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Review article

Self-focused attention in social phobia and social anxiety

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Abstract

Self-focused attention is an awareness of self-referent information and is present in many emotional disorders. This review concentrates on the role of self-focused attention in social anxiety with particular reference to the Clark and Wells [Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. In R. R. G. Heimberg, M. Liebowitz, D. A. Hope, & S. Scheier (Eds.), Social phobia: diagnosis, assessment and treatment. New York: Guilford.] model of social phobia. According to Clark and Wells, self-focused attention is an important maintaining factor in the disorder because it increases access to negative thoughts and feelings, can interfere with performance, and prevents the individual from observing external information that might disconfirm his or her fears. Clark and Wells also propose that socially phobic individuals construct a distorted impression of themselves, based on internally generated information, that takes the form of a visual image (often seen from the perspective of an observer) or felt sense. This paper describes the model and then reviews other theories of selffocused attention, and empirical evidence on self-focused attention. Two types of evidence are reviewed: one, studies that have been conducted from a variety of theoretical perspectives that have relevance either to social anxiety in general or to the Clark and Wells model in particular; two, studies that were designed as a direct test of Clark and Wells' predictions. The final section of the review summarizes the conclusions and suggests areas for future examination. © 2002 Elsevier Science Ltd. All rights reserved.

Keywords: Social phobia; Social anxiety; Self-focused attention; Imagery

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1. Introduction

Social phobia is defined by *DSM-IV* as "a marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or possibly 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." (American Psychiatric Association [APA], 1994, p. 416). Recent epidemiological studies suggest lifetime prevalence rates of 4.9% for males and 9.5% for females (Wittchen, Stein, & Kessler, 1999). Social fears that do not meet full diagnostic criteria are present both in other psychiatric disorders and in the general population. Furmark et al. (1999) and Pollard and Henderson (1988) both found that more than 20% of the population report irrational social fears. The Clark and Wells (1995) model of social phobia has influenced both theoretical understanding of the disorder and improved the success of its treatment (Clark, 2001). This review concentrates on one aspect of the model, namely the role given to self-focused attention in the maintenance of social phobia and anxiety.

Self-focused attention is not unique to social anxiety and plays an important role in a number of emotional disorders (Hartman, 1983). The review begins with a definition of self-focused attention and a brief summary of its role in psychopathology in general. Next, we outline the cognitive model of social phobia (Clark & Wells, 1995) with particular emphasis on self-focused attention and social anxiety. The next section describes two theories developed in social psychology—objective self-awareness (Duval & Wicklund, 1972) and cybernetic theory of self-regulation (Carver & Scheier, 1981)—that examine self-focused attention and we discuss their relevance to social anxiety and to the cognitive model. The following section concentrates on empirical evidence for the role of self-focused attention in social anxiety and on the effects of changing self-focus therapeutically. We then return to the cognitive model of social phobia (Clark & Wells, 1995) and examine their ideas about construction of the self as social object, imagery in social phobia and the role of the observer perspective. The review concludes with a discussion of theoretical and empirical questions about the role of self-focused attention in social phobia, and social anxiety.

2. Self-focused attention

Self-focused attention has been defined as "an awareness of self-referent, internally generated information" (Ingram, 1990, p. 156). The content of such awareness can include body state information such as awareness of physical states, or awareness of thoughts and emotions including personal beliefs and attitudes. Self-referent information may include memories of past feelings, attitudes, or events, which can impact upon the person's self-concept in the present. Ingram (1990) proposed a model of self-focused attention in psychopathology where excessive self-focused attention—described as "self-absorption" (p. 169)—plays an important role in a variety of pathological conditions including experiences of anxiety, social anxiety, depression, alcohol abuse, and schizophrenia. Self-focused attention can have negative effects because it detracts attention from the environment

and, if the content of self-focused thoughts is negative, then self-focused attention generates negative affect and impairs the individual's ability to problem-solve effectively.

Ingram (1990) argues that self-focused attention is a "nonspecific process in psychopathology" (p. 173) and that this lack of specificity diminishes its explanatory power. He resolves the problem by proposing a metaconstruct model that distinguishes between *process* and *content*. According to Ingram's model, the process of self-focused attention occurs across all disorders and is characterized by excessive internal focus, lengthy duration, and excessive rigidity. By comparison, the content of self-focused attention is "unique to the particular psychopathological schema that controls the more generalized attentional processes" (Ingram, 1990, p. 173). This is an interesting suggestion but most of the literature in support of Ingram's argument studies self-focused attention in subclinical samples. However, one recent study does provide some support for this proposal. Woodruff-Borden, Brothers, and Lister (2001) examined the extent of self-focused attention across several clinically diagnosed groups and looked at the predictors and correlates of self-focus. Woodruff-Borden et al. found that the tendency to self-focus is common to broad diagnostic groupings and that the more severe the psychopathology, the greater the self-focus, particularly when the content of the self-focused thought was negative.

Self-focusing is not in itself a pathological process. As Ingram (1990) suggests, self-focus only becomes pathological when it is excessive, sustained, and rigid. Woodruff-Borden et al. (2001) point out that future research needs to examine the threshold when self-focusing changes from normal to pathological and the extent to which negative thinking contributes to this shift. There may also be other individual differences that contribute to this shift, for example, temperament and arousal levels. Self-focus is not a unidirectional process: we know that positive and negative moods (Salovey, 1992) and arousal (Wegner & Giuliano, 1980) can both increase self-focus. Given the reciprocal nature of self-focus and a number of other processes—mood, arousal, negative rumination—it is not clear to what extent self-focused attention has a causal role to play in the development and maintenance of psychopathological states.

Despite these questions, self-focused attention clearly has an important role in psychopathology and the research described above suggests that concentrating on the role of self-focused attention within a particular disorder may be a fruitful approach. A number of authors, including Ingram (1990) have pointed to the importance of self-focus in social anxiety. Indeed Clark and Wells (1995) propose that self-focused attention has a primary role in maintaining social phobia. The next section goes on to review Clark and Wells' cognitive model of social phobia and to describe the role of self-focused attention within that model.

3. The Clark and Wells model of social phobia

Clark and Wells' (1995) propose that when a socially phobic individual enters a social situation, a set of assumptions are activated that produce anxiety. According to the model, the symptoms of anxiety together with the strategies adopted to cope with that anxiety can become further perceived sources of danger, leading to a series of vicious cycles that maintain

the disorder. For example, socially phobic individuals often have unrealistically high performance standards and distorted beliefs about the meaning of putative "social performance failures" (e.g., failing to be completely fluent in a conversation will result in other people judging you as boring or unacceptable). Furthermore, socially phobic individuals assume that other people will make negative judgments about perceived symptoms of anxiety (e.g., he or she will see I'm blushing/shaking and think I'm weird).

Clark (2001) makes a distinction between the processes that occur when a socially phobic individual enters a feared situation and those that operate before and after leaving the situation. Once the individual enters a feared social situation, Clark and Wells (1995) propose that there is a shift in attentional processing to the self that involves detailed observation and monitoring of the self in order to manage self-presentation in the feared situation. This process of self-focus is consistent with the observations on self-focused attention in other disorders and in previous accounts of social anxiety. However, Clark and Wells develop this idea a step further. They argue that once socially phobic individuals become self-focused, they use the internally generated information to construct an impression of themselves as a social object. The information used to construct this impression includes feelings of anxiety, which the individual assumes can be observed by other people, and either visual images of the self or a "felt sense." A felt sense encapsulates the individuals' fears; for example, a socially phobic individual may say "I felt like a geek" and describe a feeling of being observed as such but without a clear accompanying visual image. Socially phobic individuals believe that other people actually see the distorted impression that they have of themselves and as result, the visual image or felt sense has a significant maintaining role in the disorder.

