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An Investigation of a Shift in Thought Content in Sexual Dysfunction

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Running Head: SHIFT IN THOUGHT CONTENT

ABSTRACT

The present study was an extension of a study by Bruce, Barlow, and Jones (1989), and examined whether a cognitive shift from on-to-off-task thought occurred during sexual arousal, accounting for dysfunctional performance. This study examined the thought content and sexual response of sexually functional (SFs; N = 10) and sexually dysfunctional (SDs; N = 10) subjects during three levels of distraction, (no distraction, first level of distraction and second level of distraction). As hypothesized, under no distraction, SFs exhibited the highest level of sexual arousal and greatest number of on-task thoughts. As distraction increased, SFs showed a decrease in sexual arousal and number of on-task thoughts, and an increase in the number of off-task thoughts, also as hypothesized. For SDs, results indicated that there was no change in sexual arousal or number of off-task thoughts as distraction increased. However, the hypothesis that SDs would exhibit the lowest level of sexual arousal and highest number of off-task thoughts under no distraction was not confirmed. Implications for future theoretical and therapeutic investigations are discussed.

An Investigation of a Shift in Thought Content in Sexual Dysfunction

The relationship between anxiety and psychogenic sexual dysfunction first came under empirical scrutiny in the late 1950's and 1960's (Barlow, 1986; Bruce & Barlow, 1990). Wolpe (1958) initially suggested the idea that anxiety inhibits sexual arousal through a physiological mechanism. Specifically, he hypothesized that an increase in sympathetic nervous system (SNS) activity would cause a decrease in arousal. This theory was the underpinning of the sex therapy techniques utilized by the pioneering sexual researchers, Masters and Johnson (1966,1970). As it was, sex therapy was based largely on Wolpe's theory as late as the early 1980's. Some reports have also indicated that induced anxiety (threat of shock) inhibited sexual arousal relative to a no shock condition (Beck, Barlow, Sakheim, & Abrahamson, 1987; Hale & Strassberg, 1990).

However, other studies have called into question the conclusions made by early researchers that inhibition is the only effect anxiety has on sexual arousal. For example, when SNS activity was artificially increased by norepinephrine injections, mimicking what Wolpe proposed occurred in the prescence of anxiety, penile tumescence (sexual arousal) was not affected (Lange, Wincze, Zwick,

Feldman, & Hughes, 1981).

Several studies have also been done where the induction of anxiety has actually increased sexual arousal. Hoon, Wincze, and Hoon (1977), in attempting to test Wolpe's (1958) reciprocal inhibition theory, found that sexual response was greater when an anxiety inducing stimuli, (scenes of automobile accidents), preceded a sexually explicit stimuli, than when a neutral stimuli, (a travelogue), preceded the sexually explicit stimuli. A study done by Barlow, Sakheim, and Beck (1983) indicated that penile tumescence was greater under two different anxiety inducing shock conditions than under a no shock condition.

An overview of the literature has indicated that anxiety has varied effects on sexual arousal (Bruce & Barlow, 1990). Norton and Jehu (1984) did a comprehensive review on the role of anxiety and sexual dysfunctions and concluded that "the research showing that **some, but not other**, cognitive, performance and physiological activities inhibit sexual arousal indicates that the term **anxiety** is too broad for identifying events that inhibit sexual arousal and functioning " (p. 180).

Because of this conflicting evidence, Beck and Barlow (1984) proposed an alternate definition of anxiety.

Relying heavily on Lang's (1968) model, it was proposed that anxiety consisted of three parts: physiological, behavioral and cognitive. The fact that the three components are not necessarily correlated with each other, suggests a reason for the discrepancies in research findings. For example, the physiological component may not always inhibit sexual arousal (Barlow et al., 1983; Hoon et al., 1977; Lange et al., 1981; Norton & Jehu, 1984). Sexual arousal may instead be mediated by cognitive variables.

The cognitive aspect of anxiety most thoroughly examined has been termed performance-related concerns (Abrahamson, Barlow, & Abrahamson, 1989). Several studies have shown that performance demands, (i.e. subjects were instructed to willingly obtain an erection, or subjects were informed of the normative sexual responses of other volunteers), do not affect penile tumescence in sexually functional (SFs) males (Farkas, Sine, & Evans, 1979; Lange et al., 1981). Some studies even indicated that performance demands increased arousal in sexually functional males (Abrahamson, Barlow, & Abrahamson, 1989; Abrahamson, Barlow, Beck, Sakheim, & Kelly, 1985).

