.

 Results from the exploratory analyses suggest that behaviours represented on the affiliation axis are not part of the socially phobic pattern, as they are not used selfprotectively.

In the first study, affiliation did not generally differentiate the socially phobic from the normal group at any level. Qualitatively, both groups used agreeableness in an adaptive fashion. In comparison to the sexually dysfunctional singles however, the socially phobic reported displaying less affiliative and agreeable-type behavioural patterns. They however did not differ in terms of aggressiveness.

In the second study, affiliation remained unchanged over time. Agreeableness and aggressiveness were however reported to a lesser degree at post-treatment; the changes were maintained up to the one-year follow-up. No differences on any of these patterns were however found between participants in remission and those still considered socially phobic at the one-year follow-up. In similarity to the results from Study 1, participants displayed adaptive agreeable behaviour at each of the four assessments times, in equivalent fashion for remitted and non-remitted participants.

The additional comparisons showed that one year post-treatment, the socially phobic group did not differ in terms of affiliation in comparison to the normative group. They however reported a lower degree of aggressiveness and agreeableness. More specifically, remitted, non-remitted, and normal participants generally did not differ on affiliative, agreeable, and aggressive patterns.

Results in the literature are largely conflicting on the issue of whether affiliation, agreeableness, and/or aggressiveness characterize social phobia (Cain, et al., 2010; Kachin, et al., 2001; Russell, et al., 2011; Stangier, et al., 2006). Altogether however, the findings seem to suggest that these patterns are utilized by socially phobic individuals in an adaptive rather than a self-protective manner, as do normative control subjects.

3) Results are generally consistent with the notion that social anxiety and general distress are interrelated with self-protective patterns of powerlessness and submissiveness in social phobia.

Social anxiety and general psychopathology were found to be related to interpersonal patterns characterized primarily by powerlessness, submissiveness, and modestly/self-effacement in the first study. In the second study, results showed that social anxiety, global impairment in social functioning, and general psychopathology improved after treatment and that the gains were maintained one year later. Findings also revealed that remitted participants reported less social anxiety and distress related to general psychopathology than non-remitted participants. These improvements occurred in parallel to improvements in self-protectiveness.

In consistency, previous studies have also found a relationship between self-protectiveness and social anxiety (Davila & Beck, 2008; Russell, et al., 2011).

Caution is however warranted in the interpretation of the current results, as various other therapeutic processes that may have also influenced the progress in social anxiety after treatment, were not controlled for (e.g., exposure to social situations) in the second study.

It is interesting to note however, that patterns characterized by power, dominance, and competition/autocracy were unexpectedly not found to be negatively related to social anxiety and general distress. Therefore, although it appears that a heightened level of arousal characterized by social anxiety and general distress facilitates self-protective acts of commission, it does not necessarily activate the organism to engage in self-protective acts of omission (see also Stravynski, 2014).

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#### Chapter 9

## The Findings in Relation to the Literature

The current findings in relation to studies previously conducted in the literature were discussed in Chapters 5 and 6 and were reviewed in Chapter 8. In this chapter, we however wish to widen the discussion. We will first draw a parallel between the current findings and an evolutionary model of social interactions. In general however, it is difficult to integrate the present results into the majority of the literature as the received conceptualization of social phobia is one that equates it to a "disorder of anxiety". We will nevertheless briefly review the three main existing intrapersonal views of social phobia and we will emphasize their limitations as a means to strengthen the importance of an alternative integrative account of social phobia and our findings.

## An Evolutionary Model of Social Interactions

Trower and Gilbert (1989) applied an ethological model of primate behaviour to describe human social interactions. Basically, they theorized that, over the course of evolution, socially phobic individuals developed a tendency to over-utilize a defensive style of social interaction characterized by submissiveness, and under-utilize a more cooperative method of relating to others (affiliation). The current findings can be lent to this model as supporting evidence to the notion that social phobia is characterized by a defensive interactional style. The previously described study by Russell, Moskowitz, Zuroff, Bleau, Pinard, and colleagues (2011), which showed that social phobia is characterized by a defensive pattern of submissiveness, was partly conducted within the framework of this theory. Similarly, another study (Walters & Hope, 1998) assessed the verbal and non-verbal behaviours of 53 socially phobic and 28 normal individuals during a simulated conversation with a stranger. Results revealed that socially phobic participants displayed less dominance than normal participants, in two out of six behaviours (giving more commands and bragging), and less cooperativeness, in two out of four possible behaviours (verbal praise, and facing the other person). No differences between the two groups were however found on three submissive (agreement, gaze aversion, and requesting information) and three escape/avoidance (escape, clutching, and

looking at the experimenter) behaviours. In contrast to the current research endeavour however, this study examined specific behaviours that comprise the larger interpersonal pattern, as opposed to the patterns themselves. As it was suggested in Chapter 3, this approach to the quantification of social behaviour fails to draw an accurate portrait of the larger socially phobic pattern.

In general, the social interactions model (Trower & Gilbert, 1989) shares a common principle with the interpersonal approach to the conceptualization of social phobia (Stravynski, 2014; 2007) in that both models emphasize the uniqueness of self-protective patterns of behaviour in social phobia. The core theoretical disparity between the two views however lies in the fact that the former is built on an intrapersonal framework. It is considered a bio-psychosocial model of social phobia, whereby socially phobic individuals are thought to be biologically wired – through an evolutionary process – to become anxious in threatening social situations, which in turn probes them to act defensively. Therefore, although our results support the notion of a defensive socially phobic interactional style, our reading of these results remains at the interpersonal level; they are not interpreted as signifying built-in predispositions towards anxiety as postulated by this evolutionary model.

On a broader theoretical level, it is generally difficult to integrate the present findings to the majority of the existing literature as, in similarity to Trower and Gilbert's (1989) model, it attempts to explain and study the construct of social phobia through intrapersonal rather than interpersonal lenses. Three main intrapersonal perspectives of social phobia have been elaborated and widely examined in the literature: These, briefly described below, respectively view social phobia as a deficit in social skills, as the consequence of cognitive distortions, or as a disturbance caused by a neurobiological unbalance or genetic defect.

#### A Social Skills Deficits Model of Social Phobia

According to the social skills deficits model, social phobia is the result of an absence of or deficiency in social skills that would otherwise enable adequate functioning in the social environment (Curran, 1979). A variation to this view is that although socially phobic

individuals possess the skills that would allow them to function properly in social situations, their ability to enact skillful behaviour is inhibited by increased levels of anxiety.

The social skills deficits model has received criticism chiefly because no clear definitions of "skills" and "skills deficits" exist in the literature (Curran, 1979; Stravynski, Kyparissis, & Amado, 2014; 2010). Without a satisfactory definition of these constructs, it is difficult to generate valid hypotheses about the skills that may be specifically deficient in socially phobic individuals. Providing however that a clear notion of skill is assumed, results from studies examining the social performances of socially phobic individuals do not allow for conclusions to be drawn about a deficiency nor do they permit us to attribute such disturbances in a specific manner to social phobia. In this sense, comprehensive reviews of such studies have reached the conclusion that there is little evidence to support the notion of social phobia as a deficit in social skills (Stravynski, 2007; Stravynski & Amado, 2001; Stravynski, et al., 2014; 2010)<sup>1</sup>.

# A Cognitive Model of Social Phobia

The cognitive model (Clark & Wells, 1995) is the most common theoretical framework used to define and study social phobia (Hughes, 2002). From this standpoint, social phobia results from specific dysfunctional cognitive processes – i.e., cognitive distortions, cognitive biases, or negative self-schemata – about social situations (Clark & Wells, 1995; Leary, 1983). Three specific cognitive biases are thought to characterize social phobia: Interpretation bias, attention bias, and memory bias.

First, it is suggested that social anxiety emerges as a result of an interpretation bias, in which the social environment is perceived as being more dangerous than it is in reality. In other words, the potential threat in a given situation is exaggerated and this generates an inappropriate anxious response (Clark & Wells, 1995). The distorted anxious response is then

<sup>&</sup>lt;sup>1</sup> A review of several of these studies was provided in Chapter 2 (e.g., Baker & Edelmann, 2002; Fydrich, Chambless, Perry, Buergener, & Beazley, 1998; Hofmann, Gerlach, Wender, & Roth, 1997; Norton & Hope, 2001; Stangier, Heidenreich, & Schermelleh-Engel, 2006; Voncken & Bögels, 2008).

thought to trigger an attention bias, in which the focus is put entirely on one's somatic (e.g., increased heart rate, sweating, nausea) as well as behavioural (e.g., agitation, nervous tics) manifestations, rather than on cues from the social situation. In this view, a vicious cycle is perpetuated, as individuals overestimate the point to which their discomfort is obvious to others in their surroundings and thus become increasingly more anxious and more focused on themselves. It is assumed that this misplaced attention prevents them from gathering evidence from the social environment that would contradict and disconfirm their erroneous thoughts. Finally, cognitive theorists posit that a memory bias occurs post-interaction, whereby the socially phobic remember the negative aspects of the interaction, which has the effect of reinforcing their social fears (Clark & Wells, 1995; Émilien, Durlach, Fontaine-Delmotte, & Boyer, 2003).

Much research has focused on investigating whether these intangible concepts labelled cognitive biases specifically characterize social phobia as opposed to other psychopathological constructs (e.g., panic disorder). Critical reviews of these studies (Stravynski, 2007; Stravynski, Bond, & Amado, 2004), have however been unable to conclude that any particular cognitive distortion characterizes social phobia in a unique way (see also Amir & Foa, 2001; Turk, Lerner, Heimberg, & Rapee, 2001).

## A Neurobiological Perspective on Social Phobia

The study of the neurobiological origins of social phobia has gained popularity in recent years. In general, it is suggested that some particular neurotransmitter unbalance, hormonal disturbance, brain structure, or genetic defect is at the source of social phobia. A great deal of research has compared the neurotransmitter (e.g., serotonin, dopamine, norepinephine), and neuroendocrinological (e.g., cortisol) functioning of social phobic individuals to those of normal individuals and individuals from other clinical populations. Although scarce, neuroimaging studies have also examined the brain functioning of socially phobic individuals and genetic studies have investigated the hereditary transmission of social phobia through family and twin studies. Reviews of these studies (Chapman, Mannuzza, & Fyer, 1995; den Boer, 2000; Dewar, & Stravynski, 2001; Moutier, & Stein, 2001; Nickell, &

Uhde, 1995; Saudino, 2001; Stravynski, 2007) have however generally concluded that no specific neurobiological process has consistently and uniquely been linked to social phobia.

#### Summary and Conclusion

In sum, the current findings partly support postulates drawn from an evolutionary model of social interactions, suggesting that social phobia is characterized by a defensive interactional style. Our results cannot be fully integrated into this model however, as it is consistent with an intrapersonal outlook, whereby social phobia is the result of biological wiring that is the outcome of human evolution.

Similarly, the present findings cannot be integrated into the majority of the literature as it views social phobia intra-personally. We wish to highlight however that the interpersonal view of social phobia was developed precisely with the objective of serving as an alternative account of social phobia. In this Chapter, it was suggested that postulated specific intrapersonal features – skills deficits, cognitive distortions, and faulty neurobiology – have inconsistently been associated in a specific way to social phobia. Stated more explicitly, Stravynski (2014, Chapter 1) wrote that: "...several decades of research have provided only tenuous support for an intra-personal perspective. In other words, no intrapersonal factors can be shown to characterize social phobia..." Based on this conclusion, Stravynski (2014) suggested that social phobia can only be understood interpersonally (see also Stravynski, 2007). As mentioned in Chapter 2, the interpersonal outlook does not discount intrapersonal notions; rather all concepts studied and found from within an intrapersonal perspective are viewed as elements of the larger pattern. As specific elements may not characterize all socially phobic individuals, and may additionally be characteristic of several normal individuals (or individuals incarnating other psychopathological constructs), they are, conceptually, best viewed, as integrated parts of the whole. By providing support for the notion that social phobia is characterized by an overall self-protective pattern of conduct, our findings therefore refine and extend the view of social phobia to go beyond the construct of anxiety, and other conceptual constituent elements (e.g., cognitive distortions, deficient neurobiological processes).

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#### Chapter 10

# Contributions, Limitations, and Directions for Future Research

In this final chapter, I wish to highlight the main contributions of the current work and discuss its limitations. In conclusion, suggestions for future research endeavours are provided.

## Contributions of the Study

The primary contribution of the current dissertation is in providing evidence in support of an interpersonal conceptualization of social phobia – as an overall pattern of more specific fearfully self-protective patterns (Stravynski, 2014; 2007). The current studies refine and extend the view of social phobia to go beyond the notion of anxiety. Further, as the interpersonal perspective is in opposition to the widespread view of social phobia, it has received relatively little attention in research. The present study is therefore one of the few that have attempted to test its postulates. Additionally, support for the notion that social phobia is characterized by self-protective patterns of powerlessness and submissiveness was provided in two distinct ways. First, self-protectiveness was uniquely found to characterize the interpersonal patterns of socially phobic individuals in comparison to a clinical contrast group of sexually dysfunctional singles and a normative control group. Second, self-protectiveness was shown to no longer characterize socially phobic participants who received effective treatment for their difficulties, especially when remission was achieved. Finally, the present study provided support for the interpersonal view on a large scale, as the two studies in this dissertation consisted of large sample sizes.