When individuals experience spontaneous images of themselves in a social situation, these images are based on interoceptive sources of information, such as somatic symptoms (for example, racing heart, feeling hot), thoughts and feelings about the self (usually negative), and in some cases memories of actual events (Hackmann, Clark, & McManus, 2000). For some of these individuals, the image is seen from the *perspective of an observer*. This is described in the literature as an image being seen from the "observer perspective." The alternative to the observer perspective is the "field perspective" where the visual image is seen as though the person were viewing the scene through their own eyes, observing the details of what is going on around them. This distinction is described by Wells, Clark, and Ahmad (1998). This image represents another source of negative information about the self, increasing social anxiety still further. The observer perspective is important because it may confer additional authenticity to the image thus reinforcing the belief that this is a veridical image of the self. Self-focused attention in the model also has the consequence of reducing attention to the external environment so that the socially phobic individual does not have an opportunity to disconfirm negative fears and expectations.

The model proposes a number of other maintaining factors that interact with attentional self-focus and construction of the self as social object. These include use of in situ safety behaviors, anxiety induced performance deficits, and the processes that operate within anticipatory and postmortem processing. Safety behaviors are hypothesized to maintain negative beliefs because they prevent the individual from disconfirming his or her unrealistic negative expectancies about the consequences of certain behaviors or the display of physical

symptoms. Anticipatory and postmortem processing are characterized by negative ruminations that dwell on the perceptions of future disaster or dwell on real or imagined past disasters. Clearly self-focused attention and the construction of the self as social object potentially have an important role to play in anticipatory and postmortem processing but these are not clearly spelled out by the model. The implications of self-focus for these processes will be discussed at the end of the review.

The next section of this review will examine evidence from a variety of sources that supports Clark and Wells' (1995) proposal that self-focused attention has a critical role in the maintenance of social phobia and social anxiety. Many of these studies predate the model and were conducted from different theoretical perspectives. We will endeavor to highlight both similarities to and differences from the Clark and Wells model in the following discussion. The review will begin by outlining two influential theories of self-focused attention that were originally derived from social—psychological theory and research on self-evaluation (Duval & Wicklund, 1972).

4. Theories of self-focused attention

This section of the review describes two prominent theories of self-focused attention that may help us to explicate the processes underlying self-focused attention in the cognitive model outlined above. Duval and Wicklund (1972) proposed a theory of "objective self-awareness," which was later expanded by Carver and Scheier (1981), into their "cybernetic theory of self-regulation." These theories were not originally concerned with social anxiety, or with any other form of psychopathology, but were about normal social—psychological processes. However, they are both relevant to the processes that occur in social phobia and anxiety.

4.1. Duval and Wicklund's theory of objective self-awareness

Duval and Wicklund's (1972) ideas are in some ways consistent with the earlier ideas of Mead (1934), who argued that the uniqueness of the self lay in the fact that it could be an object unto itself, whereas no other event in the universe was reflexive in the same way. Mead proposed that when a person's experience is absorbed or preoccupied with objects in the surrounding environment, then the self is the *subject* of consciousness. However, when individuals become aware of themselves as objects in the world, they experience a sense of being outside themselves, observing themselves as another person would, and become the *object* of their own consciousness.

In line with these ideas, Duval and Wicklund (1972) proposed two forms of conscious attention and used the terms 'objective' and 'subjective' self-awareness to describe them. Objective self-awareness occurs when a person's attention is focused on the self as an object. Subjective self-awareness occurs when attention is directed away from the self towards external objects, as the person is then the subject of his or her consciousness. According to Duval and Wicklund, a high level of objective self-awareness causes a person to adopt an external visual perspective, as though the person were looking at him or herself from outside.

This represents a particular kind of self-focused attention, and is a similar in kind to the Clark and Wells (1995) concept of the observer perspective.

By comparison, subjective self-awareness, where attention is directed outward towards people and events in the environment, is a non-self-aware state in which the field perspective would be more likely to be used. According to Duval and Wicklund (1972) the person in this state of subjective self-awareness is unaware of the self as an object in the world. In fact, the term "subjective self-awareness" is somewhat misleading, as this state is not actually self-awareness at all in the way the term is conventionally used.

4.1.1. The initiation of the objectively self-aware state

Duval and Wicklund (1972) theorised that the subjectively self-aware state was the primary or "default" state. The conditions necessary to trigger objective self-awareness were simply an individual's awareness of his or her status as an object in the world. The conditions could be nonsocial such as looking in a mirror, hearing one's tape-recorded voice, or seeing a photograph of oneself. However, Duval and Wicklund go on to point out that other people are strong stimuli for objective self-awareness. If a person is aware that he or she is the object of someone else's attention, that may be sufficient to trigger objective self-awareness.

4.1.2. Consequences of objective self-awareness: self-evaluation

The theory of objective self-awareness proposes that the differences between these two states of awareness have implications for self-evaluation. This is highly relevant to the socially phobic or socially anxious person. When individuals become aware of the self as an object, they do not simply react in a neutral manner, but measure themselves up against certain standards in much the same way as they might evaluate another person. The self is evaluated against the person's own "standards of correctness" (Duval & Wicklund, 1972, p. 4), or internal model of acceptable behavior. The particular standards used depend on the situation. This differs slightly from Mead's (1934) idea that individuals take on others people's standards of evaluation, using a composite or "generalized other" (p. 159). Duval and Wicklund (1972) proposed that it was the *individual's own standards* that are made salient. This is relevant when considering socially anxious individuals, whose standards for social performance often appear to be unrealistically high (Clark & Wells, 1995). The standards of socially phobic individuals are often based on distorted beliefs or assumptions such as "I must never commit even a small social error." This contrasts with Alden's (2001) interpersonal view that it is concern over the high expectations of others that drives the cycle of anxiety.

Duval and Wicklund (1972) argue that the state of objective self-awareness is an uncomfortable one. Although it should be logically possible to judge oneself positively against one's "standards of correctness" (p. 4), they believe that the longer people remain in the objectively self-aware state, the more likely they are to perceive negative discrepancies between their actual behavior and the relevant standard. "The objectively self-aware person will become increasingly self-critical" (p. 22). The proposition that self-awareness triggers self-criticism was tested by Ickes, Wicklund, and Ferris (1973). This study showed that experimentally induced objective self-awareness had negative consequences for self-esteem, as indicated by differences in the self-relevant adjectives that were chosen by participants.

However, there appears to be no experimental evidence to support the proposition that the experience of the objectively self-aware state becomes increasingly negative as time passes.

Although the attention of other people is a strong stimulus for self-awareness, people are not continually in an objectively self-aware state whenever other people are attending to them. According to this theory, "the chronic importance of certain salient dimensions" (Duval & Wicklund, 1972, p. 8) will determine which situations and stimuli will produce objective self-awareness. For example, a child who gets poor reports at school may become objectively self-aware on seeing the head teacher in the street, believing that the teacher is contemplating his or her poor scholastic achievement. The child will then contemplate his or her own ability along this dimension and measure it up against his or her own standards for acceptable performance. These standards may be influenced by the standards of others. In the case of the child, the standard for acceptable achievement at school may be considerably influenced by his or her parents' opinions. However, according to Duval and Wicklund's (1972) theory, it is still the individual's own standards that are critical in self-evaluation.

For socially anxious individuals, all social situations are chronically important because they are so anxious about their performance and doubtful of their ability to make a good impression. People with social phobia are therefore more likely to spend a greater amount of time in a state of objective self-awareness in a social situation than a person who is not preoccupied with social performance would. If socially anxious individuals spend more time in an objectively self-aware state in social situations, this may partly explain their high anxiety. Spending more time in a state that leads to negative self-evaluation is likely to result in an increased number of negative self-related thoughts, which in terms of a cognitive model would lead to increased anxiety.

Duval and Wicklund's (1972) model focuses on the motivational consequences of the state of objective self-awareness, and does not focus specifically on whether the objectively self-aware state is an invariably negative experience that results in negative self-judgments. This issue is important, however, in social situations. If all people become self-critical when they are in an objectively self-aware state, it follows that even a person low in social anxiety would become self-critical if they were to take this perspective. This could be tested by taking a group of individuals low in social anxiety, and asking them to perform a social task such as a short presentation while manipulating the degree of self-awareness. The effect of self-awareness could be measured by looking at self-ratings of performance in both the high and the low self-awareness conditions.