On the other hand, performance demands seem to affect sexual dysfunctional (SDs) subjects in a different way. In

a study done by Beck, Barlow, and Sakheim (1983), it was found that under a high performance demand condition, (subjects were told to identify with the male in a sexually explicit film, and to focus on a highly aroused female partner), penile responding was significantly lower for dysfunctional subjects. Post hoc analyses indicated that sexually dysfunctional males seemed to concentrate on distracting performance-related concerns when viewing a highly aroused partner (Beck et al., 1983). It has been hypothesized that the differential response between sexually functional and dysfunctional males in regards to performance demands might be predicted if one assumes that dysfunctionals generate off-task cognitions in response to performance demands. These off-task cognitions in turn, interfere with their arousal through a distraction process (Bruce, Barlow, & Jones, 1989).

Several studies have indicated an inhibitory effect on arousal by nonsexual distraction. The assumption of a distraction study is that attentional resources are limited. When there is competition for those resources, (i.e. by imposing a distraction), performance will suffer. The pioneering study by Geer and Fuhr (1976) used a dichotomous listening task, where functional subjects listened to a sexually explicit audiotape in one ear, while

being presented with arithmetic tasks of increasing complexity in the other. Results showed that sexual arousal decreased as the distracting tasks became increasingly difficult and complex. Distraction also markedly influenced penile responding in a negative way when using a visual sexually explicit stimulus (Farkas et al., 1979).

What is interesting to note was that in a study done by Abrahamson, Barlow, Sakheim, Beck, and Athansiou (1985), which included functional and dysfunctional subjects, it was found that distraction affected the two groups differently. Sexually functional subjects were negatively affected by the distraction, as expected, but dysfunctional subjects were not. In fact, the SDs attained a level of sexual arousal that did not differ significantly from sexual arousal in the no distraction condition. These results were replicated in another study, where the distraction condition was similar to Geer and Fuhr's (1976) study, in that the complexity of distraction was increased at different levels (Bruce et al., 1989). Abrahamson et al. (1989) hypothesized that nonsexual distraction does not affect sexual arousal in SDs because they are already distracted by performance related concerns.

One possible explanation for why distraction affects

SDs and SFs differently has been suggested by Barlow (1986). In his working model of erectile functioning, Barlow indicated that sexual dysfunctions result from a cognitive interference process interacting with the physiological dimension of anxiety. The cognitive interference results from SDs's focus on off-task thoughts (i.e. consequences of not performing or other issues not related to the present arousing stimuli). As the physiological aspects of arousal, (which are commonly referred to as anxiety), increase, this off-task focus becomes more efficient, resulting in further dysfunctional performance. This process is explained in a negative feedback loop for SDs, in that anxiety fuels this off-task focus, further decreasing sexual arousal in every sexually arousing situation. Likewise, the paradoxical increase in sexual arousal under anxiety for SFs can also be explained by Barlow's model. Physiological arousal makes SFs's characteristic on-task focus more efficient in every sexually arousing situation via a positive feedback loop (see Figure 1).

Insert Figure 1 about here

What Barlow's model suggests is that the way anxiety

affects sexual arousal depends on the cognitive/attentional focus of the individual (Barlow, 1986), thus explaining the inconsistencies in previous research findings.

Thought content has always been inferred by the sexual responding of subjects. That is that the decrease in sexual arousal seen in SFs during distraction, for example, has been assumed to be due to a shifting of on- to off-task thoughts. What has not been measured in previous research is the actual thought content produced during the different levels of arousal and distraction or the hypothetical shift in thought content suggested by Barlow's model (1986). An analysis of this thought content shift could be a clue to the etiology of sexual dysfunctions. The present study was one of the first to examine thought content (attentional focus) shift of SFs and SDs under the same conditions.