Although the purpose of the current work was driven by theoretical objectives, the findings also have clinically meaningful implications. A secondary contribution of this study is therefore clinical in nature. Findings showed that self-protective patterns of interpersonal conduct are typical of socially phobic functioning, as self-protectiveness was found to dissolve post-treatment. Additionally, the results showed that the breakdown in self-protectiveness was most striking in participants who attained remission, as these individuals reported an interpersonal functioning typical of normative individuals. The dissolution of such patterns is

therefore indicative of improvement and may also be suggestive of remission. These indications are significant on a clinical level, because the assessment of interpersonal functioning and its improvement can be combined to the most commonly used measures of improvement in clinical settings – i.e., the reduction in social anxiety and social avoidance – to allow for a more complete picture of the evolution of the socially phobic pattern to be drafted throughout treatment.

## *Limitations of the Study*

Aside the difficulty in integrating the current findings to the general psychological literature on social phobia as mentioned in Chapter 9, the limitations of the present study are mainly on a methodological level. Four broad limitations are discussed in this section.

A first limitation is that data for this project was collected prior to the conception of the current dissertation. Some of the tools used for gathering the data can therefore be considered outdated. For instance, the clinical status of the socially phobic participants was determined using *DSM-IV* (American Psychiatric Association, 1994) criteria for social phobia, and sexual dysfunctions were assessed using *DSM-III-R* (APA, 1987) criteria. This raises questions over whether the wording of the criteria from that time would have influenced participants' inclusion or exclusion from the study and whether the samples would be different if they were assessed based on current defining criteria. As it is important for research to be as up-to-date as possible, these are valid concerns. I however do not believe that the use of previous versions of the *DSM* created biased clinical samples in these studies. As it was argued in Chapter 1, only minor changes to the defining criteria for social phobia have been made since the publication of the *DSM-III-R* (APA, 1987). In this view, the slight differences do not undermine the validity of the socially phobic sample<sup>1</sup>.

A similar case can be made for the defining criteria of the sexual dysfunctions. A comparison between the *DSM-III-R* (APA, 1987) criteria for the sexual dysfunctions and those

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<sup>&</sup>lt;sup>1</sup> Similarities and differences between *DSM-IV* (APA, 1994) and *DSM-5* (APA, 2013) criteria for social phobia can be determined by examining Appendices F and B, respectively.

provided in the *DSM-IV-TR* (APA, 2000) reveals relatively few differences (see Appendices G and P, respectively). With the publication of the *DSM-5* (APA, 2013), several noteworthy changes were however made to the sexual dysfunction category – e.g., removal of sexual aversion disorder, addition of a new sexual desire disorder (hypersexual disorder), and the combination of vaginismus and dypareunia into one sexual pain disorder – which if the study were to be conducted today, the sexual dysfunctions represented in the clinical contrast group would vary from the ones described in the current document. This last version of the manual was however published a few months ago; therefore the studies in the current work would have to be underway at the present moment for it to be possible to assess participants based on these new criteria.

A second limitation concerns the relevance of including sexually dysfunctional singles as a clinical comparison group in Study 1. The rationale for choosing this group was partly based on its availability. More importantly however, the decision to use this group was based on a theoretical reasoning, as well as on observations made in a clinical setting (e.g., Stravynski, 1986; Stravynski, Clerc, Gaudette, Fabian, Lesage, et al., 1993; Stravynski, Gaudette, Lesage, Arbel, Bounader, et al., 2007; Stravynski, Gaudette, Lesage, Arbel, Petit, et al., 1997). Namely, it concerned the contrasting difficulties in social functioning of the socially phobic (mostly in the public domain) as compared to the sexually dysfunctional single individuals (mostly in intimacy, i.e., initiating and maintaining intimate relations). The found differences between the socially phobic and the single sexually dysfunctional groups are therefore most striking when interpreted from an interpersonal perspective. As illustrated in Chapters 2 and 9 however, leading theories in social phobia are intrapersonal in nature. The notion of sexually dysfunctional singles as incarnating difficulties in interpersonal functioning is unconventional (e.g., Cole, 1986) and therefore it is difficult to justify the value of the found differences in the context of the current literature.

To account for the discrepancy between an interpersonal conceptualization of psychopathology and widespread views on the matter, it is necessary that future studies use a clinical contrast group (in additional to a normative control group) that, while displaying interpersonal problems consistent with an interpersonal standpoint, has a greater potential for

generalizability to the rest of the literature. For instance, dysmorphophobic individuals would be an appropriate contrast group, as they have been shown to display difficulties in social functioning (Didie, Tortolani, Walters, Menard, Fay, et al., 2006), characterized by patterns of social inhibition, non-assertiveness (Didie, Loerke, Howes, & Phillips, 2012), and social avoidance (Kelly, Walters, & Phillips, 2010; Pinto & Phillips, 2005). They have also been found to report high levels of social anxiety (Kelly, et al., 2010; Pinto & Phillips, 2005). Similarly, depressed individuals can also serve as a suitable comparison group as they have also been found to display interpersonal difficulties (Alden & Taylor, 2004; Davila, 2001; Segrin & Abramson, 1994; Stangier, Esser, Leber, Risch, & Heidenreich, 2006).

A third limitation regards the Interpersonal Circumplex (IPC) measure used to quantify the interpersonal patterns of behaviour. The "Test d'évaluation du répertoire des construits interpersonnels" (TERCI; Hould, 1980) was selected primarily because of its availability in the French language. Its scales on the three levels of measurement (axis, dimensional, and octant) also concord with the various self-protective patterns suggested by the interpersonal approach (Stravynski, 2014; 2007), and thus is an appropriate measure of the model. As discussed in Chapters 5 and 6 however, less than optimal reliability was obtained for some of the octant scales, calling into question the results obtained for those scales. To reduce the possibility of measurement error, perhaps a more recent and more widely used IPC measure, which has consistently shown satisfactory reliability, can be used in future studies – such as the Revised Interpersonal Adjective Scale (IAS-R; Wiggins, 1995) or the Inventory of Interpersonal Problems Circumplex Scales (IIP-C; Alden, Wiggins, & Pincus, 1990) presented in Chapter 4. These measures have been shown to have adequate internal consistency: Ranging from  $\alpha = 0.75$  to  $\alpha = 0.86$  (Wiggins, 1995; Wiggins, Trapnell, & Phillips, 1988), and from  $\alpha = 0.72$  to  $\alpha = 0.85$  (Alden, et al., 1990), respectively.

Finally, a fourth limitation consists of the artificial context, in which information about interpersonal patterns of behaviour were obtained. Asking participants to complete questionnaires in a laboratory setting might not necessarily yield the most accurate results (Benjamin, 1996). In light of the available resources however, it was the best method for acquiring data from a large amount of participants in a least time-consuming manner.

Although based on self-reported data, the results from the current study provided support for the notion that self-protective patterns of powerlessness and submissiveness characterize the socially phobic pattern on a large scale. To reduce the bias that may arise in retrospectively recalling interpersonal behaviours, an event-contingent recording method (Moskowitz, 1994) could however be utilized (see Chapter 4) in future studies. In this self-monitoring strategy, participants are asked to monitor their behaviours in social interactions during their daily lives. Strong test-retest reliability, ranging from  $\alpha = 0.83$  to  $\alpha = 0.96$ , has been found for the measure (Brown & Moskowitz, 1998; Moskowitz, 1994), and adequate internal consistency has been found for the dominance ( $\alpha = 0.54$ ), submissiveness ( $\alpha = 0.45$ ), quarrelsomeness ( $\alpha = 0.84$ ), and friendliness ( $\alpha = 0.53$ ) scales (Moskowitz, 1994).

# Directions for Future Research

In this final section, we wish to open the discussion by recommending three directions for future research. Two of these have theoretical objectives, whereas the third directs attention towards a clinical consideration for future study.

In terms of theory, a fundamental aspect of the interpersonal approach is the notion that self-protectiveness occurs in a social context, whereby there is a constant dynamic interaction between the whole living organism and the environment (Stravynski, 2014; 2007). As a more robust test of the theoretical model, it would therefore be important for future research to examine self-protective patterns of behaviour interactively, in context. Observations should be conducted ethnographically (e.g., Amado, Kyparissis, & Stravynski, 2014) or in the context of simulated role-play scenarios (e.g., Kyparissis & Stravynski, 2014). Two especially interesting avenues would be valuable tests of the interpersonal approach: The first would be to assess whether self-protectiveness fluctuates as a function of the formality of the social situation. The second would consist of examining whether self-protectiveness operates based on the principle of complementarity in same-status relationships. These two possibilities are elaborated in greater detail below.

# Formality of the Situation

Stravynski (2014; 2007) suggests that in social phobia, self-protectiveness increases as a function of the formality of the situation and the level of authority held by the other (or others) in the interaction. Specifically it is hypothesized that:

"The greatest threat is experienced by the socially phobic individuals in a formal and impersonal setting; here they have to deal satisfactorily with powerful members of the hierarchy while enacting a public role [...]. Public events of a private nature that concern membership in communities [e.g. weddings, birthday parties] are moderately threatening. [...] The least threatening setting is private life – encounters one on one with people known personally – especially intimate friendships and love relations that are obviously requited." (Stravynski, 2014, Chapter 1).

The concept of rank as influencing defensive reactions is also inherent in Trower and Gilbert's (1989) evolutionary model. According to this model, it is suggested that defensiveness arises to appease potential harm from others with more power. In their view, "[...] submissive gestures become a coping response to inhibit the dominant's potential for aggression and allow the subordinate to return and continue to live within proximity of the dominant." (p. 21).

Preliminary support for these hypotheses were provided by Amado and colleagues (2014) who showed that self-protective patterns of evasiveness and escape became more prominent as the intimacy in the interpersonal relationships decreased (spheres of life in descending order of intimacy: personal, couple, family, social, and professional; see also Amado, Kyparissis, & Stravynski, 2013). Similarly, the study by Russell, Moskowitz, Zuroff, Bleau, Pinard, and colleagues (2011) showed that socially phobic participants reported high degrees of submissiveness in fear-evoking social situations, but not in situations judged to be secure.

The results obtained ethnographically with a small sample size (Amado, et al., 2014) and through self-report using an event-contingent recording method (Russell, et al., 2011)

could benefit from further investigation and replication. It would therefore be interesting to examine the fluctuation in self-protectiveness as well as social anxiety in a study where social roles are manipulated in varying degrees of formality and authoritativeness. In similar light, one can assume that authority and rank, likely influence normal social anxiety and fearful behaviour. As a further test of the interpersonal model, it would therefore be imperative to determine the degree to which self-protective reactions are unique to the socially phobic pattern, by comparing socially phobic participants to normative and other clinical contrast groups in various social scenarios.

# Complementarity

According to an interpersonal perspective, socially phobic individuals engage in self-protective pattern of powerlessness and submissiveness, because, on the flipside, the other (or others) in the social interactions are exhibiting power and assertiveness. Such complementary transactions can occur independently of the formality of the situation, i.e., they can take place between individuals of equal status. More specifically, it is suggested that:

"Over and above the content of the specific behaviors involved, the reactive conduct of socially phobic individuals in interactions with others tends to the complementary (withdraws when approached, offers justifications and apologies when criticized, grins and blushes when praised), rather than reciprocal (exchange of banter, compliments or threats, titillating gossip, teasing)." (Stravynski, 2014, Chapter 1).

Within the IPC tradition however, all interpersonal interactions – i.e., not specifically socially phobic interactions – function on the basis of the complementarity principle (Kiesler, 1983). In this light, dominance is said to induce submissiveness, and submissiveness dominance (Carson, 1969; Leary, 1957; see also Keltner & Buswell, 1997). A study (Malone, 1975) using a computer simulated program of the IPC constructs provided support for complementarity between dominance and submissiveness and suggested that complementarity functions as a result of positive reinforcement. Specifically, it was shown that when a person

engaged in dominant behaviour and the other responded with submissive behaviour, the original dominant behaviour was reinforced and therefore, continued (see also Leary, 1957)<sup>2</sup>.

Based on these views, it would be worthwhile to investigate whether complementary reactions are more prominent in social phobia than in a normative group. For instance, confederates can be asked to express varying degrees of power during a range of simulated role-play scenarios and independent observers can assess the self-protective behavioural responses of the experimental and control groups. In reverse, it would also be interesting to test whether socially phobic individuals would respond with dominant stances if the others in the social interaction are prompted to express submissiveness (complementarity), as would be expected of a normative sample, or whether they would continue to behave submissively (reciprocity), but to a lesser degree than when the others are prompted to express dominance.

Finally, the main focus of the current dissertation was to test an alternative theoretical account of the socially phobic pattern. In consistency, the two main directions for future research described above, pertained to additional tests of the interpersonal approach. In conclusion of this section, we however wish to provide a more clinically meaningful suggestion for future research endeavours that go beyond the scope of the present study.

In the present study, a complete dissolution in the self-protective pattern of interpersonal behaviour was found in participants who achieved remission after receiving treatment of an interpersonal approach (IA; Stravynski, 2014; 2007; Stravynski, Arbel, Bounader, Gaudette, Lachance, et al., 2000; Stravynski, Arbel, Lachance, & Todorov, 2000) aimed at improving social functioning. If we accept the premise that the absence of self-protectiveness is an indicator of remission, it would be interesting to examine whether other widespread treatments of social phobia – i.e., exposure, cognitive therapy, pharmacotherapy (e.g., SSRIs, MAOIs, BDZs), and their various combinations – have a similar impact on interpersonal functioning.

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<sup>&</sup>lt;sup>2</sup> Interestingly, the notion of complementarity as pertaining to social anxiety is not a new one. Illustrations of this principle date back to Ancient Greek mythology, where Oizys, Goddess of distress, misery, anxiety, wretchedness, and worry was described as the twin sister and mirror image of Monus, God of mockery, blame, ridicule, scorn, censure, complaint, and criticism (Hesiod, *circa* 700 B.C., *Theogony*).