4.2. Carver and Scheier's cybernetic theory of self-regulation

Another theoretical model that is relevant to self-evaluation in social anxiety is Carver and Scheier's (1981) cybernetic model of self-regulation. This is an extension of Duval and Wicklund's (1972) model. However, Carver and Scheier's model is different in certain respects, particularly regarding the issue of whether the effects of self-focused attention on self-evaluation are necessarily negative.

Carver and Scheier's (1981) model states that self-focus constitutes a feedback cycle, allowing the person to become aware of progress towards goals and take appropriate action if

the relevant standard of behavior is not being achieved. Attempts to reduce any discrepancy between the actual behavior and the standard are made, and further comparisons with the standard are then performed, to assess whether a discrepancy still exists. In this model, negative affect only arises when there is a low probability of reducing the discrepancy successfully. If this occurs, the person may withdraw from further attempts to bring the behavior closer to the standard.

In Carver and Scheier's (1981) model the assumption is that a person's degree of selfefficacy (Bandura, 1991) will determine whether they experience cognitive or emotional discomfort when self-aware. An experiment by Carver, Blaney, and Scheier (1979) showed that inducing unfavorable expectancies, for example, telling participants a task was insoluble, led to more withdrawal from tasks when self-focus was high. This suggests that negative affect was experienced when the participants did not believe they were capable of achieving well, and may have been due to an increased focus on the potential personal failure in the selffocus condition. Carver, Peterson, Follansbee, and Scheier (1983) found that experimentally enhanced self-focus interacted with level of test anxiety, improving performances among low test-anxious participants and impairing them among high test-anxious. High test-anxious people are likely to have low expectancies of achieving well on tests, and this may have led them to withdraw mentally from the task, leading to impaired performance. However, low test-anxious subjects, who believed themselves capable of success, demonstrated enhanced performance in the self-aware condition. Results of this experiment are consistent with Carver and Scheier's theory: it seems that when the comparison between an individual's desired standard and his or her actual performance is small enough to seem manageable, persistence is increased and performance enhanced as a result.

4.2.1. Relevance of Carver and Scheier's theory to social anxiety

As the above evidence relates to test anxiety, it cannot be used directly to make predictions about social anxiety. However, some of the processes described may apply to social anxiety. People who are socially anxious often feel that they do not have the specific skills, abilities, or characteristics required for effective interpersonal behavior and as a result they often have lower expectations of success in social situations. When self-focused, they are more likely to perceive themselves as falling short of the standards they have for themselves. This might lead to withdrawal, or if withdrawal is not possible, to mental disengagement from the social situation, which may in turn impair performance. Low socially anxious individuals have higher expectations of social success, and are therefore more likely to believe that they are meeting their goals for performance satisfactorily. As a result, they are less vulnerable to negative self-evaluation and anxiety if they do become self-focused.

Carver and Scheier's (1981) theory contrasts with Duval and Wicklund's (1972) view that being in an objectively self-aware state is uncomfortable for everyone. Carver and Scheier's theory suggests different predictions about anxiety, negative thoughts, and social performance in people low in social anxiety who become self-aware compared to people high in social anxiety. Individuals low in social anxiety would not normally be in a state of objective self-awareness in a social situation because their social performance is not as salient for these individuals as it is for socially anxious people. By comparison, if Duval and Wicklund's

theory is correct, low socially anxious individuals would be equally vulnerable to negative self-related thoughts and consequent anxiety when they become objectively self-aware compared to being in a state of subjective self-awareness.

However, it follows from Carver and Scheier's (1981) theory that low socially anxious people are not likely to perceive such a large negative discrepancy between their actual and desired performance as high socially anxious people, and would therefore feel far more confident that they could perform to an acceptable standard. As a result, low socially anxious people are likely to be less self-critical, and should be relatively unaffected by the state of objective self-awareness compared to high socially anxious individuals. In fact, the performance of these confident individuals might even be enhanced, as suggested by the results of Carver et al. (1983) with high and low test-anxious participants.

4.2.2. Public and private self-consciousness

Within their model, Carver and Scheier (1981) make a distinction between two states of self-focused attention, which they call public self-consciousness and private self-consciousness. This concept was initially developed by Fenigstein, Scheier, and Buss (1975) who constructed a scale to measure these hypothetically different aspects of self-consciousness. Factor analysis showed that there were three subcomponents of self-consciousness: private self-consciousness, public self-consciousness, and social anxiety (Carver & Glass, 1976). Private self-consciousness represents the extent to which individuals tend to focus on psychological aspects of themselves, such as thoughts, feelings, and attitudes. Public self-consciousness assesses a person's tendency to be aware of the outwardly observable aspects of the self, such as physical appearance, and the impression they may be giving to others. The social anxiety subscale measures the individual's reaction to being focused on by others.

Public self-consciousness is a strong predictor of social anxiety (Darvill, Johnson, & Danko, 1992). Public self-consciousness appears similar to objective self-awareness in its focus on public aspects of the self: "The essence of public self-consciousness is the self as a social object" (Fenigstein et al., 1975, p. 525.). Both public self-consciousness and objective self-awareness are similar to the Clark and Wells (1995) description of the self as a social object, the awareness of which is sometimes represented in a visual image seen from the observer perspective. However, private self-consciousness is *not* similar to subjective self-awareness. This is because private and public self-consciousness are both forms of self-focused attention, whereas the subjective self-awareness is the opposite—attention focused away from the self.

Public and private self-consciousness are *traits*. The conditions of objective and subjective self-awareness described by Duval and Wicklund (1972) are *states*, affected by environmental factors. However, the distinction between 'private' and 'public' has also been used in some experiments as a state concept, public and private self-awareness. Fenigstein et al. (1975) assume that the traits of public and private self-consciousness and their state counterparts, public and private self-awareness, would have similar consequences on behavior: "We assume that dispositional self-consciousness has essentially the same impact on behavior as situational self-awareness" (p. 526). The concepts of public and private self-consciousness both as states and traits have been frequently used in research on self-focused attention, and

its effect on mood, thoughts, and behavior. A recent study by Lundh and Öst (1996) showed that while a self-focus manipulation did not affect socially phobic individuals performance on an emotional Stroop task, the social phobics did score much higher than controls on the SCS, which was chosen as a trait measure of self-consciousness, and on perfectionism.

All experiments that have manipulated self-focus depend on the validity of the manipulations used. There are several criticisms of these manipulations. They are difficult to check. Asking a person how self-focused they were in an experiment is likely to produce a bias (Wicklund, 1975), as it has the immediate effect of focusing people on themselves. However, there is reasonable evidence that certain manipulations such as the presence of a video camera, tape recorder, mirrors or audiences increase self-focus. Davis and Brock (1975) found that self-awareness manipulated by a mirror resulted in participants using more first-person pronouns in an ambiguous foreign-language passage. Geller and Shaver (1976) found that participants made self-aware by a video camera had increased latencies for self-relevant words in a Stroop Color—Word interference test (Stroop, 1938) apparently because the manipulation made the self more salient in the situation. There is general acceptance of the validity of these manipulations in self-awareness research (Hass & Eisenstadt, 1991).

4.3. Summary of relevance of social psychological theories to social phobia

Both the social psychological theories presented above—Duval and Wicklund's (1972) objective self-awareness and Carver and Scheier's (1981) cybernetic self-regulation—appear to have relevance to social phobia and social anxiety. There are also many similarities to Clark and Wells' (1995) concept of the construction of the self as a social object, which is thought to be an important maintenance factor in social anxiety. In particular, the external visual perspective described by Duval and Wicklund appears to be describing a similar phenomenon to the Clark and Wells' concept of a visual image seen from an observer perspective.