The present study was an extension of a study on distraction and sexual arousal by Bruce, Barlow, and Jones (1989). This study compared the sexual functioning of SFs and SDs during three different levels of distraction (no distraction, minimal distraction and more distraction). Four hypotheses were examined. It was first hypothesized that under no distraction, SFs would exhibit the highest level of sexual arousal and the highest number of on-task thoughts. Secondly, under this same condition, it was

expected that SDs would exhibit the lowest levels of sexual arousal and highest number of off-task thoughts. Both hypotheses 1 and 2 are predicted by Barlow's model (1986), in that this was how SFs and SDs would behave in any sexual context where distraction does not exist. Thirdly, it was hypothesized that as distraction increased, SFs would show a decrease in sexual arousal and number of on-task thoughts, and an increase in the number of off-task thoughts. Finally, it was hypothesized that for SDs, as distraction increased, there would be no change in sexual arousal or number of off-task thoughts. This was due to the theory that distraction would simply be reallocating attention from one off-task focus (i.e. performance concerns) to another off-task focus (i.e. numbers heard).

METHOD

Subjects

Subjects were from the Bruce, Barlow, and Jones (1989) study, and were 20 males (10 SFs and 10 SDs, matched on age, education level, race and sexual orientation). The SDs met the criteria for Inhibited Sexual Excitement in the Diagnostic and Statistical Manual-III (American Psychiatric Association, 1980, 302.70). All subjects were screened for major psychopathology and medical complications to ensure

there was no other cause (i.e. organic) for their dysfunctions.

Design

A repeated measure design varying four levels of nonsexual distraction was used. In each condition, the subject viewed a sexually explicit film while simultaneously attending to and performing a series of mental tasks. The mental tasks involved a series of auditory number presentations which increased in the level of attentional focus necessary to correctly complete them.

The present study analyzed the data collected from only three of the four original conditions. One condition was found to be too complex to accurately perform under the given conditions, so it was eliminated in the present study.

Experimental Conditions

During each of the experimental conditions, subjects were asked to "attempt to become as aroused as possible" in order to create a performance demand across each session. The treatment integrity of the distraction conditions was assessed by monitoring the subjects' responses. The levels of nonsexual distraction were dependent on the level of

difficulty each distracting task produced.

Distraction X0. Subjects were asked to respond verbally to each number heard with the word "check" in order to control for the effect of verbalization alone. This was considered the least demanding of the three conditions, identified as "no distraction."

Distraction X1. Subjects were asked to repeat verbally every other number heard. This condition was considered the first or minimal level of distraction, identified as the "shadowing task".

Distraction X2. Subjects were asked to add consecutive pairs of numbers and respond verbally with the sum of each two-digit pair. This was considered the second level of distraction, "identified as the "addition task".

Stimulus Materials

Sexually explicit stimuli. Four five-minute color videos, each validated as highly arousing to heterosexual males, were used. The films involved a male and two females engaged in commonly practiced sexual behaviors.

Neutral stimuli. During each five-minute condition, subjects were presented a series of single digit numbers at two-to-six second intervals through two sides of the headphone set simultaneously.

Travelogue. To allow habituation to the laboratory setting, subjects viewed a three-minute travelogue prior to each experimental condition.

Measures

Physical measurement. A mechanical penile strain gauge (Barlow, Becker, Leitenberg, & Argas, 1970) was used to assess penile circumference changes through each of the distraction conditions.

Cognitive assessment. A combination of both endorsement and production methods of assessment was used to identify each subject's thought content (foci of attention) during the experimental conditions. The specific assessment tool was a modified version of what Abrahamson, et al. used in their 1989 study, and contained a series of 15 statements regarding the subjects' thoughts during the film presentations (see Appendix).

Each statement fell under one of three content categories: a.) performance related (i.e., "I thought about how much of an erection I was getting"; items number 5, 10, 12, 15); b.) sexual, but not performance related (i.e., "I thought about the breasts of the women in the film"; items number 1, 4, 6, 8, 11, 14); c.) neutral (i.e., "I thought about the numbers I heard"; items number

2, 3, 7, 9, 13).

Subjects were told to first endorse and produce all thoughts occurring during each condition immediately following that condition. They were then asked to rank order these thoughts in terms of which they thought about most (1) to least. Next, subjects were asked to rate both endorsed and produced thoughts on a dimension of sexual arousal on a 0-10 Likert scale (0 = not at all arousing; 10 = extremely sexually arousing), and the affect on a -10-+10 Likert scale (-10 = extremely unpleasant; +10 = extremely pleasant). Scoring procedures are described in a subsequent section.