These treatments are consistent with an intrapersonal framework; conceptualizing social phobia as a disorder of anxiety, and thus in most cases, reduction in anxiety is the standard by which improvement is measured. Although substantial decreases in subjective distress and social avoidance have been found as a result of these treatments (Acarturk, Cuijpers, van Straten, & de Graaf, 2009; Blanco, Schneier, Schmidt, Blanco-Jerez, Randall, et al., 2003; Federoff & Taylor, 2001; Feske & Chambless, 1995; Gould, Buckminster, Pollack, Otto, & Yap, et al., 1997; Moreno Gil, Méndez Carrillo, & Sánchez Meca, 2001; Ponniah & Hollon, 2008; Stravynski & Greenberg, 1998), these do not necessarily translate into a meaningful improvement in social functioning (Sheehan, Harnett-Sheehan, & Raj, 1996; Stravynski & Greenberg, 1998; Watanabe, Furukawa, Chen, Kinoshita, Nakano, et al., 2010). Future research should therefore examine the impact of these treatments, particularly exposure as it is the treatment of choice for social phobia (Moreno Gil, et al., 2001) based on the standard of reduction in anxiety, on self-protective patterns and sub-patterns of behaviour, in addition to general measures of social functioning and social anxiety.

It would also be interesting to examine whether self-protectiveness improves as a result of other treatments bearing an interpersonal title, namely Interpersonal Psychotherapy (IPT; Lipsitz, Markowitz, & Cherry, 1997), and Interpersonal Cognitive Behavioural Treatment (ICBT; Alden & Taylor, 2011). IPT has been shown to obtain improvement in anxiety levels at the end of treatment (Borge, Hoffart, Sexton, Clark, Markowitz, et al., 2008) that are maintained one year later, as well as reduction in the use of discrete anxious behaviours. Little is however known of the larger interpersonal pattern. It would therefore be interesting to further explore this question. In terms of ICBT, one study showed a maintenance in gains associated with a decrease in social anxiety and an increase in self-reported social approach behaviours (e.g., inviting someone to lunch) six months following the end of group treatment (Alden & Taylor, 2011). These findings provide support for the importance of addressing social functioning in treatment, particularly behaviours that seek out a connection with others in addition to social anxiety and social avoidance. It would therefore be interesting to contrast the efficacy of this treatment to that of treatment conducted within an IA format, particularly in treating self-protectiveness.

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#### **CONCLUSION**

This dissertation investigated self-protective patterns of behaviour among socially phobic individuals using predictions drawn from an interpersonal theoretical framework. In this view, the construct of social phobia is conceptualized as an overall self-protective pattern of more specific fearfully self-protective patterns of interpersonal behaviour.

Results from two studies provided support for the main hypothesis that the overall socially phobic pattern is uniquely characterized by specific maladaptive self-protective patterns of powerlessness and submissiveness. These patterns were also shown to be associated with elevated levels of social anxiety and general distress.

These findings are consistent with previous research examining these interpersonal dimensions in social phobia and provide support for an interpersonal account of the socially phobic pattern.

# -APPENDIX AAUTHORIZATION LETTER TO WRITE THE CURRENT DISSERTATION IN ENGLISH



Faculté des études supérieures Vice-décanat

Le 12 septembre 2007

Madame Angéla Kyparissis

Code permanent:

Programme:

322012, Ph.D. psychologie - recherche et intervention

Dir. de recherche :

Ariel Stravynski, F.A.S. - psychologie

Objet: Rédaction d'un mémoire en anglais

Madame,

Suite à votre lettre, la Faculté des études supérieures et postdoctorales vous autorise à rédiger votre mémoire en anglais.

Veuillez agréer, Madame, l'expression de mes sentiments les meilleurs.

La vice-doyenne,

Nicole Dubreuil

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# -APPENDIX B DSM-5 CRITERIA FOR SOCIAL PHOBIA (ADULTS)

#### **Social Anxiety Disorder (Social Phobia)**

#### Diagnostic Criteria

300.23 (F40.10)

- A. Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others. Examples include social interactions (e.g. having a conversation, meeting unfamiliar people), being observed (e.g. eating or drinking), and performing in front of others (e.g. giving a speech).
- B. The individual fears that he or she will act in a way or show anxiety symptoms that will be negatively evaluated (i.e. will be humiliating or embarrassing; will lead to rejection or offend others).
- C. The social situations almost always provoke fear or anxiety.
- D. The social situations are avoided or endured with intense fear or anxiety.
- E. The fear or anxiety is out of proportion to the actual threat posed by the social situation and to the socio-cultural context.
- F. The fear, anxiety, or avoidance is persistent, typically lasting for six months or more.
- G. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- H. The fear, anxiety, or avoidance is not attributable to the physiological effects of a substance (e.g. a drug of abuse, a medication) or another medical condition.
- I. The fear, anxiety, or avoidance is not better explained by the symptoms of another mental disorder, such as panic disorder, body dysmorphic disorder, or autism spectrum disorder.
- J. If another medical condition (e.g. Parkinson's disease, obesity, disfigurement from burns or injury) is present, the fear, anxiety, or avoidance is clearly unrelated or is excessive.

#### Specify if:

**Performance only:** If the fear is restricted to speaking or performing in public.

(*DSM-5*; APA, 2013, pp. 202-203)

# -APPENDIX C ICD-10 CRITERIA FOR SOCIAL PHOBIA

#### F40.1 Social phobias

- A. Either (1) or (2):
  - (1) marked fear of being the focus of attention, or fear of behaving in a way that will be embarrassing or humiliating;
  - (2) marked avoidance of being the focus of attention or situations in which there is fear of behaving in an embarrassing or humiliating way.

These fears are manifested in social situations, such as eating or speaking in public; encountering known individuals in public; or entering or enduring small group situations, such as parties, meetings and classrooms.

- B. At least two symptoms of anxiety in the feared situation at some time since the onset of the disorder, as defined in criterion B for F40.0 (Agoraphobia) and in addition one of the following symptoms:
  - (1) Blushing.
  - (2) Fear of vomiting.
  - (3) Urgency or fear of micturition or defecation.
- C. Significant emotional distress due to the symptoms or to the avoidance.
- D. Recognition that the symptoms or the avoidance are excessive or unreasonable.
- E. Symptoms are restricted to or predominate in the feared situation or when thinking about it.
- F. Most commonly used exclusion criteria: Criteria A and B are not due to delusions, hallucinations, or other symptoms of disorders such as organic mental disorders (F0), schizophrenia and related disorders (F20-F29), affective disorders (F30-F39), or obsessive compulsive disorder (F42), and are not secondary to cultural beliefs.

(ICD-10; WHO, 1993, pp. 110-111)

# -APPENDIX DAUTHORIZATION LETTER TO PRESENT THE CURRENT WORK IN ARTICLE FORMAT



#### Faculté des arts et des sciences Département de psychologie

Le 16 mars 2012

| KYPARISSIS, A | ∖nge | la |
|---------------|------|----|
|---------------|------|----|

Objet : Autorisation de rédaction de thèse de doctorat par articles

Madame,

Par la présente nous vous informons que nous accueillons favorablement votre demande de rédaction de thèse par articles.

Veuillez agréer, Madame, l'expression de mes sentiments distingués.

Serge Larochelle

Directeur

c.c. Ariel STRAVYNSKI, directeur de recherche

Jocelyne Emond (FESP)

p.i

C.P. 6128, succursale Centre-ville Montréal QC H3C 3J7

Télécopieur : 514 343-2285

# -APPENDIX ETEST D'ÉVALUATION DU RÉPERTOIRE DES CONSTRUITS INTERPERSONNELS (TERCI)

#### Test d'évaluation du répertoire des construits interpersonnels (TERCI)

(Hould, 1980)

Dans ce questionnaire, vous trouverez une liste de comportements ou d'attitudes qui peuvent être utilisés pour décrire votre manière d'agir ou de réagir avec les gens.

Exemples: (1) Se sacrifie pour ses amis(es)

(2) Aime montrer aux gens leur médiocrité

Cette liste vous est fournie pour vous aider à préciser l'image que vous avez de vousmêmes dans vos relations avec les gens.

Prenez les items de cette liste un à un et, pour chacun, posez-vous la question suivante :

« Est-ce que ce comportement ou cette attitude pourrait être utilisé pour décrire votre manière habituelle d'être ou d'agir avec les gens ? »

Lorsque, pour un item, vous pouvez répondre '<u>OUI</u>', inscrivez '<u>O</u>' comme réponse. Lorsque l'item ne correspond pas à l'opinion que vous avez de votre façon d'agir ou de réagir ou que vous hésitez de vous attribuer ce comportement, répondez '<u>NON</u>' en inscrivant '<u>N</u>' dans l'endroit réservé à cet effet.

Vérifiez si vous avez bien compris les instructions en répondant aux exemples suivants :

Est-ce que ce comportement ou cette attitude décrit ou caractérise ma manière habituelle d'être ou d'agir avec les gens ?

Si votre réponse est '<u>OUI</u>', inscrivez la lettre '<u>O</u>'. Si votre réponse est 'NON', inscrivez la lettre 'N'.

(1) Se sacrifie pour ses amis(es)

R :

(2) Aime montrer aux gens leur infériorité

R:\_\_\_

Est-ce que ce comportement ou cette attitude décrit ou caractérise ma manière habituelle d'être ou d'agir avec les gens ?

Si votre réponse est 'OUI', inscrivez la lettre 'O'.

| Si | votre réponse est ' <u>NON</u> ', inscrivez la lettre ' <u>N</u> '. |     |
|----|---|-----|
| 1. | Capable de céder et d'obéir   | R : |
| 2. | Sensible à l'approbation d'autrui                                   | R : |
| 3. | Un peu snob   | R : |
| 4. | Réagit souvent avec violence  | R : |
| 5. | Prend plaisir à s'occuper du bien-être des gens                     | R : |
| 6. | Dit souvent du mal de soi, se déprécie face aux gens                | R : |
| 7. | Essaie de réconforter et d'encourager autrui                        | R : |
| 8. | Se méfie des conseils qu'on lui donne                               | R : |
| 9. | Se fait respecter par les gens                                      | R : |
| 10 | . Comprend autrui, tolérant(e)                                      | R : |
| 11 | . Souvent mal à l'aise avec les gens                                | R : |
| 12 | . A une bonne opinion de soi-même                                   | R : |
| 13 | . Supporte mal de se faire mener                                    | R : |
| 14 | . Éprouve souvent des déceptions                                    | R : |
| 15 | . Se dévoue sans compter pour autrui, généreux(se)                  | R : |
| 16 | . Prend parfois de bonnes décisions                                 | R : |
| 17 | . Aime faire peur aux gens  | R : |
| 18 | . Se sent toujours inférieur(e) et honteux(se) devant autrui        | R·  |

Est-ce que ce comportement ou cette attitude décrit ou caractérise ma manière habituelle d'être ou d'agir avec les gens ?

| Si votre réponse est ' <u>OUI</u> ', inscrivez la lettre ' <u>O</u> '.<br>Si votre réponse est ' <u>NON</u> ', inscrivez la lettre ' <u>N</u> '. |     |
|--|-----|
| 19. Peut ne pas avoir confiance en quelqu'un   | R : |
| 20. Capable d'exprimer sa haine ou sa souffrance   | R : |
| 21. A plus d'amis(es) que la moyenne des gens  | R : |
| 22. Éprouve rarement de la tendresse pour quelqu'un  | R : |
| 23. Persécuté(e) pour les personnes qui se trompent  | R : |
| 24. Change parfois d'idée pour faire plaisir à autrui  | R : |
| 25. Intolérant(e) pour les personnes qui se trompent   | R : |
| 26. S'oppose difficilement aux désire d'autrui   | R : |
| 27. Éprouve de la haine pour la plupart des personnes de son entourage   | R : |
| 28. N'a pas confiance en soi   | R : |
| 29. Va au-devant des désires d'autrui  | R : |
| 30. Si nécessaire, n'admet aucun compromis   | R : |
| 31. Trouve tout le monde sympathique   | R : |
| 32. Éprouve du respect pour l'autorité   | R : |
| 33. Se sent compétent(e) dans son domaine  | R : |
| 34. Commande aux gens  | R : |
| 35. S'enrage pour peu de choses  | R : |
| 36. Accepte, par bonté, de gâcher sa vie pour faire le bonheur d'une personne ingrate  | R : |

Est-ce que ce comportement ou cette attitude décrit ou caractérise ma manière habituelle d'être ou d'agir avec les gens ?

| Si votre réponse est ' <u>OUI</u> ', inscrivez la lettre ' <u>O</u> '.<br>Si votre réponse est ' <u>NON</u> ', inscrivez la lettre ' <u>N</u> '. |     |  |  |  |
|--|-----|--|--|--|
| 37. Se sent supérieur(e) à la plupart des gens   | R : |  |  |  |
| 38. Cherche à épater, à impressionner  | R : |  |  |  |
| 39. Comble autrui de prévenances et de gentillesse   | R : |  |  |  |
| 40. N'est jamais en désaccord avec qui que se soit   | R : |  |  |  |
| 41. Manque parfois de tact ou de diplomatie  | R : |  |  |  |
| 42. A besoin de plaire à tout le monde   | R : |  |  |  |
| 43. Manifeste de l'empressement à l'égard des autres   | R : |  |  |  |
| 44. Heureux(se) de recevoir des conseils   | R : |  |  |  |
| 45. Se montre reconnaissant(e) pour les services qu'on lui rend  | R : |  |  |  |
| 46. Partage les responsabilités et défend les intérêts de chacun   | R : |  |  |  |
| 47. A beaucoup de volonté et d'énergie   | R : |  |  |  |
| 48. Toujours aimable et gai(e)   | R : |  |  |  |
| 49. Aime la compétition  | R : |  |  |  |
| 50. Préfère se passer des conseils d'autrui  | R : |  |  |  |
| 51. Peut oublier les pires affronts  | R : |  |  |  |
| 52. A souvent besoin d'être aidé(e)  | R : |  |  |  |
| 53. Donne toujours son avis  | R : |  |  |  |
| 54. Se tracasse pour les troubles de n'importe qui   | R : |  |  |  |

Est-ce que ce comportement ou cette attitude décrit ou caractérise ma manière habituelle d'être ou d'agir avec les gens ?