In any cognitive model, thinking is a primary process and impacts on affect and behavior. In the case of social phobia, the main affect of concern is usually anxiety. If the impact of self-focused attention on social phobia and social anxiety is considered within a cognitive framework, we would predict that self-focused attention would have a negative impact upon thinking, anxiety, and social behavior. In the next section, we review empirical research about the effects of self-focused attention on anxiety, thinking, and social behavior. Many of these studies were conducted by social psychologists on nonclinical populations but the results have relevance to the predictions made by the cognitive model on the role of self-focused attention in social phobia and social anxiety.

5. Effects of self-focused attention on anxiety, thinking and behavior

Self-focused attention has been linked to social anxiety, poor social performance, increased anxiety, and negative self-judgments in a number of studies (Woody, Chambless, & Glass, 1997). In a study on individuals with social phobia, Woody (1996) looked at self-focus in relation to anxiety and performance. Half the participants were in a passive role, sitting in

front of an audience while someone else was speaking, whereas some were in an active role, giving a presentation. Self-focus was manipulated according to whether the person was speaking about themselves (self-focus, active role) or someone else (non self-focus, active role) or whether they were being spoken about (self-focus, passive role) or just sitting before the audience (non self-focus, passive role). Participants in the passive role showed significantly higher anticipated, self-rated, and observer-rated anxiety in the self-focus condition, whereas those in the active role showed significantly higher anticipated and observer-rated anxiety only in the self-focus condition, but showed no differences in self-rated anxiety. No differences were found in ratings of performance, either self-ratings or ratings by judges.

These results could have been affected by factors related to the self-focus manipulation used in this study. It was assumed that speakers were not self-focused when speaking about another person; however, the public speaking task in itself was likely to generate a high degree of self-focus in these socially phobic participants. The manipulation check confirmed that self-focus was very similar across the self-focus conditions for the active group; therefore, the absence of a difference in self-rated anxiety could have been explained in this way. However, these results do suggest that self-focus increases self-rated and observed anxiety. Lack of a significant effect on performance could be a result of the problems described above in the experimental manipulation, which may have had the effect of reducing the difference between the focus of attention conditions in the active group. Although the passive participants were also rated for performance, this role would appear to lack external validity with regard to most social situations.

More recently, Woody and Rodriguez (2000) showed that self-focused attention increased anxiety in a group of socially phobic individuals and in a control group, but that this increase in anxiety affected self-ratings of performance differently between the two groups. Observers rated the performance of the two groups equally but the nonanxious control group gave higher ratings of their performance than the socially phobic group, whose ratings were closer to the observer ratings. Woody and Rodriguez suggest that self-focus might alter attributional biases and that socially phobic individuals might be heavily influenced by current and past attributions of social performance that are based on "a mental representation of how one appears to an observer" (p. 486).

In any social interaction, a person has to interpret a range of social cues, many of which may be nonverbal. Self-focused attention might interfere with a person's ability to interpret social feedback and as a result influence results of a performance task. A study by Pozo, Carver, Wellens, and Scheier (1991) addressed this question. They looked at the effect of social anxiety on people's ability to detect social feedback during a videotaped interaction and showed that there were no differences between high and low social anxiety groups in their ability to respond to changes in facial expressions. However, the high social anxiety group did construe other people's reactions to them more negatively than the low social anxiety group.

Self-focused attention can have an impact on performance. Stephenson and Wicklund (1984) showed that when participants interacted with a partner who was supposedly high in self-focus, the participants themselves became more self-focused. Other studies have looked

at the impact on thinking as well as performance as a result of manipulating self-focus. Burgio, Merluzzi, and Pryor (1986) used a heterosocial conversation task and manipulated self-focus using a video camera. Participants were men who scored in the medium range on a commonly used social anxiety questionnaire, the Social Avoidance and Distress Scale (Watson & Friend, 1969). They were subsequently divided into two groups according to their responses on a self-report questionnaire concerning their expectancies of success at the task. Afterwards they measured negative and positive thoughts in an open-ended thought-listing procedure and found that the self-focus condition resulted in significantly more negative and fewer positive thoughts for both groups. This is consistent with Duval and Wicklund's (1972) theory, which postulated that directing attention toward the self-creates a self-evaluative reaction and almost certainly results in the discovery of a negative discrepancy between the actual and ideal self. Carver and Scheier (1981), in contrast, would predict that high expectancy of success would protect against negative thinking and anxiety when the individual became self-aware, and that, therefore, the high-expectancy group should have demonstrated less negative thinking than the low-expectancy group.

No effect of self-focus on self-rated anxiety was found in Burgio et al.'s (1986) study. However, there was an interaction between self-focus condition and expectancy in performance ratings. Judges' ratings of the participants' skill were significantly different between the high- and low-expectancy groups, but only in the self-focus condition. In the self-focus condition, those who had low expectancies of success were judged as significantly less socially skilled than low-expectancy participants in the non self-focus condition. The self-focus condition appeared to magnify the differences between the high-expectancy and the low-expectancy group. This finding supports Carver and Scheier's (1981) theory, which predicts that individuals with high expectancies of success would not be negatively affected by self-focus whereas those with low expectancies would be negatively affected.

Results of Burgio et al.'s (1986) study suggest that self-focused attention increases negative thinking, but caution has to be used in generalising the results to social anxiety, as the groups were actually selected for their scores on a measure of success expectancy. However, as their expectancy of success in a social task was the criterion, there may be some similarities between a low-expectancy group and the highly socially anxious, who often appear to have low expectancies of social success. Another criticism of the study is that self-focus was a between-subjects variable, therefore results may have been affected by individual differences. This problem could have been overcome by making focus of attention a within-subjects variable, so that individual differences could be ruled out.

In a study of individuals with social phobia, Hope and Heimberg (1988) looked at the relationship between public self-consciousness and anxiety and thinking in a social task. A behavioral role-play task was designed to suit each individual. Hope and Heimberg found that participants who were high in public self-consciousness reported a higher number of negative self-related thoughts after a role-played social situation than those who were low on this variable. High public self-consciousness was also related to self-ratings of anxiety and independent ratings of anxious appearance, as well as poorer performance on a role-played social situation as judged by the independent raters. However, in this study the social task was not standardised, which may have created problems with objective performance ratings. In

addition, the study used correlational analyses; therefore, no conclusions about the causal role of high public self-consciousness can be drawn.

Another study that found differences in thinking associated with self-focused attention was conducted by Daly, Vangelisti, and Lawrence (1989) who studied two groups of participants, high and low on self-rated public speaking anxiety, using a public speaking task. Self-focused attention and task-related cognitions and performance were the dependent variables. Daly et al. found that "high anxious" speakers remembered a larger proportion of self-focused cognitions than "low anxious" speakers, and that a larger number of their self-focused thoughts were negative compared to the low anxious group. Self-focus was also related to a more negative self-assessment of performance, and poorer performance as assessed by independent raters, and was found more in the high anxious group. Self-focus was not directly manipulated in this study, but was a dependent variable, assessed by incidental memory scores. It was therefore possible that high anxious speakers' tendency to be self-focused was the important variable, but again a causal role for self-focus cannot be established from these results.

Self-evaluative attention—a concept similar to self-focused attention—has also been studied in relation to anxiety and performance. In a study of heterosocial anxiety in high school boys, Johnson and Glass (1989) used two conditions. Half of the participants were told they would be evaluated on their own heterosocial conversation skill, while the other half were told that they were to evaluate the other person's skill. Participants in the self-evaluative attention condition had significantly higher anxiety, both self- and independent-rated, and their performance in the conversation task was rated as worse than in the nonevaluative condition as measured by both self-ratings and judges' ratings of conversational skill. In addition, high public self-consciousness was significantly correlated with the number of negative self-statements on a structured measure of task-related positive and negative self-statements. These results suggest that self-awareness can affect anxiety, thinking, and performance in social situations.