Procedure

Each subject participated in two separate sessions, the first involving initial screening for subject criteria and an explanation of the nature of the experimental session. The experimental session began with a second explanation of the nature of the experiment. After questions were answered and consent forms signed, the subject was asked to privately disrobe, to place the strain gauge on his penis as instructed, and was then covered with a linen sheet. Once the subject was seated comfortably, the experimenter explained each of the conditions, and

allowed the subject to practice each of the cognitive operations. Once assured the subject understood each condition, the experimenter left the room.

A five-minute baseline was achieved first while the subject viewed the travelogue. Each stimulus presentation involved a 30-second baseline preceding each film, the five-minute film, completion of the post-stimulus measures, followed by an interval to allow penile measurement to return to baseline. Each subject participated in each experimental condition, with the conditions presented in counterbalanced order across subjects. Debriefing followed each experimental session.

Scoring and Data Reduction

Physiological measures. Since not all subjects were able to reach 100% full erection at some time during the procedure, the strain gauge measurements could not be converted to percent of full erection. Thus, a measure of millimeters penile circumference change from pre-condition baseline was used.

Cognitive assessment. The cognitive assessment measure was scored in the following manner. It was assumed that the total number of thoughts endorsed and produced approximated the total content of the subject's attention

during the condition. Each rank given represented an ordinal estimation of the attentional resources allocated for that particular thought. A percentage estimate score of attention was computed by first dividing the sum of the ranks into 100. The rank value of the thoughts were then inverted, (i.e. if a total of 4 thoughts were endorsed and produced, the thought ranked as 1 (what the subject thought about the most) was given a value of 4, the thought ranked as 2 was given the value of 3, etc.). Finally, this inverted rank value was multiplied by the quotient derived above to provide the percentage estimate score.

The percentage estimate scores derived above were used to determine the number of on- and off- task thoughts the subjects reported during each experimental condition. There are many possible ways to conceptualize on- or off-task thoughts. The present study proceeded to define the attentional foci in the following manner: on-task thoughts were defined as all thoughts (performance related, sexual and neutral thoughts) rated as arousing (1-10 on the arousal scale). Consequently, off-task thoughts were defined as all thoughts (performance related, sexual and neutral thoughts) rated as unarousing (0 on the arousal scale).

RESULTS

All data was analyzed using repeated measures ANOVA of Group (2) by Condition (3), with t-test follow-ups to examine for group differences.

Erectile Responding

For mean strain gauge values, a significant Group x Condition effect was revealed ($F = 3.70$, $DF = 2$, $p < .036$). Follow-up t-tests revealed a significant difference in penile circumference change from baseline in millimeters between SFs and SDs at Distraction X0 ($t = -1.99$, $DF = 18$, $p < .032$) as depicted in figure 2.

Insert Figure 2 about here

Paired samples t-tests revealed that although the genital responding of SDs did not differ significantly across conitions, mean genital response for SFs was significantly higher under Distraction X0 than their genital response under Distraction X1 ($t = 2.99$, $DF = 9$, $p < .016$) and Distraction X2 ($t = 2.53$, $DF = 9$, $p < .033$). The above results are also depicted in figure 2.

Cognitive measure

As indicated in the Methods section, the cognitive

measure used in the present study required the subjects to endorse and produce all thoughts occupying their attention during each condition. These thoughts were then ranked in terms of which they thought about most to least. Subjects then rated how unarousing/arousing and unpleasant/pleasant each thought was. The cognitive measure yielded a cummulative percentage score of total on-task thoughts (the sum of percentages allocated to performance related, sexual but not performance related, and neutral thoughts rated as arousing). This procedure yielded a measurement scale with interval properties, appropriate for analysis with parametric statistics, if analysis in such a manner is limited to the present study. By mutual exclusion, the cognitive measure also yielded a measure of total off-task thoughts (the sum of percentages allocated to performance related, sexual but not performance related, and neutral thoughts rated as unarousing).

A significant Group x Condition effect was revealed in the analysis of total on-task thoughts when defined as total thoughts rated as arousing ($F = 6.24$, $DF = 2$, $p < .006$) as depicted in figure 3.

Insert Figure 3 about here

Follow-up t-tests indicated that SDs reported significantly more on-task thoughts under Distraction X1 ($t = 2.05$, $DF = 18$, $p < .029$), but was not significantly different at Distraction X0 and Distraction X2.