Si votre réponse est 'OUI', inscrivez la lettre 'O'.

| Si votre réponse est 'NON', inscrivez la lettre 'N'.               |     |  |  |  |
|--|-----|--|--|--|
| 55. Veut toujours avoir raison                                     | R : |  |  |  |
| 56. Se fie à n'importe qui, naïf(ve)                               | R : |  |  |  |
| 57. Exige beaucoup d'autrui, difficile à satisfaire                | R : |  |  |  |
| 58. Incapable d'oublier le tort que les autres ont fait            | R : |  |  |  |
| 59. Peut critiquer ou s'opposer à une opinion qu'on ne partage pas | R : |  |  |  |
| 60. Souvent exploité(e) par les gens                               | R : |  |  |  |
| 61. Susceptible et facilement blessé(e)                            | R : |  |  |  |
| 62. Exerce un contrôle sur les gens et les choses qui l'entourent  | R : |  |  |  |
| 63. Abuse de son pouvoir et de son autorité                        | R : |  |  |  |
| 64. Capable d'accepter ses torts                                   | R : |  |  |  |
| 65. À l'habitude d'exagérer ses mérites, de se venter              | R : |  |  |  |
| 66. Peut s'exprimer sans détours                                   | R : |  |  |  |
| 67. Se sent souvent impuissant(e) et incompétent(e)                | R : |  |  |  |
| 68. Cherche à se faire obéir                                       | R : |  |  |  |
| 69. Admet difficilement la contradiction                           | R : |  |  |  |
| 70. Évite les conflits, si possible                                | R : |  |  |  |
| 71. Sûr(e) de soi  | R : |  |  |  |
| 72. Tient à plaire aux gens  | R : |  |  |  |

Est-ce que ce comportement ou cette attitude décrit ou caractérise ma manière habituelle d'être ou d'agir avec les gens ?

| Si votre réponse est ' <u>OUI</u> ', inscrivez la lettre ' <u>O</u> '.<br>Si votre réponse est ' <u>NON</u> ', inscrivez la lettre ' <u>N</u> '. |     |
|--|-----|
| 73. Fait passer son plaisir et ses intérêts personnels avant tout  | R : |
| 74. Se confie trop facilement  | R : |
| 75. Planifie ses activités   | R : |
| 76. Accepte trop de concessions ou de compromis  | R : |
| 77. N'hésite pas à confier son sort au bon vouloir d'une personne qu'on admire   | R : |
| 78. Toujours de bonne humeur   | R : |
| 79. Se justifie souvent  | R : |
| 80. Éprouve souvent de l'angoisse et de l'anxiété  | R : |
| 81. Reste à l'écart, effacé(e)   | R : |
| 82. Donne aux gens des conseils raisonnables   | R : |
| 83. Dur(e), mais honnête   | R : |
| 84. Prend plaisir à se moquer des gens   | R : |
| 85. Fier(e)  | R : |
| 86. Habituellement soumis(e)   | R : |
| 87. Toujours prêt(e) à aider, disponible   | R : |
| 88. Peut montrer de l'amitié   | R : |

# -APPENDIX F DSM-IV CRITERIA FOR SOCIAL PHOBIA (ADULTS)

# Diagnostic Criteria for 300.23 Social Phobia (Social Anxiety Disorder)

- A. A marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. The individual fears that he or she will act in a way (or show anxiety symptoms) that will be humiliating or embarrassing.
- B. Exposure to the feared social situation almost always provokes anxiety, which may take the form of a situationally bound or situationally predisposed Panic Attack.
- C. The person recognizes that the fear is excessive or unreasonable.
- D. The feared social or performance situations are avoided or else are endured with intense anxiety or distress.
- E. The avoidance, anxious anticipation, or distress in the feared social or performance situation(s) interferes significantly with the person's normal routine, occupational (academic) functioning, or social activities or relationships, or there is marked distress about having the phobia.
- F. In individuals under age 18 years, the duration is at least 6 months.
- G. The fear or avoidance is not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition and is not better accounted for by another mental disorder (e.g., Panic Disorder With or Without Agoraphobia, Separation Anxiety Disorder, Body Dysmorphic Disorder, a Pervasive Developmental Disorder, or Schizoid Personality Disorder).
- H. If a general medical condition or another mental disorder is present, the fear in Criterion A is unrelated to it, e.g., the fear is not of Stuttering, trembling in Parkinson's disease, or exhibiting abnormal eating behavior in Anorexia Nervosa or Bulimia Nervosa.

#### Specify if:

**Generalized:** if the fears include most social situations (also consider the additional diagnosis of Avoidant Personality Disorder)

(DSM-IV; APA, 1994, p. 416)

# -APPENDIX GDSM-III-R CRITERIA FOR THE SEXUAL DYSFUNCTIONS

## Sexual Desire Disorders

## Diagnostic Criteria for 302.71 Hypoactive Sexual Desire Disorder

- A. Persistently or recurrently deficient or absent sexual fantasies and desire for sexual activity. The judgment of deficiency or absence is made by the clinician, taking into account factors that affect sexual functioning, such as age, sex, and the context of the person's life.
- B. Occurrence not exclusively during the course of another Axis I disorder (other than a Sexual Dysfunction), such as Major Depression.

(DSM-III-R; APA, 1987, p. 293)

## Diagnostic Criteria for 302.79 Sexual Aversion Disorder

- A. Persistent or recurrent extreme aversion to, and avoidance of, all or almost all, genital sexual contact with a sexual partner.
- B. Occurrence not exclusively during the course of another Axis I disorder (other than a Sexual Dysfunction), such as Major Depression.

(DSM-III-R; APA, 1987, p. 293)

## Sexual Arousal Disorders

# Diagnostic Criteria for 302.72 Female Sexual Arousal Disorder

#### A. Either (1) or (2):

- (1) persistent or recurrent partial or complete failure to attain or maintain the lubrication-swelling response of sexual excitement until completion of the sexual activity
- (2) persistent or recurrent lack of a subjective sense of sexual excitement and pleasure in a female during sexual activity
- B. Occurrence not exclusively during the course of another Axis I disorder (other than a Sexual Dysfunction), such as Major Depression.

(DSM-III-R; APA, 1987, p. 294)

## Diagnostic Criteria for 302.72 Male Erectile Disorder

#### A. Either (1) or (2):

- (1) persistent or recurrent partial or complete failure in a male to attain or maintain erection until completion of the sexual activity
- (2) persistent or recurrent lack of a subjective sense of sexual excitement and pleasure in a male during sexual activity
- B. Occurrence not exclusively during the course of another Axis I disorder (other than a Sexual Dysfunction), such as Major Depression.

(DSM-III-R; APA, 1987, p. 294)

### Orgasm Disorders

#### Diagnostic Criteria for 302.73 Inhibited Female Orgasm

- A. Persistent or recurrent delay in, or absence of, orgasm in a female following a normal sexual excitement phase during sexual activity that the clinician judges to be adequate in focus, intensity, and duration. Some females are able to experience orgasm during noncoital clitoral stimulation, but are unable to experience it during coitus in the absence of manual clitoral stimulation. In most of these females, this represents a normal variation of the female sexual response and does not justify the diagnosis of Inhibited Female Orgasm. However, in some of these females, this does represent a psychological inhibition that justifies the diagnosis. This difficult judgment is assisted by a thorough sexual evaluation, which may even require a trial of treatment.
- B. Occurrence not exclusively during the course of another Axis I disorder (other than a Sexual Dysfunction), such as Major Depression.

(DSM-III-R; APA, 1987, p. 294)

#### Diagnostic Criteria for 302.74 Inhibited Male Orgasm

- A. Persistent or recurrent delay in, or absence of, orgasm in a male following a normal sexual excitement phase during sexual activity that the clinician, taking into account the person's age, judges to be adequate in focus, intensity, and duration. This failure to achieve orgasm is usually restricted to an inability to reach orgasm in the vagina, with orgasm possible with other types of stimulation, such as masturbation.
- B. Occurrence not exclusively during the course of another Axis I disorder (other than a Sexual Dysfunction), such as Major Depression.

(DSM-III-R; APA, 1987, p. 295)

### Diagnostic Criteria for 302.75 Premature Ejaculation

Persistent or recurrent ejaculation with minimal sexual stimulation or before, upon, or shortly after penetration and before the person wishes it. The clinician must take into account factors that affect duration of the excitement phase, such as age, novelty of the sexual partner or situation, and frequency of sexual activity.

(DSM-III-R; APA, 1987, p. 295)

### Sexual Pain Disorders

### Diagnostic Criteria for 302.76 Dyspareunia

- A. Recurrent or persistent genital pain in either a male or a female before, during, of after sexual intercourse.
- B. The disturbance is not caused exclusively by lack of lubrification or by Vaginismus.

(*DSM-III-R*; APA, 1987, p. 295)

### Diagnostic Criteria for 306.51 Vaginismus

- A. Recurrent or persistent involuntary spasm of the musculature of the outer third or the vagina that interferes with coitus.
- B. The disturbance is not caused exclusively by a physical disorder, and is not due to another Axis I disorder.

(DSM-III-R; APA, 1987, p. 295)

### -APPENDIX H-SOCIAL ANXIETY AND DISTRESS (SAD)

### SAD

# Répondez par VRAI (1) ou FAUX (2) à chacune des phrases suivantes. Inscrivez la réponse qui correspond à votre état actuel.

| 1.  | Je me sens bien même dans des rencontres sociales inhabituelles.   | R |
|-----|--|---|
| 2.  | J'essaie d'éviter les situations qui m'obligent à être très sociable.                                    | R |
| 3.  | Il m'est facile de relaxer quand je suis avec des étrangers.   | R |
| 4.  | Je n'ai pas de désir particulier d'éviter les gens.  | R |
| 5.  | Je trouve souvent les rencontres sociales dérangeantes.  | R |
| 6.  | Je me sens habituellement calme et confortable lors des rencontres sociales.                             | R |
| 7.  | Je suis habituellement à l'aise de parler à quelqu'un de l'autre sexe.                                   | R |
| 8.  | J'essaie d'éviter de parler aux gens à moins que je l'ai connaisse bien.                                 | R |
| 9.  | Si j'ai la chance de rencontrer des nouvelles personnes, j'en profite.                                   | R |
| 10. | Je me sens souvent nerveux(se) et tendu(e) dans des rencontres sociales où les deux sexes sont présents. | R |
| 11. | Je suis habituellement nerveux(se) avec les gens à moins de bien les connaître.                          | R |
| 12. | Je me sens ordinairement détendu(e) quand je suis avec un groupe de personnes.                           | R |
| 13. | Je veux souvent fuir les gens.   | R |
| 14. | Je me sens d'habitude inconfortable quand je suis avec un groupe de personnes que je ne connais pas.     | R |
| 15. | Je me sens habituellement détendu(e) quand je rencontre quelqu'un pour la première fois.                 | R |
| 16. | Être présenté(e) à des gens me rend tendu(e) et nerveux(se).   | R |
| 17. | Même si une pièce est remplie d'étrangers, je vais quand même y entrer.                                  | R |

### SAD

# Répondez par VRAI (1) ou FAUX (2) à chacune des phrases suivantes. Inscrivez la réponse qui correspond à votre état actuel.

| 18. J'évite de m'avancer et de me joindre à un groupe de personnes.                 | R |
|---|---|
| 19. Quand mon patron veut me parler, j'accepte volontiers.                          | R |
| 20. Je me sens souvent tendu(e) quand je suis avec un groupe de personnes.          | R |
| 21. J'ai tendance à me tenir à l'écart des gens.                                    | R |
| 22. Il m'est égal de parler à des gens dans des parties ou des rencontres sociales. | R |
| 23. Je suis rarement à l'aise dans un grand groupe de personnes.                    | R |
| 24. J'invente souvent des excuses afin d'éviter des engagements sociaux.            | R |
| 25. Je prends souvent la responsabilité de présenter les gens les uns aux autres.   | R |
| 26. J'essaie d'éviter les rencontres sociales formelles.                            | R |
| 27. Je remplis habituellement mes engagements sociaux quels qu'ils soient.          | R |
| 28. Je trouve facile de me détendre avec d'autres personnes.                        | R |

### -APPENDIX I-FEAR OF NEGATIVE EVALUATION (FNE)

### FNE

# Répondez par VRAI (1) ou FAUX (2) à chacune des phrases suivantes. Inscrivez la réponse qui correspond à votre état actuel.