There has been relatively little psychophysiological research on self-focused attention. Panayiotou and Vrana (1998) designed a study to test the effect of self-focused attention on the startle reflex and heart rate and they assessed the assumption that socially anxious individuals become self-focused in evaluative situations. Both the startle reflex and heart rate have both been used as probes in the study of attention. Panayiotou and Vrana hypothesised that when attention is focused internally on negative thoughts, the startle reflex should be augmented. They proposed that heart rate should increase as a result of self-focused attention. The authors found that in the social anxiety group, the first hypothesis was supported but there was no evidence of an increase in heart rate as a result of self-focused attention. They also showed that self-focused attention combined with an evaluative task led to poorer performance on a digit recall task in both high and low social anxiety subjects. Panayiotou and Vrana argue that their results challenge the assumption that self-focused attention involves a shifting of attention away from the environment because such a shift would have required an increase of heart rate and this was not observed. They suggest that self-focused attention can be damaging but only when it is combined with another variable such as evaluation anxiety. The study is interesting and clearly contradicts Clark and Wells' (1995) proposal that one reason why self-focused attention maintains social anxiety is that it reduces attention to environmental feedback that could provide disconfirmatory evidence. However, it is not clear whether a single psychophysiological measure, such as heart rate, can provide an unequivocal index of the direction of attention.

While it is clear that there is some evidence to suggest that anxiety, thinking and performance may be influenced by self-focus in some situations, the evidence is inconsistent and there are few directly relevant studies. Many of the studies cited are correlational, and therefore it is not possible to establish a causal role for self-focus. Other studies use overlapping concepts such as "evaluative self-awareness" that are similar but not identical to self-focus. Some studies identify participants on the basis of criteria other than social anxiety, such as speech anxiety, and while there is likely to be significant overlap between the groups, the criteria may differ in significant ways. An additional problem is that all of the studies on self-focus in social anxiety and social phobia are affected by the fact that some degree of self-awareness of the public self is highly likely to be triggered by social tasks as other people are strong stimuli for self-awareness (Duval & Wicklund, 1972) and this is even more likely to be the case for high socially anxious individuals. The relevant evidence from the social psychological literature about the possible effects of self-focused attention on anxiety, thinking and social performance is small, and is also inconsistent.

5.1. Evidence for therapeutic effects of changing self-focused attention

A reduction in self-focused attention is often associated with improvements in anxiety after treatment for social phobia. Woody et al. (1997) reported a decrease in self-focused attention after group cognitive—behavioral treatment for social phobia. Hoffmann (2000) found that a decrease in negative self-focused thoughts was highly correlated with a decrease in social anxiety after treatment for social phobia, suggesting the importance of a more positive view of self. Harvey, Clark, Ehlers, and Rapee (2000) showed that the therapeutic effects of using video feedback to modify distorted images in social anxiety can be greatly enhanced by careful cognitive preparation.

In the studies just cited, direction of causation is not clear. Reduced self-focused attention may not have a causal role in recovery from social anxiety, but could be an effect of that improvement. However, Wells and Papageorgiou (1998) showed that, when people with social phobia were required to shift attention from themselves to external events, the benefits of exposure therapy for social anxiety were enhanced, suggested a causal role for this shift in attention to external events. This attentional shift also resulted in a change from observer perspective to field perspective. However, this study did not demonstrate a causal role for change of perspective, as the perspective shift was used as a dependent, not an independent variable.

The impact of changing an excessively negative view of the self, which may be maintained by self-focused attention, is suggested by Rapee and Hayman's (1996) results. They found that high socially anxious participants rated their performance closer to an independent rater after they had seen a videotape of their own performance in comparison to ratings taken before viewing the videotape. The supposition is that the video supplied an accurate observer

perspective, which allowed participants to correct any distortions of self-perception. This is consistent with the Clark and Wells (1995) view. Possible effects of the distorted self-image contained within the observer perspective will be considered in a later section.

6. Construction of the self as a social object and the observer perspective

The Clark and Wells' (1995) model of social phobia described earlier gives a key role to the process of attentional self-focus in maintaining the disorder. In the model, self-focused attention prevents the individual noticing disconfirmatory external information and is part of a wider process that Clark and Wells describe as the construction of the self as a social object. They propose that an impression of the self is constructed by the person using somatic sensations, thoughts, and feelings about the self. However, Clark and Wells go a step further and propose that this constructed impression of self is sometimes experienced as a visual image, seen from the perspective of an observer. In other cases, the individual does not have a discrete visual image but instead experiences a "felt sense" of the constructed self. The review will continue by looking first at the evidence in support of the proposal that social phobics use somatic sensations, and also thoughts and feelings about the self, to infer how they appear to others. The next part will examine the role of imagery in psychological disorders in general and the evidence on perspective taking in imagery. Following this, we will review the small body of evidence on imagery and the observer perspective in social phobia and social anxiety.

6.1. Self as social object: the role of thoughts and feelings

A number of studies support the proposal that socially phobic individuals' beliefs about negative evaluation by other people are based on self-impression rather than on detailed information about others people's responses. Stopa and Clark (1993) found that socially phobic individuals reported more negative self-evaluative thoughts (e.g., "I'm boring) than anxious or nonpatient controls, but did not report more negative thoughts that explicitly mentioned evaluation by the conversational partner (e.g., "she thinks I'm boring"). McEwan and Devins (1983) asked high and low socially anxious individuals to rate themselves on a checklist of behavioral signs of anxiety and asked a person who knew the participant well to rate him or her on the same checklist. High socially anxious individuals overestimated the extent to which their anxiety was observable, whereas low socially anxious individuals' ratings of the observability of their anxiety were more accurate (i.e., agreed with ratings made by a peer). This is consistent with the Clark and Wells (1995) suggestion that socially anxious individuals use their own perception of how anxious they are to construct an impression of how they actually look to other people and that this construction is inaccurate.

Evidence from social psychology suggests that forming an impression of the self as a social object from self-perceptions may be a relatively common process. Kenny and DePaulo (1993) asked participants (not selected for social anxiety) to rate how they saw themselves and how they thought other people saw them. There was a strong relationship between self-

perception and belief about how other people perceived them, irrespective of how they were actually perceived by others. This suggests that a constructed self-view is used by many people in assessing how they come across. If this is the case, then we need to know what goes wrong in social anxiety and social phobia. The evidence suggests that social anxiety leads to an excessively negative construction of the self but we need a much clearer understanding of the processes that contribute to this negative construction of self. One possibility is the suggestion that socially anxious and socially phobic individuals use the perception of their own anxiety to construct this impression.

Clark and Wells (1995) suggest that self-focus prevents people from noticing objective feedback that might allow them to update their negative image of self. There is some indirect support for this suggestion from studies that look at memory for social interactions. Daly et al. (1989), Hope, Heimberg, and Klein (1990), and Kimble and Zehr (1982) all found that high socially anxious participants had poorer memory for the details of a recent social interaction than low socially anxious participants. This suggests that the high socially anxious participants were focused on their own thoughts and feelings, preventing them from fully noticing the real details of the interaction. In contrast, Stopa and Clark (1993) found no difference in the details of a social interaction recalled by high and low socially anxious participants. However, the participants in Stopa and Clark's study were asked to recall details of the conversation partner's appearance and details of the room. Details of the interaction itself, such as remembering what was said, may have been a more valid way of measuring recall of a social interaction.

6.2. Self as social object: the role of somatic sensations

Johansson and Ost (1982) investigated awareness of heart-rate changes in social phobics and controls. Social phobics were particularly accurate in estimating their heart rate changes, suggesting enhanced awareness of such anxiety-related body changes. Mansell and Clark (1999) found that within a group of high socially anxious participants, perceived body sensations during a speech were significantly correlated with self-ratings of anxious appearance and global negative behaviors (looking awkward, embarrassed, or uncomfortable) indicating that these body sensations were being used by participants to form an impression of how they were coming across to others. These studies indicate that social phobics and other socially anxious individuals are highly aware of the bodily sensations of anxiety and may be using these sensations to infer how they are coming across to others. This distorted impression of self interacts with beliefs about acceptable self-presentation and about the consequences of failing to meet these standards of acceptability, namely the likelihood of suffering humiliation and rejection.