| 1.  | Je me préoccupe rarement de paraître ridicule vis-à-vis des autres.   | R |
|-----|---|---|
| 2.  | Je me fais du souci au sujet de ce que les gens vont penser de moi, même si je sais que cela n'a aucune importance. | R |
| 3.  | Je deviens tendu(e) et agité(e) si je sais que quelqu'un est en train de m'évaluer.                                 | R |
| 4.  | Je suis indifférent(e) même si je sais que les gens se font une impression défavorable de moi.                      | R |
| 5.  | Je me sens très bouleversé(e) quand j'ai un comportement social inapproprié.  | R |
| 6.  | Je me préoccupe peu de ce que les gens importants pensent de moi.   | R |
| 7.  | J'ai souvent peur de paraître ridicule ou de me montrer stupide.  | R |
| 8.  | Je réagis très peu quand d'autres personnes me désapprouvent.   | R |
| 9.  | J'ai souvent peur que les autres remarquent mes lacunes (points faibles).   | R |
| 10. | Je suis peu affecté(e) quand les autres me désapprouvent.   | R |
| 11. | Je m'attends au pire lorsque quelqu'un m'évalue.  | R |
| 12. | Je me soucie rarement des impressions que je fais sur autrui.   | R |
| 13. | J'ai peur que les autres ne m'approuvent pas.   | R |
| 14. | Je crains que les gens me critiquent.   | R |
| 15. | Les opinions des autres à mon sujet ne me tracassent pas.   | R |
| 16. | Je ne m'en fais pas nécessairement si je ne plais pas à quelqu'un.  | R |
| 17. | Ouand je parle à des gens, je suis préoccupé(e) de ce qu'ils pensent de moi.  | R |

### **FNE**

# Répondez par VRAI (1) ou FAUX (2) à chacune des phrases suivantes. Inscrivez la réponse qui correspond à votre état actuel.

| 18. Je pense qu'il est inévitable parfois de faire des erreurs en présence d'autrui, donc pourquoi m'en faire. | R |
|--|---|
| 19. Je suis habituellement préoccupé(e) par l'impression que je donne.   | R |
| 20. Je suis très préoccupé(e) de ce que mes supérieurs pensent de moi.   | R |
| 21. Si je sais que quelqu'un me juge, cela a peu d'effet sur moi.  | R |
| 22. Je me préoccupe de savoir si les autres pensent que j'en vaux la peine.                                    | R |
| 23. Je suis très peu affecté(e) au sujet de ce que les autres peuvent penser de moi.                           | R |
| 24. Je pense que quelques fois je suis trop concerné(e) par ce que les autres pensent de moi.                  | R |
| 25. Je suis souvent préoccupé(e) par le fait que je puisse dire ou faire des erreurs.                          | R |
| 26. Je suis souvent indifférent(e) aux opinions que les autres ont de moi.                                     | R |
| 27. Habituellement, j'ai confiance que les autres ont une impression favorable de moi.                         | R |
| 28. Je me préoccupe du fait que les gens qui sont important pour moi ne pensent pas grand chose de moi.        | R |
| 29. Je broie du noir au sujet des opinions que mes ami(e)s se font de moi.                                     | R |
| 30. Je deviens tendu(e) et agité(e) lorsque je sais que mes supérieurs m'évaluent.                             | R |

### -APPENDIX J-SYMPTOM CHECK-LIST (SCL)

| 0:  | 1:                                       | 2:                  | 3:                 | 4:            |  |
|---|--|---------------------|--------------------|---------------|--|
| Pas du tout   | Un peu                                   | Passablement        | Beaucoup           | Excessivement |  |
|   |  |                     |                    |               |  |
| 1. Maux de tête   |  |                     |                    | R             |  |
| 2. Nervosité ou in  | npressions de tremb                      | lements intérieurs  |                    | R             |  |
| 3. Pensées désagre  | éables répétées don                      | t vous ne pouvez pa | s vous débarrasser | R             |  |
| 4. Faiblesses ou ét   | tourdissements                           |                     |                    | R             |  |
| 5. Diminution du  | plaisir ou de l'intér                    | êt sexuel           |                    | R             |  |
| 6. Envie de critiqu   | ier les autres                           |                     |                    | R             |  |
| 7. L'idée que quelqu'un peut contrôler vos pensées                            |  |                     |                    |               |  |
| 8. L'impression que d'autres sont responsables de la plupart de vos problèmes |  |                     |                    |               |  |
| 9. Difficulté à vous rappeler certaines choses                                |  |                     |                    | R             |  |
| 10. Inquiétude fac  | e à la négligence et                     | t l'insouciance     |                    | R             |  |
| 11. Facilement irr  | 11. Facilement irrité(e) et contrarié(e) |                     |                    |               |  |
| 12. Douleurs à la poitrine  |  |                     |                    |               |  |
| 13. Peur dans les espaces ouverts ou sur la rue                               |  |                     |                    |               |  |
| 14. Sentiment de vous sentir au ralenti ou de manquer d'énergie               |  |                     |                    |               |  |
| 15. Penser à vous   | enlever la vie                           |                     |                    | R             |  |
| 16. Entendre des v  | voix que les autres                      | n'entendent pas     |                    | R             |  |

| 0:  | 1:                     | 2:                   | 3:            | 4:            |
|---|------------------------|----------------------|---------------|---------------|
| Pas du tout                                     | Un peu                 | Passablement         | Beaucoup      | Excessivement |
|   |                        |                      |               |               |
| 15.5  |                        |                      |               | _             |
| 17. Des tremblem                                | nents                  |                      |               | R             |
| 18. Le sentiment                                | que vous ne pouvez     | z pas avoir confianc | e en personne | R             |
| 19. Manque d'app                                | pétit                  |                      |               | R             |
| 20. Pleurer facile                              | ment                   |                      |               | R             |
| 21. Timidité ou m                               | naladresse avec les p  | personnes            |               | R             |
| 22. Sentiment d'ê                               | tre pris au piège      |                      |               | R             |
| 23. Soudainement                                | t effrayé(e) sans rai  | son                  |               | R             |
| 24. Crises de colè                              | ere incontrôlable      |                      |               | R             |
| 25. Peur de sortir                              | seule(e) de la maise   | on                   |               | R             |
| 26. Vous blâmer vous-même pour certaines choses |                        |                      |               | R             |
| 27. Douleurs au b                               | oas du dos             |                      |               | R             |
| 28. Sentiment d'in                              | ncapacité de faire u   | n travail jusqu'au b | out           | R             |
| 29. Sentiment de                                | R                      |                      |               |               |
| 30. Sentiment de                                | tristesse (avoir les « | (bleus »)            |               | R             |
| 31. Vous en faire                               | à propos de tout et    | de rien              |               | R             |
| 32. Manque d'inte                               | érêt pour tout         |                      |               | R             |

| 0:   | 1:                                     | 2:                   | 3:                    | 4:            |  |
|--|--|----------------------|-----------------------|---------------|--|
| Pas du tout  | Un peu                                 | Passablement         | Beaucoup              | Excessivement |  |
|  |  |                      |                       |               |  |
| 33. Vous sentir cr   | aintif(ve)                             |                      |                       | R             |  |
| 34. Vous sentir fa   | cilement blessé(e)                     | ou froissé(e)        |                       | R             |  |
| 35. L'impression   | que les autres sont                    | au courant de vos p  | ensées intimes        | R             |  |
| 36. Sentiment que  | e les autres ne vous                   | comprennent pas or   | u ne sont pas sympa   | athisant R    |  |
| 37. Sentiment que  | e les gens ne sont pa                  | as aimables ou ne vo | ous aiment pas        | R             |  |
| 38. Faire les chose  | es très lentement po                   | our vous assurer qu' | elles sont bien faite | es R          |  |
| 39. Avoir des palp   | oitations ou sentir v                  | otre cœur battre trè | s vite et fort        | R             |  |
| 40. Nausées, doul  | eurs ou malaises à                     | l'estomac            |                       | R             |  |
| 41. Vous sentir in   | férieur(e) aux autre                   | S                    |                       | R             |  |
| 42. Douleurs muse  | culaires                               |                      |                       | R             |  |
| 43. Sentiment qu'  | on vous observe ou                     | qu'on parle de vou   | ıs.                   | R             |  |
| 44. Difficulté à vo  | ous endormir                           |                      |                       | R             |  |
| 45. Besoin de vérifier et de revérifier ce que vous faites |  |                      |                       |               |  |
| 46. Difficulté à pr  | 46. Difficulté à prendre des décisions |                      |                       |               |  |
| 47. Peur de prende   | re l'autobus, le mét                   | ro ou le train       |                       | R             |  |
| 48. Difficulté à pr  | 48. Difficulté à prendre votre souffle |                      |                       |               |  |

| 0 :                              | 1:                     | 2:                   | 3:                   | 4:          |      |
|----------------------------------|------------------------|----------------------|----------------------|-------------|------|
| Pas du tout                      | Un peu                 | Passablement         | Beaucoup             | Excessive   | ment |
|                                  |                        |                      |                      |             |      |
|                                  |                        |                      |                      |             |      |
| 49. Bouffées de ch               | naleur ou des frisso   | ns                   |                      |             | R    |
| 50. Besoin d'évite               | er certains endroits,  | certaines choses ou  | certaines activités  | parce       | R    |
| qu'ils ou elles                  | s vous font peur       |                      |                      |             |      |
| 51. Des blancs de                | mémoire                |                      |                      |             | R    |
| 52 Engourdissem                  | ents ou nicotement     | s dans certaines par | ties du corns (ev h  | as iamhes   | R    |
| figure, etc.)                    | ents ou preotement     | s dans certaines par | ties du corps (ex or | as, jamoes, | κ    |
| 53. Une boule dan                | ıs la gorge            |                      |                      |             | R    |
|                                  |                        |                      |                      |             |      |
| 54. Sentiment de p               | pessimisme face à l    | 'avenir              |                      |             | R    |
| 55. Difficulté à vous concentrer |                        |                      |                      |             | R    |
| 56. Sentiment de f               | faiblesse dans certa   | ines parties du corp | S                    |             | R    |
| 57. Sentiment de t               | tension ou de surex    | citation             |                      |             | R    |
| 58. Sensations de                | lourdeur dans les b    | ras et les jambes    |                      |             | R    |
| 59. Pensées en rel               | ation avec la mort     |                      |                      |             | R    |
| 60. Trop manger                  |                        |                      |                      |             | R    |
| 61. Vous sentir ma               | al à l'aise lorsqu'or  | n vous observe ou q  | ue l'on parle de vo  | us          | R    |
| 62. Avoir des pens               | sées qui ne viennen    | t pas de vous        |                      |             | R    |
| 63. Envie de frapp               | per, injurier ou faire | e mal à quelqu'un    |                      |             | R    |

| 0:  | 1:                    | 2:                    | 3:                 | 4:            |
|---|-----------------------|-----------------------|--------------------|---------------|
| Pas du tout   | Un peu                | Passablement          | Beaucoup           | Excessivement |
|   |                       |                       |                    |               |
| 64. Vous réveiller                                  | tôt le matin          |                       |                    | R             |
| 65. Besoin de répo                                  | éter les mêmes action | ons telles que touch  | er, compter, laver | R             |
| 66. Avoir un som                                    | meil agité ou pertur  | bé                    |                    | R             |
| 67. Envies de bris                                  | er ou de fracasser d  | les objets            |                    | R             |
| 68. Avoir des idée                                  | es ou des opinions o  | que les autres ne par | tagent pas         | R             |
| 69. Tendance à l'a                                  | anxiété en présence   | d'autres personnes    |                    | R             |
| 70. Vous sentir m                                   | al à l'aise dans des  | foules (ex. centre d  | 'achat ou cinéma)  | R             |
| 71. Sentiment que tout est un effort                |                       |                       |                    | R             |
| 72. Moments de to                                   | R                     |                       |                    |               |
| 73. Sentiments d'i                                  | R                     |                       |                    |               |
| 74. Vous disputer                                   | R                     |                       |                    |               |
| 75. Nervosité lors                                  | R                     |                       |                    |               |
| 76. Vous n'êtes pas reconnu(e) à votre juste valeur |                       |                       |                    | R             |
| 77. Sentiment de solitude même avec d'autres        |                       |                       |                    | R             |
| 78. Vous sentir te                                  | llement tendu(e) qu   | e vous ne pouvez re   | ester en place     | R             |
| 79. Sentiment d'ê                                   | tre bon(ne) à rien    |                       |                    | R             |

| 0:                  | 1:   | 2:                   | 3:                | 4:            |
|---------------------|--|----------------------|-------------------|---------------|
| Pas du tout         | Un peu   | Passablement         | Beaucoup          | Excessivement |
|                     |  |                      |                   |               |
|                     |  |                      |                   |               |
| 80. Sentiment qu'   | il va vous arriver q   | uelque chose de néf  | aste              | R             |
| 81. Crier et lancei | des objets   |                      |                   | R             |
|                     | , and the second |                      |                   |               |
| 82. Peur de perdre  | e connaissance en p  | ublic                |                   | R             |
| 83. Sentiment que   | e les gens vont prof   | iter de vous si vous | les laissez faire | R             |
| 84. Des pensées s   | exuelles qui vous tr   | oublent beaucoup     |                   | R             |
| 85. L'idée que vo   | us devriez être pun  | i(e) pour vos péchés | 3                 | R             |
| 86. Pensées ou vis  | sions qui vous effra   | ient                 |                   | R             |
| 87. L'idée que vo   | tre corps est sérieus  | sement atteint       |                   | R             |
| 88. Ne jamais vou   | us sentir près de que  | elqu'un d'autre      |                   | R             |
| 89. Avoir des sen   | timents de culpabil  | ité                  |                   | R             |
| 90. L'idée que vo   | tre esprit (tête) est o  | dérangé              |                   | R             |

### -APPENDIX K-SOCIAL ADJUSTMENT SCALE – REVISED (SAS-R)

#### SAS-R

Pour savoir comment les choses ont été pour vous depuis 1 mois, nous aimerions que vous répondiez à quelques questions touchant votre travail, vos loisirs et votre vie de famille. Il n'y a pas de bonnes ou de mauvaises réponses à ces questions.

# **SECTION 1 : TRAVAIL EXTÉRIEUR**

| 1.  | De façon générale, avez-vous un emploi rémunéré pour plus de 15 heures par sem  | aine?    |
|-----|---|----------|
|     | 1 : OUI<br>2 : NON  | R        |
| 2.  | Dans le dernier mois, avez-vous travaillé ?   |          |
|     | 1 : OUI<br>2 : NON  | R        |
| 3.  | Combien de jours de travail avez-vous manqués durant le dernier mois ?  |          |
|     | <ul> <li>1 : Aucun</li> <li>2 : Quelques jours</li> <li>3 : La moitié du temps</li> <li>4 : Plus de la moitié du temps</li> <li>5 : J'étais en vacances</li> </ul>  | R        |
| 4.  | Avez-vous été capable de faire votre travail comme il faut durant le dernier mois s   | ?        |
|     | <ul> <li>1 : Très bien</li> <li>2 : Bien fait mais avec quelques petits problèmes</li> <li>3 : J'ai eu besoin d'aide et j'ai des problèmes à peu près la moitié du temps</li> <li>4 : J'ai eu des problèmes la plupart du temps</li> <li>5 : J'ai eu constamment des problèmes</li> </ul> | R        |
| 4.1 | .Durant le dernier mois, vous êtes-vous jamais senti(e) gêné(e) ou embarrassé(e) p votre travail n'était pas bien fait ?  | arce que |
|     | 1 : Je ne me suis pas senti(e) gêné(e) 2 : Je me suis senti(e) gêné(e) 1 ou 2 fois 3 : Je me suis senti(e) gêné(e) la moitié du temps 4 : Je me suis sentie gêné(e) la plupart du temps 5 : Je me suis constamment sentie gêné(e)   | R        |

| Э. | Avez-vous eu des chicanes au travail depuis un mois ?  |            |
|----|--|------------|
|    | <ul><li>1 : Aucune</li><li>2 : Seulement quelques petites chicanes</li><li>3 : 2 ou 3 chicanes</li></ul>   |            |
|    | 4 : Plusieurs chicanes   |            |
|    | 5 : Constamment  | R          |
| 6. | Vous êtes-vous senti mal, préoccupé(e) ou inconfortable pendant que vous étiez depuis un mois ?  | au travail |
|    | 1 : Jamais   |            |
|    | 2 : 1 ou 2 fois  |            |
|    | 3 : La moitié du temps   |            |
|    | 4 : La plupart du temps  |            |
|    | 5 : Constamment  | R          |
| 7. | Avez-vous trouvé que votre travail était intéressant durant le dernier mois ?  |            |
|    | 1 : Presque toujours   |            |
|    | 2 : La plupart du temps sauf 1 ou 2 fois   |            |
|    | 3 : La moitié du temps   |            |
|    | 4 : Presque jamais   |            |
|    | 5 : Jamais   | R          |
| C  | FOTION 2 - ÉCOLF   |            |
| 5  | ECTION 2 : ÉCOLE   |            |
| 8. | Combien de fois allez-vous à l'école (école spéciale) pendant une semaine ? (De 0 À 7)   |            |
|    | jour(s)  |            |
| 9. | Combien de jours avez-vous manqué durant le dernier mois ?   |            |
|    | <ol> <li>Presque jamais</li> <li>Quelques jours</li> <li>La moitié du temps</li> <li>Plus de la moitié du temps</li> <li>Incapable d'y aller durant le dernier mois</li> <li>J'étais en vacance</li> </ol> | R          |
|    |  |            |

| 10. Avez-vous été capable de travailler comme il faut à l'école durant le dernier mois   | ?         |
|--|-----------|
| <ul> <li>1 : J'ai très bien travaillé</li> <li>2 : J'ai bien travaillé mais avec quelques petites difficultés</li> <li>3 : J'ai eu besoin d'aide et j'ai eu des difficultés à peu près la moitié du temps</li> <li>4 : J'ai eu des difficultés la plupart du temps</li> <li>5 : J'ai eu constamment des difficultés</li> </ul> | R         |
| 11. Avez-vous eu des chicanes à l'école depuis un mois ?   |           |
| <ul> <li>1 : Je n'ai eu aucune chicane et je me suis très bien entendu</li> <li>2 : Je me suis généralement bien entendu mais j'ai eu quelques petites chicanes</li> <li>3 : J'ai eu des chicanes à quelques reprises</li> <li>4 : J'ai eu plusieurs chicanes</li> <li>5 : J'étais toujours en chicane</li> </ul>              | s<br>R    |
| 12. Vous êtes-vous senti(e) mal, préoccupé(e), ou inconfortable pendant que vous l'école depuis 1 mois ?   | s étiez à |
| 1 : Jamais 2 : 1 ou 2 fois 3 : La moitié du temps 4 : La plupart du temps 5 : Constamment  | R         |
| 13. Avez-vous trouvé que c'était intéressant d'aller à l'école durant le dernier mois ?  |           |
| <ul> <li>1 : Presque toujours</li> <li>2 : La plupart du temps sauf une ou deux fois</li> <li>3 : La moitié du temps</li> <li>4 : Presque jamais</li> </ul>  |           |
| 5 : Jamais   | R         |
| SECTION 3 : TRAVAIL À LA MAISON  |           |
| <ul><li>14. Combien de fois avez-vous fait des tâches ménagères à la maison depuis 1 mois ?</li><li>1 : Tous les jours</li></ul>   |           |
| <ul> <li>2 : Presque tous les jours</li> <li>3 : Environ la moitié du temps</li> <li>4 : En général je n'ai pas fait de petits travaux</li> <li>5 : J'ai été incapable de faire des petits travaux</li> </ul>  | R         |
|  |           |

| 1 : J'ai fait du bon travail 2 : J'ai fait du bon travail mais avec quelques difficult 3 : L'ai au basain d'aida pour faire mon travail et is no  |                                    |
|---|------------------------------------|
| 3 : J'ai eu besoin d'aide pour faire mon travail et je ne   | i ai pas bien fait environ         |
| la moitié du temps<br>4 : Pas travaillé   | R                                  |
| 16. Durant le dernier mois, avez-vous été gêné(e), embarras maison n'était pas bien fait ?  | sé(e) parce que votre travail à la |
| 1 : Je me suis jamais senti(e) gêné(e) 2 : Je me suis senti(e) gêné(e) 1 ou 2 fois 3 : Je me suis senti(e) gêné(e) la moitié du temps 4 : Je me suis senti(e) gêné(e) la plupart du temps 5 : Je me suis constamment senti(e) gêné(e)   | R                                  |
| 17. Durant le dernier mois, avez-vous eu des chicanes ou d<br>vendeurs dans un magasin ou d'autres gens que vous ne c   |                                    |
| <ul> <li>1 : Je n'ai eu aucune chicane et je me suis très bien en</li> <li>2 : Je me suis généralement bien entendu mais j'ai eu</li> <li>3 : J'ai eu des chicanes quelques reprises</li> <li>4 : J'ai eu plusieurs chicanes</li> </ul> |                                    |
| 5 : J'étais toujours en chicane   | R                                  |
| 18. Durant le dernier mois, vous êtes-vous senti mal, préocci vous faisiez vos travaux dans la maison ?   | upé(e), inconfortable pendant que  |
| 1 : Jamais 2 : 1 ou 2 fois 3 : La moitié du temps 4 : La plupart du temps 5 : Constamment   | R                                  |
| 19. Avez-vous trouvé que vos tâches ménagères étaient intére  | essantes durant le dernier mois ?  |
| <ul> <li>1 : Presque toujours</li> <li>2 : La plupart du temps sauf 1 ou 2 fois</li> <li>3 : La moitié du temps</li> <li>4 : Presque jamais</li> </ul>  |                                    |
| 5 : Jamais  | R                                  |
|   |                                    |
|   |                                    |

15. Durant le dernier mois, avez-vous réussi à bien faire vos tâches ménagères ?

# SECTION 4 : AMIS EXTÉRIEURS

| 20. À combien d'ami(e)s avez-vous parlé au téléphone depuis 1 mois ?  |          |
|---|----------|
| ami(e)s   |          |
| 21. Combien d'ami(e)s avez-vous rencontré(e)s depuis 1 mois ?   |          |
| ami(e)s   |          |
| 22. Durant le dernier mois, avez-vous été capable de parler à un(e) amis(e) de vos se et de vos problèmes ?   | entiment |
| <ul><li>1 : Je me suis senti(e) capable de parler de mes sentiments les plus personnels</li><li>2 : J'ai généralement été capable de parler de mes sentiments et de mes problèmes</li></ul>   |          |
| 3 : J'ai été incapable de parler de mes sentiments et de mes problèmes la moiti du temps  | é        |
| 4 : J'ai généralement été incapable de parler de mes sentiments et de mes problèmes   |          |
| 5 : Je n'ai jamais été capable de parler de mes sentiments  | R        |
| 23. Durant le dernier mois, combien de fois avez-vous rencontré des ami(e)s pour choses ensemble ? (visites, cinéma, restaurant)  | faire de |
| 1 : Plus que 6 fois   |          |
| 2 : 5 à 6 fois  |          |
| 3 : 3 à 4 fois<br>4 : 1 ou 2 fois   |          |
| 5 : Jamais  | R        |
| 24. Avez-vous eu des chicanes avec vos ami(e)s depuis 1 mois ?  |          |
| <ul> <li>1 : Je n'ai eu aucune chicane et je me suis très bien entendu(e)</li> <li>2 : Je me suis généralement bien entendu(e) mais j'ai eu quelques petites chica</li> <li>3 : J'ai eu des chicanes à quelques reprises</li> <li>4 : J'ai eu plusieurs chicanes</li> </ul> | nes      |
| 5 : J'étais toujours en chicane   | R        |
| 25. Est-ce qu'un(e) ami(e) vous a fait de la peine ou vous a fâché depuis 1 mois ?  |          |
| 1:OUI   |          |
| 2 : NON   | R        |

| 23.1.      | Combien de temps cera vous a pris pour vous en remettre !  |             |
|------------|--|-------------|
|            | 1 : Quelques heures  |             |
|            | 2 : Quelques jours   |             |
|            | 3: Une semaine   |             |
|            | 4 : Ça va me prendre des mois pour m'en remettre   | R           |
| <u>CEC</u> | TION E . TEMPS I IDDES   |             |
| SEC        | CTION 5 : TEMPS LIBRES   |             |
|            | ous êtes-vous senti(e) seule(e) ou auriez-vous aimé avoir plus d'ami(e)s derniers mois ?   | lurant les  |
|            | 1 : Non 2 : Quelques fois 3 : La moitié du temps 4 : Généralement 5 : Je me suis toujours senti(e) seule(e)  | R           |
|            |  |             |
|            | endant le dernier mois, combien de temps avez-vous passé à des activités de lois asse-temps (hobby, bricolage, sport, lecture, etc.) ?   | sirs, ou de |
|            | <ol> <li>La plupart de mes temps libres tous les jours</li> <li>La moitié de mes temps libres</li> <li>J'ai passé peu de temps à faire des hobbys</li> <li>Je n'ai pas fait de hobbys mais j'ai regardé la TV</li> <li>Je n'ai pas fait de hobbys et je n'ai pas regardé la TV</li> </ol>                | R           |
| 28. V      | ous êtes-vous senti(e) mal à l'aise ou gêné(e) avec les gens depuis un mois ?  |             |
|            | <ol> <li>Je me suis toujours senti(e) confortable</li> <li>Parfois je me suis senti(e) mal à l'aise mais j'ai pu relaxer après quelques instants</li> <li>La moitié du temps inconfortable</li> <li>Généralement inconfortable</li> <li>Toujours inconfortable</li> <li>NAP (pas vu personne)</li> </ol> | R           |
| 29. V      | ous êtes-vous ennuyé(e) durant vos temps libres depuis 1 mois ?  |             |
|            | <ol> <li>Jamais</li> <li>Généralement je ne me suis pas ennuyé(e)</li> <li>La moitié du temps je me suis ennuyé(e)</li> <li>La plupart du temps je me suis ennuyé(e)</li> <li>Je me suis toujours ennuyé(e)</li> </ol>   | R           |
|            |  |             |