Wells and Papageorgiou (2001) found empirical support for the proposition that body-state information can affect anxiety and thoughts. Participants were given false information about their own heart rate just before a social encounter. Participants who believed that their heart rate was high were significantly more high anxious and had more negative beliefs about the self in the social situation than participants who believed that their heart rate was low. Wells and Papageorgiou also found that self-focus was significantly higher when participants

believed that heart rate was high, indicating that self-focus can be increased by internal somatic information.

Overall, there is a growing body of evidence to support the hypothesis that social phobics and high socially anxious people use interoceptive information to construct an impression of how they come across to others, and that this constructed impression is not an accurate reflection of how they are actually perceived by other people. The cognitive model of social phobia (Clark & Wells, 1995) proposes that for some individuals this impression exists in the form of a visual image and that in many cases this image is seen from the perspective of an observer. The next section of the review will examine the importance of imagery in emotional disorders in general and will then go on to consider the evidence for the existence of an external visual perspective in imagery.

6.3. The role of imagery in emotional disorders

Images are defined as contents of consciousness that possess sensory qualities, as opposed to those that are purely verbal or abstract (Hackmann, 1998). While images can have qualities associated with any of the sensory modalities, visual imagery is the most common (Horowitz, 1970). Memories can also come to awareness as images with sensory qualities, such as in the case of 'flash bulb' memories of events.

Images are important in all cognitive models of anxiety. According to these models, anxiety results from distorted appraisals of the danger of various stimuli across a variety of situations. The content of these appraisals is often described as if it reflects verbal thoughts. However, according to Beck (1976), appraisals are *meanings* sufficient to account for the *strength of the emotion being experienced*. Meanings are conveyed through *images and memories* as well as verbal thoughts; in fact images can contain large amounts of information that is often highly charged with significant affective meaning.

Buzan and Buzan (1997) suggest that images are often more evocative than words, and can be potent in triggering a wide range of associations and accompanying affect. Therefore, changing or transforming an image in therapy can produce a more significant emotional shift than challenging a verbal thought. Using techniques to transform images in therapy (e.g., Layden, Newman, Freeman, & Byers-Morse, 1993), can have positive effects on distress or anxiety. Creating new, more functional images in therapy can have a positive effect on behavior (Hackmann, 1998).

Although images are often used in clinical work, particularly in work with the survivors of sexual abuse and people with posttraumatic stress disorder (e.g., Smucker, Dancu, Foa, & Niederee, 1995) there are few systematic studies that have looked at the behavioral effects of changing imagery. In one such study of speech-anxious individuals, Ayres, Hopf, and Ayres (1994) showed that visualization, if sufficiently vivid, could result in reductions of negative thoughts and state and trait communication anxiety. Additionally, evidence from sports psychology shows that creating positive imagery can result in improvements in performance (Fenker & Lambiotte, 1987) and reductions in performance-related anxiety (Tremayne & Barry, 1990). Imagery has also been used in sport to replace negative thoughts and self-statements with positive ones (Ungerreider, 1985).

The power of imagery has been explored in some of the anxiety disorders. Beck, Laude, and Bohnert (1974) investigated spontaneously occurring images using free recall in a group of patients with various anxiety disorder diagnoses. They found that images were common and often depicted both physical and psychosocial danger. The authors suggested that images were as likely as verbal thoughts to cause behavioral avoidance, and thus to maintain the disorder. Although Beck et al. did not demonstrate the impact of changing imagery on behavior, the evidence from sports psychology and speech anxiety cited above does support the claim that changing imagery can produce behavioral change. If positive imagery can improve behavior, it is possible that negative imagery could maintain problematic behavior. The Clark and Wells (1995) model proposes that imagery in social phobics may be a particularly powerful maintaining factor because the image of the self is often perceived from the perspective of another person making it appear credible evidence for how the socially phobic individual actually appears to other people. As a result, a negative image perceived from an observer perspective could raise anxiety and contribute to behavioral avoidance. The next section will review evidence in support of the contention that it is possible to view an image from an observer perspective.

6.4. Evidence for the existence of an external visual perspective

There is empirical evidence to support subjective reports that an image of the self can be seen from an external, visual perspective. Hass (1984) tested the Duval and Wicklund (1972) hypothesis about existence of an external visual perspective with a series of experiments. Participants were asked to draw a capital 'E' on their forehead as quickly as possible. The participants believed that they were alone. In fact, the experimenter was covertly observing them to ascertain how they drew the 'E.' If the 'E' were drawn as an observer perspective image, it would be correct in orientation for the experimenter. If the 'E' were drawn from a field perspective, it would appear as a mirror image to the experimenter. Self-focus was manipulated by using a video camera, which was placed behind the participant so that there was no indication that the way they drew the 'E' was being monitored, or an auditory tape recorder placed in front of the participant. They were significantly more likely to draw the 'E' from an observer perspective in the high self-focus condition, even though they believed themselves unobserved. According to the authors, this suggests that self-focus increases the likelihood that a person will adopt an external visual, or 'observer,' perspective.

An alternative explanation is that these participants were deliberately orienting the 'E' for another person. However, they believed that they were unobserved. Hass (1984) concluded that the 'E' was being drawn correctly for the participants themselves, looking at themselves from an observer perspective. However, although participants may have oriented the 'E' for an observer when self-aware, it may not follow from this that participants were using external visual perspective taking in order to do this.

Stephenson and Wicklund (1983) also investigated the existence of an external visual perspective by requiring participants to guide a blindfolded person through a finger maze. Participants were sitting opposite the person they had to guide, so the ability to take the other person's perspective would be a great advantage. There were significantly fewer

errors if they had been made self-aware first, suggesting that this had indeed increased their ability to take the other person's perspective. One explanation is that self-awareness had increased their ability to use the observer perspective. However, again it could also be argued that it is possible to take another person's perspective without necessarily adopting an external visual perspective.

These studies attempt to demonstrate the existence of an external visual perspective while a person is performing a task. As such, they are highly relevant to the question of whether socially phobic individuals use the observer perspective while they are actually in social situations. However, while evidence reported here is suggestive, it is not conclusive. Another important question concerns whether images in memory can be seen from an observer or field perspective. Two key maintaining processes in the Clark and Wells (1995) model of social phobia are anticipatory processing and postevent processing. If social phobics see themselves from an observer perspective while imagining or reflecting upon social events, again the use of a negative observer perspective image could have a powerful role in maintaining social anxiety. Nigro and Neisser (1983), used the terms "observer memory" and "field memory" to describe the perspective from which memories were remembered, where individuals either look in on the self from outside (observer) or view the scene through their own eyes, observing the details of what is happening around them (field). Nigro and Neisser carried out a series four exploratory studies, developing hypotheses from the evidence as they collected it. They found that memories remembered from an observer perspective tended to occur when the participants were asked to focus on objective facts whereas a focus on feelings tended to produce field memories. However, when feeling was overwhelming, as in memories of frightening or traumatic events, they were often remembered from an observer perspective. This has interesting implications for social phobia, as socially anxious individuals may remember situations from this perspective because these situations are overwhelmingly difficult and anxiety provoking for them.

Self-awareness was an important component of memories that were remembered from an observer perspective. When participants were asked to recall situations that produced high levels of self-consciousness (e.g., an incident of embarrassment; giving a public presentation) observer memories were produced more frequently than if the person was asked to recall a nonobserved state (studying, walking alone). This is also consistent with the Clark and Wells (1995) hypothesis about the observer perspective being associated with awareness of the public self.

Nigro and Neisser's (1983) research did not adopt any particular theoretical framework. However, the results do support existence of these two types of perspective in memory, and some of the factors associated with them. Nigro and Neisser concluded that memories could be affected by the characteristics of the original event, the individual's purpose in recalling that event, and the recall interval.

Nigro and Neisser (1983) suggest that the individual's purpose in recalling the event can influence whether it is remembered from a field or an observer perspective. This has methodological implications for studies in this area. For example, if a person is self-focused when remembering an event, he or she is more likely to remember the event from an observer perspective. For socially anxious individuals, this could mean that previous experiences are

more likely to be remembered from an observer perspective if the person is currently self-focused, even if the event was originally experienced from a field perspective. If this is the case, then studies on the observer perspective in social phobia suffer from a methodological confound because they fail to distinguish between the memory of a perspective and the actual perspective that was adopted in vivo. However, as argued above, memories may be used to construct an in vivo perspective, which is consistent with the argument that Clark and Wells (1995) propose.

6.5. Imagery and the observer perspective in social phobia

A small number of recent studies provides evidence to support the proposal that a constructed image of the self, seen from an observer perspective, has an important role in maintaining social phobia and social anxiety. Two of these studies explored imagery in social phobia. Hackmann, Surawy, and Clark (1998) compared 30 socially phobic participants and 30 nonpatient controls using a semistructured interview that focused on spontaneously occurring images. Participants with social phobia were significantly more likely than controls to report experiencing images when anxious in social situations. In addition, their images were significantly more negative and significantly more likely to involve seeing themselves from an observer perspective. Clark and Wells' (1995) hypothesis states that self-generated images of how one might appear to others are the main source of information that people with social phobia use in order to infer how they actually appear. This research supports the hypothesis that individuals with social phobia use these images, that they tend to be negative, and suggests the possibility that they maintain anxiety.

In a subsequent study, Hackmann et al. (2000) conducted a semistructured interview with 22 patients who had a *DSM-IV* diagnosis of social phobia in order to explore the nature of their images. Hackmann et al. found that all of the patients reported spontaneously recurring negative images in a range of feared social situations. These images were stable over time, generally included several sensory modalities and most of them were linked to memories of adverse social events that occurred around the time of onset of the disorder. Hackmann et al. suggest that early, unpleasant experiences may lead to development of negative images of the social self that are reactivated in subsequent social situations. This study suggests that negative observer images in social phobia are, at least in some cases, linked to the memory of a real event. However, the individual's perception of self at that time is distorted and fails to change in the light of subsequent less aversive social experiences.

Again, there is some evidence from social psychology that has a bearing on this question of memory-based images. Frank and Gilovich (1989), in a study on the effect of the observer perspective on retrospective causal attributions, suggest that there is evidence from their study and from Nigro and Neisser's (1983) work that the likelihood of recalling an event from an observer perspective increases as more time passes. In other words, the older the memory, the more likely it is to be remembered from an observer perspective. They do not suggest a mechanism underlying this process but do go on to speculate over whether some individuals have a chronic tendency to recall events from an observer perspective. There is also the possibility that people learn over time to remember images from a particular perspective

through frequent rehearsal of the image in that perspective. The impact of the observer perspective on causal attributions is discussed further below.

Several of the more recent studies have concentrated on establishing whether social phobics do use the observer perspective and whether the use of this perspective is unique to social phobia. Wells et al. (1998) asked 12 outpatients who met DSM-IV criteria for social phobia and 12 nonpatients to recall a recent social situation and a recent nonsocial situation. When participants had obtained a clear image, they were asked to rate the perspective from which the image was seen on a bipolar -3 to +3 scale. On the scale, -3 is labelled as "entirely looking out through my eyes" (field perspective) and +3 is labelled as "entirely observing myself from an external point of view" (observer perspective). The patients with social phobia were significantly more likely to view the images of the social events from an observer perspective compared to the controls. However, both groups were more likely to view the remembered nonsocial events from a field perspective. This study did not include a patient control group, and therefore it was not clear from the results whether the use of the observer perspective was specific to social phobia or the general result of having any kind of anxiety disorder.

Wells and Papageorgiou (1999) tackled this question by exploring perspective taking in four different groups—patients with social phobia, agoraphobia, and blood-injury phobia, and a nonpatient control group. Participants were asked to recall and imagine a recent anxietyprovoking situation and a neutral situation (defined as non-anxiety-provoking and nonsocial). Wells and Papageorgiou found that both the socially phobic and the agoraphobic patients recalled the social situation from an observer perspective. Interestingly, only the agoraphobic patients recalled the neutral situation from an observer perspective; the social phobics switched to a field perspective when recalling the neutral situation. Wells and Papageorgiou argue that the results are consistent with the Clark and Wells (1995) cognitive model of social phobia and suggest that the use of the observer perspective is a characteristic of socialevaluative concerns rather than a general feature of phobias. They speculate over whether the agoraphobic patients use of the observer perspective in the nonsocial situation could be due to a wider range of situations triggering heightened processing of the public, observable self. This suggestion is interesting but requires empirical testing. It would be interesting to repeat the study and examine the effects on the observer perspective of recalling a high-anxiety social situation, a low-anxiety social situation, a high-anxiety nonsocial situation, and a lowanxiety nonsocial situation.

A recent study by Coles, Turk, Heimberg, and Fresco (2001) goes some way towards examining this question. Coles et al. compared 30 anxious individuals who met *DSM-IV* criteria for social phobia with 24 nonanxious controls. The results suggested that in the socially phobic group, individuals were progressively more likely to see their memories from an observer perspective as the anxiety level of the situation increased. By comparison, the nonanxious controls showed a trend towards using the field perspective more often as the anxiety level of the situation increased, although this was not statistically significant.

Coles et al. (2001) also looked at attributions in this study and found that as anxiety increased, socially phobic individuals were more likely to use the observer perspective and their attributions became more internal, stable and global. Control participants showed the

opposite pattern: as threat increased their attributions became more situational (external, unstable and specific). This result is interesting in the context of social-psychological research on the self-serving bias (Bradley, 1978), which indicates that, to some degree, it is normal to attribute negative events externally and positive events internally. This process may be adaptive to some extent because it protects individuals from developing high levels of anxiety about their failings provided they have reasonably positive self-beliefs. Coles et al.'s results are consistent with studies that demonstrate a reversal in the self-serving bias in individuals who have high social-evaluative concerns, when evaluation by others is imminent (Arkin, Appleman, & Burger, 1980).

The Coles et al. (2001) study is interesting and suggestive but does not provide any evidence about the causal direction of the relationship between the observer perspective and attributional bias. There is, however, evidence from social psychology on actor-observer differences in causal attributions (Jones & Nisbett, 1971; Taylor & Fiske, 1978; Watson, 1982) that is relevant to this question. Actors tend to make situational attributions for their own behavior, possibly because the situation is more salient to them than the person. In contrast, observers are more likely to make dispositional attributions for the same actor's behavior perhaps because the person, rather than the situation, stands out when you are observing someone. Frank and Gilovich (1989) link these actor-observer differences in causal attributions to the fact that people's attributions tend to become more dispositional and less situational over time. They suggest that this change may be due to changes in the visual perspective used to recall memories with the passing of time. If people are more likely to use an observer perspective as memories get older, then this shift of perspective may be responsible for the increase in dispositional attributions for behavior over time. Frank and Gilovich tested this suggestion in two experiments. In the first experiment, participants made attributions for their performance in a "getting acquainted" conversation and then these attributions were repeated 3 weeks later. As well as completing the attribution scales, participants were also asked to rate the memory perspective of the situation. The second study was identical except that the memory perspectives were manipulated through experimenter instructions. Frank and Gilovich showed that in both studies the use of the observer perspective was linked to a greater number of dispositional attributions.

Studies in the objective self-awareness literature have also demonstrated that changing the perspective from which participants viewed themselves using self-focus manipulations such as mirrors (Duval & Wicklund, 1972) can affect the type of causal attribution that is made. In the self-aware condition, participants made more dispositional attributions, similar to the behavior of an actual observer. This evidence suggests that the shift to an observer perspective may affect the kinds of attributions that an individual makes about his or her behavior and that these attributions may be more like the attributions made by an observer of the situation (dispositional) and less like the attributions made by an actor (situational). If this is the case, then the observer perspective in social phobia would reinforce the individual's belief that social failure is due to innate, trait-like factors, thus further reinforcing negative maladaptive beliefs about the self.