# **SECTION 6: FAMILLE**

| enfants, beaux-frères, etc.)?   | ie, sœui,  |
|---|------------|
| 1 : OUI<br>2 : NON  | R          |
| 31. Avez-vous eu des chicanes avec quelqu'un de votre famille depuis un mois ?  |            |
| <ul> <li>1 : Nous nous sommes toujours très bien entendus(es)</li> <li>2 : Nous nous sommes très bien entendus mais il y a eu quelques petites chicar</li> <li>3 : J'ai eu des chicanes à quelques reprises</li> <li>4 : J'ai eu plusieurs chicanes</li> </ul>  | nes        |
| 5 : J'étais toujours en chicane   | R          |
| 32. Durant le dernier mois, avez-vous été capable de parler de vos problèmes à quel votre famille ?   | lqu'un de  |
| <ul> <li>1 : Je me suis senti(e) capable de parler de mes sentiments les plus personnels</li> <li>2 : J'ai généralement été capable de parler de mes sentiments et de mes problèmes</li> <li>3 : J'ai été incapable de parler de mes sentiments et de mes problèmes la moiti du temps</li> </ul>              | é          |
| 4 : J'ai généralement été incapable de parler de mes sentiments et de mes problèmes   | D          |
| 5 : Je n'ai jamais été capable de parler de mes sentiments  | R          |
| 33. Durant le dernier mois, vous êtes-vous parfois arrangé(e) pour éviter de r quelqu'un de votre famille ?   | encontrer  |
| <ol> <li>Je les ai rejoints régulièrement</li> <li>J'ai rejoint au mois une fois une personne de ma famille</li> <li>J'ai attendu que les gens de ma famille me rejoignent</li> <li>Je les ai évités mais eux m'ont rejoint</li> <li>Je n'ai eu aucun contact avec aucun des membres de ma famille</li> </ol> | R          |
| 34. Au cours du dernier mois, avez-vous été dépendant(e) des membres de votre fan avoir de l'aide, des conseils ou de l'argent ?  | nille pour |
| <ol> <li>Je n'ai jamais eu à dépendre d'eux</li> <li>Je n'ai généralement pas eu à dépendre d'eux</li> <li>La moitié du temps j'ai dépendu d'eux</li> <li>La plupart du temps j'ai été dépendant(e) d'eux</li> <li>J'ai été complètement dépendant(e) d'eux</li> </ol>  | R          |
|   |            |

| 35. Durant le dernier mois, avez-vous eu le goût de faire le contraire de ce que votre fair voulait, simplement pour les fâcher ?   | mille  |
|---|--------|
| 1 : Jamais 2 : 1 ou 2 fois 3 : La moitié du temps 4 : La plupart du temps 5 : Constamment  R_   |        |
| 36. Durant le dernier mois, avez-vous été préoccupé(e) ou inquiet(e) sans raison au sujer membres de votre famille ?  | t des  |
| 1 : Jamais 2 : 1 ou 2 fois 3 : La moitié du temps 4 : La plupart du temps 5 : Constamment  R_   |        |
| 37. Au cours du dernier mois, vous est-il arrivé de penser que vous aviez été injuste ou pas hauteur avec les membres de votre famille ?  | s à la |
| 1 : Je n'ai jamais pensé cela 2 : Généralement je n'ai pas pensé cela 3 : La moitié du temps j'ai pensé cela 4 : La plupart du temps, j'ai pensé cela 5 : J'ai constamment pensé cela   |        |
| 38. Au cours du dernier mois, vous est-il arrivé de penser que des membres de votre far avaient été injustes ou vous avaient lassé(e) tomber ?  | mille  |
| 1 : Je n'ai jamais pensé cela 2 : Généralement je n'ai pas pensé cela 3 : La moitié du temps j'ai pensé cela 4 : Généralement j'ai pensé cela 5 : Je leur en veux beaucoup de m'avoir laissé tomber  R_  39. Avez-vous déjà été marié(e) ou avez-vous vécu en union libre ? |        |
| 1 : OUI<br>2 : NON  |        |

| 40. Durant le dernier mois, avez-vous été préoccupé(e) ou inquiet(e) sans raison a votre conjoint(e) ou de vos enfants même si vous ne vivez pas avec eux ?   | ı sujet de  |
|---|-------------|
| 1 : Jamais 2 : 1 ou 2 fois 3 : La moitié du temps 4 : La plupart du temps 5 : Constamment 6 : NAP (conjoint(e) et/ou enfants décédé(e)s)  | R           |
| 41. Au cours du dernier mois, vous est-il arrivé de penser que vous aviez été injuste chauteur avec votre conjoint(e) ou un de vos enfants ?  | ou pas à la |
| <ol> <li>Je n'ai jamais pensé cela</li> <li>Généralement je n'ai pas pensé cela</li> <li>La moitié du temps j'ai pensé cela</li> <li>La plupart du temps, j'ai pensé cela</li> <li>J'ai constamment pensé cela</li> </ol>   | R           |
| 42. Au cours du dernier mois, vous est-il arrivé de penser que votre conjoint(e) ou enfants avaient été injustes ou vous avaient laissé(e) tomber ?   | un de vos   |
| <ol> <li>Je n'ai jamais pensé cela</li> <li>Généralement je n'ai pas pensé cela</li> <li>La moitié du temps j'ai pensé cela</li> <li>La plupart du temps j'ai pensé cela</li> <li>J'ai constamment pensé cela</li> </ol>  | R           |
| 43. Avez-vous présentement un(e) conjoint(e) avec qui vous vivez ?  |             |
| 1 : OUI<br>2 : NON  | R           |
| 44. Avez-vous eu des chicanes avec votre conjoint(e) depuis un mois ?   |             |
| <ul> <li>1 : Nous nous sommes toujours très bien entendus (es)</li> <li>2 : Nous nous sommes très bien entendus(es) mais il y a eu quelques petites chicanes</li> <li>3 : J'ai eu des chicanes à quelques reprises</li> <li>4 : J'ai eu plusieurs chicanes</li> </ul> |             |
| 5 : J'étais toujours en chicane   | R           |

| 45. Durant le dernier mois, avez-vous été capable de parler de vos sentiments o problèmes à votre conjoint(e) ?   | u de vos   |
|---|------------|
| <ul><li>1 : Je me suis senti(e) capable de parler de mes sentiments les plus personnels</li><li>2 : J'ai généralement été capable de parler de mes sentiments et de mes problèmes</li></ul> |            |
| 3 : J'ai été incapable de parler de mes sentiments et de mes problèmes la moiti du temps  | é          |
| 4 : J'ai généralement été incapable de parler de mes sentiments et de mes problèmes   |            |
| 5 : Je n'ai jamais été capable de parler de mes sentiments  | R          |
| 46. Durant le dernier mois, avez-vous insisté pour toujours tout faire à votre façon ?  |            |
| 1 : Je n'ai pas insisté pour tout faire à ma façon  |            |
| 2 : Je n'ai généralement pas insisté pour tout faire à ma façon   |            |
| 3 : La moitié du temps, j'ai insisté pour faire les choses à ma façon   |            |
| 4 : J'ai généralement insisté pour faire les choses à ma façon  |            |
| 5 : J'ai constamment insisté pour faire les choses à ma façon   | R          |
| 47. Durant le dernier mois, avez-vous eu l'impression que votre conjoint(e) vous toujours des ordres, vous « bossait » ?  | s donnait  |
| 1 : Jamais  |            |
| 2 : 1 ou 2 fois   |            |
| 3 : La moitié du temps  |            |
| 4 : La plupart du temps   |            |
| 5 : Constamment   | R          |
| 48. Durant le dernier mois, jusqu'à quel point vous êtes-vous senti(e) dépendant(e) conjoint(e) ?   | de votre   |
| 1 : J'étais indépendant(e)  |            |
| 2 : J'étais généralement indépendant(e)   |            |
| 3 : J'étais un peu dépendant(e)   |            |
| 4 : J'étais généralement dépendant(e)   |            |
| 5 : J'ai été dépendant(e) de mon (ma) conjoint(e) pour tout   | R          |
| 49. Comment vous êtes-vous senti(e) par rapport à votre conjoint(e) depuis un mois ?  |            |
| 1 : J'ai toujours ressenti de l'affection   |            |
| 2 : J'ai généralement ressenti de l'affection   |            |
| 3 : La moitié du temps je ne l'aimais pas et l'autre moitié je ressentais de  |            |
| l'affection   |            |
| 4 : La plupart du temps je ne l'aimais pas  | R          |
| 5 : Pendant tout le mois je ne l'aimais pas   | <b>1</b> / |

| 50. Durant le dernier mois, avez-vous eu des problèmes (comme des douleurs) prelations sexuelles avec votre conjoint(e)?  | endant vos    |
|---|---------------|
| 1 : Aucun 2 : 1 ou 2 fois 3 : La moitié du temps 4 : La plupart du temps 5 : Constamment  | R             |
| SECTION 7 : ENFANTS   |               |
| 51. Avez-vous eu un ou des enfants qui vivaient avec vous durant le dernier mois ?  |               |
| 1 : OUI<br>2 : NON  | R             |
| 52. Dans le dernier mois, vous êtes-vous intéressé(e) à ce que vos enfants faisaie dans leurs loisirs, etc. ?   | nt à l'école, |
| <ul> <li>1 : J'étais toujours intéressé(e) et je participais activement</li> <li>2 : J'étais généralement intéressé(e)</li> <li>3 : J'étais intéressé(e) la moitié du temps mais pas l'autre moitié</li> <li>4 : Je n'avais généralement pas d'intérêt</li> <li>5 : Je n'avais jamais d'intérêt</li> </ul>  | R             |
| 53. Durant le dernier mois, avez-vous été capable de parler à vos enfants et de (seulement les enfants de plus de deux ans) ?   | les écouter   |
| <ol> <li>J'étais toujours capable de communiquer avec eux</li> <li>J'étais généralement capable de communiquer avec eux</li> <li>J'étais capable de communiquer avec eux environ la moitié du temps</li> <li>J'étais en général incapable de communiquer avec eux</li> <li>J'étais absolument incapable de communiquer avec eux</li> <li>NAP : aucun enfant de plus de 2 ans</li> </ol> | R             |
| 54. Dans le dernier mois, comment vous êtes-vous entendu(e) avec vos enfants ?  |               |
| <ul> <li>1 : Je n'ai eu aucune chicane et je me suis très bien entendu(e)</li> <li>2 : Je me suis généralement bien entendu(e) mais j'ai eu quelques petites chicanes</li> <li>3 : J'ai eu des chicanes à quelques reprises</li> <li>4 : J'ai eu plusieurs chicanes</li> </ul>  |               |
| 5 : J'étais toujours en chicane   | R             |
|   |               |

| 55. Comment vous êtes-vous senti(e) par rapport à votre (vos) enfant(s) depuis un moi   | s ? |
|---|-----|
| 1 : J'ai toujours ressenti de l'affection   |     |
| 2 : J'ai généralement ressenti de l'affection   |     |
| 3 : La moitié du temps je ne l'aimais pas et l'autre moitié je ressentais de l'affection  |     |
| 4 : La plupart du temps je ne l'aimais pas  |     |
| 5 : Pendant tout le mois je ne l'aimais pas   | R   |
| 56. Avez-vous eu assez d'argent pour vivre durant le dernier mois ?   |     |
| 1 : Assez d'argent  |     |
| 2 : Généralement assez d'argent   |     |
| 3 : La moitié du temps j'ai manqué d'argent mais je n'ai pas eu à emprunter<br>4 : Généralement pas assez et j'ai été obligé(e) d'emprunter |     |
| 5 : J'ai eu des gros problèmes de finances  | R   |

# -APPENDIX LTABLE: MEANS AND STANDARD DEVIATIONS OF PARTICIPANTS WITH PARTNERS *VERSUS* THOSE WITHOUT PARTNERS

Means and Standard Deviations of Patterns of Interpersonal Behaviour, Social Anxiety, General Psychopathology, and Social Functioning in Socially Phobic and Normal Participants With and Without Partners and in Sexually Dysfunctional Singles

| ia<br>W/O Partners |
|--------------------|
| = 64)              |
| (SD)               |
| 16.39)             |
| 18.39)             |
| (9.39)             |
| 11.81)             |
| 13.86)             |
| 12.88)             |
| (5.43)             |
| (7.23)             |
| (5.85)             |
| (6.65)             |
| (8.31)             |
| (6.29)             |
| (7.60)             |
| (6.22)             |
| (8.59)             |
| (7.35)             |
| (99.0)             |
| (0.35)             |

Generosity/Normativeness; H = Friendliness/Compliance; SAD = Social Anxiety and Distress; FNE = Fear of Negative Affiliation; DOM = Dominance; AGG = Aggressiveness; SUB = Modesty/Self-Effacement; F = Docility/Dependence; Management/Exploitation; Evaluation; SCL = Symptom Check-List; SAS-R = Social Adjustment Scale – Revised. Competition/Autocracy; B Without; PO = Power; AF = Skepticism/Mistrust; = Agreeableness; A Boldface means differ at p < 0.01Criticism/Hostility; D = AGR Submissiveness; Notes. W/O =  $\frac{1}{2}$ 

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| -APPENDIX M-  |
|---|
| THE TREATMENT OF SOCIAL PHOBIA BY AN INTERPERSONAL APPROACH |
| (IA)  |

#### An Interpersonal Approach to Treatment of Social Phobia

The practical application of the therapy of an interpersonal approach (IA)<sup>1</sup> is derived directly from an interpersonal theoretical framework and is therefore guided closely by premises inherent to this approach.

In general, IA is based on the principle that overcoming social phobia requires the dissolution of the various self-protective sub-patterns that make up the overall socially phobic pattern. A gradual discarding of self-protective conduct requires the *re-learning* of established habits, and the development of new ways of behaving with others (Stravynski, 2014). "Viewed interpersonally, the absence of social phobia would imply a greater ability to venture out of a safety zone, to act more powerfully and independently, and to enact social roles prolifically and with greater poise" (Stravynski, 2014; Chapter 8). The non-defensive modes of interacting with others identified for built-up, constitute the content of the therapy. More specifically:

"From a social life predicated on maximizing safety and minimizing harm, it will be refocused on the pursuit of the patient's social objectives. [...] firstly, all distance keeping (avoiding, fleeing) has to cease. Secondly, when in social settings, non-defensive new patterns of conduct have to be developed. These would mostly seek to replace passive attendance and submission by active and appropriate participation." (Stravynski, 2014, Chapter 8).

Specifically, treatment goals are organized in descending order based on the severity of the social impairment: Those resulting in the most severe social dysfunction are grappled first. A higher degree of impairment is often observed in the enactment of social roles that occur in the public domain of social life (e.g., occupational setting) than in those enacted in the private domain (e.g., family reunion). At an intermediate level can be found some cases, where there is an overlap between private roles requiring action in public settings (e.g., a groom giving a speech at a wedding where there will be strangers). In general, impairment in social functioning increases as the level of intimacy in a particular situation decreases; therefore social roles performed in public settings are often targeted before those occurring in private

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<sup>&</sup>lt;sup>1</sup> A more elaborate description of IA can be found more specifically in Stravynski (2014, Chapter 8) and Stravynski (2007, pp. 3-15; 209-304).

settings or those consisting of private functions taking place in the public domain (Stravynski, 2014).