One recent study set out to test the effect of manipulating perspective on social anxiety and performance. Spurr and Stopa (submitted for publication) investigated the effects of taking

the observer perspective on thinking, anxiety, behavior, and social performance in high and low socially anxious participants selected on the basis of their Fear of Negative Evaluation scores (Stopa & Clark, 2001; Watson & Friend, 1969). Forty-four participants (N=22 in each group) gave two speeches, one in the observer and one in the field perspective. Speeches given while using the observer perspective produced more frequent negative thoughts, more safety behaviors, and worse self-evaluation of performance in both groups. There were also clear trends demonstrating increases in anxiety and in thought belief ratings in the observer perspective compared to the field perspective. However, the two groups were affected differently by watching the videotapes of speeches given while adopting the observer perspective. Ratings made by the high socially anxious group improved after watching themselves give a speech whereas ratings made by the low socially anxious group were not affected by watching themselves perform, suggesting that the observer perspectives of low socially anxious group contained more realistic images that were not in need of correction by the video image. The results are consistent with the Clark and Wells (1995) model of social phobia overall, but the results of watching speeches given while adopting the observer perspective suggests that in low socially anxious individuals, the observer image may contain positive rather than negative information.

Overall the results reviewed in this section provide evidence in support of Clark and Wells' (1995) proposal that the construction of the self as a social object and the use of the observer perspective is a characteristic of social anxiety and that the use of the observer perspective can interfere with performance. The Clark and Wells model does not make specific predictions about attributions but the literature reviewed here is consistent with the model because dispositional attributions are likely to activate negative automatic thoughts and provide confirmatory evidence of negative beliefs. There is, however, one recent study that is inconsistent with the proposal that individuals high in social anxiety use the observer perspective more as a result of increased self-focus. Wells and Papageorgiou (2001) found that a manipulation involving false heart-rate information increased self-focused attention, negative beliefs, and anxiety in a way that is consistent with Clark and Wells' proposal that the construction of the self as a social object is affected by somatic sensations. By comparison, perspective taking was not affected by the heart-rate information and participants' beliefs that heart rate had increased did not lead to a greater use of the observer perspective.

Concepts of public and private self-consciousness, or their state counterparts, public and private self-awareness, discussed earlier might help to explain this finding. Studies have shown that heart-rate information manipulations are associated with changes in private self-awareness, but not public self-awareness. Public self-awareness is more likely to produce a shift to the observer perspective because of the focus on public aspects of the self. Increases in private self-awareness are less likely to result in this shift and so if heart-rate awareness differentially affects private self-consciousness, then it might increase one aspect of self-focus but not the aspect that is most relevant to the observer perspective. A study using a manipulation that affected public self-consciousness might provide a better test of the model. Nevertheless, negative beliefs and anxiety did increase in this study, as predicted, and it might be useful to tease out different types of self-focus in social anxiety and examine whether they do indeed have differential effects on anxiety and performance.

The Clark and Wells (1995) model of social phobia proposes that the construction of the self as a social object is a key maintaining factor in the disorder. Constructing the self in this way involves a number of processes including self-focused attention, production of images or a "felt sense" that encodes both meanings and actual memories, and the use of an external visual perspective. The studies reviewed above provide some initial support for these proposals; however, much of the evidence is indirect and does not set out to directly test predictions from the model. The final section of the review considers areas for future investigation that would test the model and advance our understanding of social phobia.

7. Conclusions and future directions

There is compelling evidence that self-focused attention is an important process in many emotional disorders. However, although self-focused attention, or self-awareness as it is sometime described, is not a pathological state per se, it is clear from the studies on nonclinical populations that self-focused attention can have a significant impact on anxiety and performance. The literature also suggests that there may be different types of self-focused attention—witness the distinction between public and private self-consciousness (although see Wicklund and Gollwitzer's, 1987 critique of the distinction)—and that these types may be differentially affected by certain kinds of information. Some researchers make a distinction between state and trait self-focused attention implying that certain individuals may have a chronic tendency to be self-focused. A range of studies supports the contention that self-focused attention is associated with increases in social anxiety, poor social performance, and negative self-judgments and attributions. There is a small body of literature that demonstrates a reduction in self-focused attention following successful treatment of social anxiety.

In the Clark and Wells (1995) model of social phobia, self-focused attention is an important maintaining factor in anxiety because directing attention inwards prevents socially phobic individuals from noticing social feedback that might contradict their negative beliefs. Furthermore, attention to a number of sources of internal information including thoughts, feelings, somatic sensations, and, in some cases, memories, contributes to the construction of an erroneous impression of how the self appears to others. Clark and Wells argue that in some socially phobic individuals this impression is encoded in the form of an internally observable image that is often seen from the perspective of an observer, In other cases, the impression exists not in the form of an image but as a "felt sense." Several studies from social psychology support the contention that it is possible to view an image from an external visual perspective and there is also a small body of evidence that provides more direct support Clark and Wells' proposals about the role of the observer image and the observer perspective in social phobia.

Where should we go from here? The final part of this review will raise a number of questions that require investigation in order to advance our understanding of self-focused processing in general and how it operates in social phobia in particular. It is possible, as Ingram (1990) suggests, that the *process* of self-focused attention is common across psychopathologies, but that the *content* differs according to the disorder. However, the assumption that the process is the same across disorders requires empirical investigation and

any such investigations need to examine the assumption that self-focused attention is a single unitary process. Self-focused attention may comprise a set of processes that are yoked together in various ways in different disorders. For example, the role of self-focused attention in helping to construct an impression of the self in social situations may be very different from the role of self-focused attention in maintaining negative ruminations in depression. Of course, the processes may be the same and it may simply be the final output that is different. If this is the case, however, we still need to specify how and why the output differs.

When we look more specifically at social phobia, are observer images and the use of the observer perspective specific to social phobia or to social-evaluative anxiety? The observer perspective is more likely to be used as time passes, and certain self-focus manipulations can initiate use of the observer perspective. The observer perspective may be inevitable or normal under certain conditions. If this is the case, then treatment may be better targeted at changing the content of the observer image rather than worrying too much about which perspective is used to view the image. If there are trait differences in self-focused attention, these may predispose an individual towards using an observer, rather than a field perspective. Any trait differences could be due to a number of interacting factors—differences in arousal levels, selective rehearsal of a particular perspective, salience of the observed images, and so on. Until we have a clearer understanding of state—trait differences in self-focused attention, it may be difficult to target treatment most effectively.

The Clark and Wells (1995) model does not distinguish clearly between the role of self-focused attention in anticipatory, in situ, and post-event processing. Self-focused attention may operate in the same way in all three or there may be important differences between them. For example, when a socially phobic individual is anticipating a social event, he or she is likely to construct possible outcomes for the social event or situation. These are likely to be negative and the images that are constructed may be a kind of prototype based on recollections of multiple previous occasions. By comparison, post-event processing may be characterised by a more specific focus on the particular event that has just occurred. When it comes to in situ processing, it is not clear whether socially phobic individuals experience an "on-line" image of themselves because studies of the observer perspective have all used retrospective ratings. When a person is remembering a social interaction, any image that is constructed at the time of remembering may contaminate recall of what actually happened during the interaction. The current methodology for investing the observer perspective is limited and the challenge is to develop methods of studying self-focused attention and the use of the observer perspective in on-line processing.

To conclude, our review of self-focused attention in social anxiety and social phobia suggests that there is a substantial body of evidence showing that self-focused attention has an important role to play in maintaining social anxiety. The Clark and Wells (1995) model of social phobia takes a useful step forward in proposing that observer images and the use of the observer perspective are specific aspects of self-focused attention that are, if not unique to, particularly important in social anxiety. However, there is still much to learn and we need to reexamine both our conceptualisations and theoretical models of self-focused attention as well as empirically testing a number of more straightforward questions that are raised by the model.

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