Practically, six steps (instructions, modeling, role-rehearsal, feedback, homework, and self-monitoring), which can take place in either individual or group format<sup>2</sup>, can constitute a typical therapeutic session. These steps, described individually below, allow for the treatment targets to be progressively tackled and for the process of re-learning how to live in social life to take place. This approach to treatment is however very flexible. The means used to achieve social goals can therefore range from simple to more elaborate. On the one hand, patients can be given simple assignments, which do not require significant preparation (e.g., greeting a stranger). In this case, the fifth (homework) and sixth (self-monitoring) steps can be implemented directly after the first one (instructions). On the other hand, more complex tasks, which require increased preparation, can be assigned. These may necessitate that all six intervention steps be exercised to make the achievement of the social goal possible (Stravynski, 2014).

- 1) **Instructions:** The therapist provides directives to the patient. These "describe the targeted behavioral pattern, its purpose and intended effect (function)" (Stravynski, 2014, Chapter 8).
- 2) **Modeling:** A demonstration of how to perform the particular targeted social action is made. This can be done by either the psychotherapist or another participant in the group when the therapy takes places in group format, as the case in the present study.
- 3) **Role-Rehearsal:** The participant is asked to enact the targeted behaviour in a simulated interaction with the therapist or another member of the group.

<sup>&</sup>lt;sup>2</sup> See also Amado, D., Kyparissis. A., & Stravynski, A. (2013, June). Traitement de la phobie sociale par une approche interpersonnelle – format individuel ou de groupe. Workshop presented at the 74th Annual Convention of the Canadian Psychological Association, Quebec City, Quebec, Canada.

4) **Feedback:** The therapist and the other participants in the group comment on the simulated interaction. This step consists of two parts: In the first part, the positive features of the performance as well as the achievement (even if partial) of the intended goal are praised and positively reinforced. In the second part, suggestions for improvement are given. Often, adjustments to be made to specific elements of behaviour – verbal (i.e., the specific content of the discourse), para-verbal (e.g., tone of voice, pace, enunciation), or non-verbal (e.g., posture, facial expression) – are highlighted.

After the initial feedback, the role-rehearsal and feedback steps are repeated at least twice, to allow participants to gain a better grasp on the more complex set of interactive behaviours they are asked to perform.

- 5) **Homework:** The "targeted behaviors practiced to a satisfactory level of performance within sessions are assigned as [...] tasks to be performed in real life, between sessions." (Stravynski, 2014, Chapter 8). These are reviewed at the beginning of the following session.
- 6) **Self-Monitoring:** The final step requires that participants keep daily track of each performance of a target. They are also asked to take note of their anxiety level for each of these performances.

It is imperative to mention that from an interpersonal standpoint, anxiousness is construed as arising as a by-product of the interaction between self-protectiveness and the threat inherent in the social situation. For this reason, IA does not specifically aim for anxiety reduction. Instead the working hypothesis is that:

"during successful therapy, as self-protective patterns wither and are replaced by interpersonal patterns allowing greater and better enactment of social roles (and therefore participation in social life), diminished fearfulness, would flow naturally – as a collateral result – from such interpersonal transformation." (Stravynski, 2014, Chapter 8).

# -APPENDIX NTABLE: MEANS AND STANDARD DEVIATIONS OF PARTICIPANTS WHO COMPLETED THE STUDY *VERSUS* THOSE WHO DROPPED OUT

Pre-Treatment Means and Standard Deviations of Patterns of Interpersonal Behaviour, Social Anxiety, Social Functioning, and General Psychopathology in Participants who Completed the Study and Drop-Outs

| ,     | Completers |         | Drop-Outs |         |
|-------|------------|---------|-----------|---------|
|       | (n = 85)   |         | (n = 48)  |         |
|       | <i>M</i>   | (SD)    | <i>M</i>  | (SD)    |
| PO    | -15.99     | (17.17) | -15.96    | (17.13) |
| AF    | 9.44       | (16.08) | 9.93      | (17.87) |
| DOM   | 26.59      | (9.96)  | 25.71     | (9.23)  |
| AGG   | 27.97      | (11.97) | 27.11     | (10.92) |
| SUB   | 42.58      | (12.51) | 41.67     | (15.33) |
| AGR   | 37.41      | (11.35) | 37.04     | (13.00) |
| A     | 9.05       | (5.87)  | 8.75      | (5.34)  |
| В     | 11.86      | (7.36)  | 11.00     | (6.53)  |
| C     | 10.21      | (6.28)  | 9.77      | (5.37)  |
| D     | 13.51      | (6.17)  | 13.77     | (6.74)  |
| E     | 20.65      | (7.64)  | 20.19     | (8.68)  |
| F     | 17.82      | (5.87)  | 16.92     | (7.06)  |
| G     | 15.69      | (6.77)  | 15.94     | (7.44)  |
| Н     | 13.20      | (6.09)  | 13.23     | (5.54)  |
| SAD   | 21.08      | (5.36)  | 21.19     | (4.89)  |
| FNE   | 25.02      | (3.87)  | 23.58     | (5.87)  |
| SAS-R | 1.44       | (0.33)  | 1.47      | (0.43)  |
| SCL   | 0.90       | (0.54)  | 1.06      | (0.70)  |

Notes. PO = Power; AF = Affiliation; DOM = Dominance; AGG = Aggressiveness; SUB = Submissiveness; AGR = Agreeableness; A = Competition/Autocracy; B = Management/Exploitation; C = Criticism/Hostility; D = Skepticism/Mistrust; E = Modesty/Self-Effacement; F = Docility/Dependence; G = Generosity/Normativeness; H = Friendliness/Compliance; SAD = Social Anxiety and Distress; FNE = Fear of Negative Evaluation; SAS-R = Social Adjustment Scale - Revised; SCL = Symptom Check-List.

# -APPENDIX OTABLE: MEANS AND STANDARD DEVIATIONS OF PARTICIPANTS ON THE WAITING LIST *VERSUS* PARTICIPANTS AT PRE-TREATMENT

Means and Standard Deviations of Patterns of Interpersonal Behaviour, Social Anxiety, Social Functioning, and General Psychopathology Prior to a Waiting List Period and at Pre-Treatment

|       | Prior to WL |         | Pre-Tr | reatment |
|-------|-------------|---------|--------|----------|
|       | M           | (SD)    | M      | (SD)     |
| PO    | -13.51      | (16.94) | -12.85 | (16.24)  |
| AF    | 12.89       | (16.95) | 12.35  | (17.74)  |
| DOM   | 26.02       | (10.53) | 26.29  | (10.74)  |
| AGG   | 24.35       | (9.93)  | 24.55  | (11.26)  |
| SUB   | 39.53       | (13.36) | 39.15  | (12.39)  |
| AGR   | 37.24       | (12.64) | 36.90  | (11.47)  |
| A     | 8.19        | (6.28)  | 9.31   | (6.07)   |
| В     | 11.36       | (6.44)  | 10.76  | (7.33)   |
| C     | 7.76        | (4.45)  | 8.76   | (5.36)   |
| D     | 12.33       | (5.48)  | 11.79  | (5.18)   |
| E     | 19.33       | (8.14)  | 18.71  | (8.15)   |
| F     | 16.52       | (6.80)  | 17.40  | (6.11)   |
| G     | 15.79       | (7.17)  | 15.26  | (6.81)   |
| Н     | 14.12       | (6.14)  | 13.50  | (5.73)   |
| SAD   | 20.74       | (4.75)  | 19.88  | (6.45)   |
| FNE   | 24.33       | (5.32)  | 23.52  | (5.61)   |
| SAS-R | 1.44        | (0.34)  | 1.40   | (0.31)   |
| SCL   | 0.78        | (0.41)  | 0.75   | (0.45)   |

Notes. n = 42.

WL = Waiting List; PO = Power; AF = Affiliation; DOM = Dominance; AGG = Aggressiveness; SUB = Submissiveness; AGR = Agreeableness; A = Competition/Autocracy; B = Management/Exploitation; C = Criticism/Hostility; D = Skepticism/Mistrust; E = Modesty/Self-Effacement; F = Docility/Dependence; G = Generosity/Normativeness; H = Friendliness/Compliance; SAD = Social Anxiety and Distress; FNE = Fear of Negative Evaluation; SAS-R = Social Adjustment Scale - Revised; SCL = Symptom Check-List.

# -APPENDIX P DSM-IV-TR CRITERIA FOR THE SEXUAL DYSFUNCTIONS

#### Sexual Desire Disorders

#### Diagnostic Criteria for 302.71 Hypoactive Sexual Desire Disorder

- A. Persistently or recurrently deficient (or absent) sexual fantasies and desire for sexual activity. The judgment of deficiency or absence is made by the clinician, taking into account factors that affect sexual functioning, such as age, sex, and the context of the person's life.
- B. The disturbance causes marked distress or interpersonal difficulty.
- C. The sexual dysfunction is not better accounted for by another Axis I disorder (except another Sexual Dysfunction), and is not due exclusively to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

(DSM-IV-TR; APA, 2000, p. 541)

#### Diagnostic Criteria for 302.79 Sexual Aversion Disorder

- A. Persistent or recurrent extreme aversion to, and avoidance of, all (or almost all), genital sexual contact with a sexual partner.
- B. The disturbance causes marked distress or interpersonal difficulty.
- C. The sexual dysfunction is not better accounted for by another Axis I disorder (except another Sexual Dysfunction).

(DSM-IV-TR; APA, 2000, p. 542)

#### Sexual Arousal Disorders

#### Diagnostic Criteria for 302.72 Female Sexual Arousal Disorder

- A. Persistent or recurrent inability to attain, or to maintain until completion of the sexual activity, an adequate lubrication-swelling response of sexual excitement.
- B. The disturbance causes marked distress or interpersonal difficulty.
- C. The sexual dysfunction is not better accounted for by another Axis I disorder (except another Sexual Dysfunction), and is not due exclusively to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

(DSM-IV-TR; APA, 2000, p. 544)

#### Diagnostic Criteria for 302.72 Male Erectile Disorder

- A. Persistent or recurrent inability to attain, or to maintain until completion of the sexual activity, an adequate erection.
- B. The disturbance causes marked distress or interpersonal difficulty.
- C. The erectile dysfunction is not better accounted for by another Axis I disorder (other than a Sexual Dysfunction), and is not due exclusively to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

(DSM-IV-TR; APA, 2000, p. 547)

#### Orgasmic Disorders

### Diagnostic Criteria for 302.73 Female Orgasmic Disorder (formerly Inhibited Female Orgasm)

- A. Persistent or recurrent delay in, or absence of, orgasm following a normal sexual excitement phase. Women exhibit wide variability in the type or intensity of stimulation that triggers orgasm. The diagnosis of Female Orgasmic Disorder should be based on the clinician's judgment that the woman's capacity is less than would be reasonable for her age, sexual experience, and the adequacy of sexual stimulation she receives.
- B. The disturbance causes marked distress or interpersonal difficulty.
- C. The orgasmic dysfunction is not better accounted for by another Axis I disorder (except another Sexual Dysfunction), and is not due exclusively to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

(DSM-IV-TR; APA, 2000, p. 549)

## Diagnostic Criteria for 302.74 Male Orgasmic Disorder (formerly Inhibited Male Orgasm)

- A. Persistent or recurrent delay in, or absence of, orgasm following a normal sexual excitement phase during sexual activity that the clinician, taking into account the person's age, judges to be adequate in focus, intensity, and duration.
- B. The disturbance causes marked distress or interpersonal difficulty.
- C. The orgasmic dysfunction is not better accounted for by another Axis I disorder (except another Sexual Dysfunction), and is not due exclusively to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

(DSM-IV-TR; APA, 2000, p. 552)

#### Diagnostic Criteria for 302.75 Premature Ejaculation

- A. Persistent or recurrent ejaculation with minimal sexual stimulation before, on, or shortly after penetration and before the person wishes it. The clinician must take into account factors that affect duration of the excitement phase, such as age, novelty of the sexual partner or situation, and recent frequency of sexual activity.
- B. The disturbance causes marked distress or interpersonal difficulty.
- C. The premature ejaculation is not due exclusively to the direct effects of a substance (e.g., withdrawal from opioids).

(*DSM-IV-TR*; APA, 2000, p. 554)

#### Sexual Pain Disorders

## Diagnostic Criteria for 302.76 Dyspareunia (Not Due to a General Medical Condition)

- A. Recurrent or persistent genital pain associated with sexual intercourse in either a male or a female.
- B. The disturbance causes marked distress or interpersonal difficulty.
- C. The disturbance is not caused exclusively by Vaginismus or lack of lubrification, is not better accounted for by another Axis I disorder (except another Sexual Dysfunction), and is not due exclusively to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

(DSM-IV-TR; APA, 2000, p. 556)

# Diagnostic Criteria for 306.51 Vaginismus (Not Due to a General Medical Condition)

- A. Recurrent or persistent involuntary spasm of the musculature of the outer third or the vagina that interferes with sexual intercourse.
- B. The disturbance causes marked distress or interpersonal difficulty.
- C. The disturbance is not better accounted for by another Axis I disorder (e.g., Somatization Disorder) and is not due exclusively to the direct physiological effects of a general medical condition.

(DSM-IV-TR; APA, 2000, p. 558)