Paired samples t-tests revealed that for SDs, total on-task thought was significantly higher under Distraction X1 when compared to Distraction X0 ($t = -2.31$, $DF = 9$, $p < .047$), but was not significantly different between the other distraction conditions. For SFs, total on-task thought was significantly higher under Distraction X0 compared to Distraction X1 ($t = 2.61$, $DF = 9$, $p < .029$), and Distraction X2 ($t = 2.45$, $DF = 9$, $p < .038$). These results are also depicted in figure 3.

Results on the off-task thought measure (defined as thoughts rated as unarousing), mirrored those of on-task thought, (defined as thoughts rated as arousing), due to the fact that the categories were mutually exclusive. Consequently, the Group x Condition effect was the same statistically ($F = 6.24$, $DF = 2$, $p < .006$), as were the follow-up results. These results are depicted in figure 4.

Insert Figure 4 about here

DISCUSSION

Results of the present study confirmed several hypotheses and have important implications. As expected, SFs exhibited the highest levels of sexual arousal and highest number of on-task thoughts under no distraction. This was predicted by Barlow's (1986) model, and is in fact, empirical evidence for the hypothesized manner in which SFs behave under "normal" arousing situations.

The present study also replicated and extended the effect of distraction on SFs, in that hypothesis 3, (as distraction increased, SFs would show a decrease in sexual arousal and number of on-task thoughts, and an increase in number of off-task thoughts), was supported. Distraction caused sexual arousal in SFs to decrease, which corresponded with a decrease in number of on-task thoughts. SFs also experienced a slight increase in number of on-task thoughts from Distraction X1 to Distraction X2, but it was nonsignificant. The present study replicated some of the results from the pioneering distraction study done by Geer and Fuhr (1976). It is important to note that although the present study used male subjects, and Geer and Fuhr (1976) used female subjects, the distraction effect was present in both experiments.

It is interesting to note that unlike results obtained

by Geer and Fuhr (1976), the decrease in on-task thoughts and genital measures of arousal in SFs in the present study were not linear. Rather, they resemble more of a threshhold pattern in that sexual arousal did not decrease in equal intervals, rather it decreased to a certain level and then remained at approximately that decreased level. It is possible that our results differ from Geer and Fuhr's (1976) because the present study imposed a distraction in a different modality from which the sexually explicit stimuli was presented, (audio distraction, visual sexually explicit stimuli). The Geer and Fuhr (1976) study presented both the distraction and sexually explicit stimuli auditorily. This indicates that distraction can occur across modalities, although the pattern of response may differ.

Although the distraction effect was present, we did not get the between group effects, (SFs did not report significantly more on-task thougts than SDs under no distraction and Distraction X2), which we expected. This may be explained in the way which the present study was designed. Although labeled as such, the Distraction X0 condition was not a "pure" no distraction condition. Audtory distraction was still present, and subjects were required to respond verbally to each number heard. This was necessary for methodological reasons to control for

verbalization, which was the means of responding for subjects. Thus, the Distraction XO condition may have had a detrimental effect on the SFs's arousal and number of on-task thoughts. The Distraction XO condition may, in turn, be "improving" the sexual responding of SDs by distracting them from an already present off-task focus. By bringing the two groups closer together in terms of their responses, the Distraction XO condition may have attenuated the between group differences we expected.

Although the results supported hypothesis 4, (for SDs, as distraction increased, there was no change in level of sexual arousal and number of off-task thoughts), hypothesis 2, (under no distraction, SDs would exhibit the lowest level of sexual arousal and highest number of off-task thoughts), was not supported. The number of off-task thoughts was not significantly higher under the no distraction condition for SDs. This may be explained by the fact that imposing a mild distraction does not have much of an effect on the number of off-task thoughts for SDs, because they already have an off-task focus. Yet, it should also be recognized that even though SDs exhibited a moderate level of arousal under each condition, there was not a significant increase in number of on-task thoughts.

The present study has several implications. If

anxiety does indeed interfere with sexual arousal, the present study supported the position that it can do so through an attentional process, rather than a physiological one. One therapeutic implication of this position is that techniques which focus on cognitive/affective aspects, (i.e. relaxation training), may be more effective than techniques which focus on physical aspects.

Future studies may wish to include a pure no distraction condition to see if a between group difference is indeed present. Although this study does provide some evidence for the hypothetical shift in thought content that is assumed to occur in sexual dysfunctions, further investigations are still necessary.

We recognized some weaknesses in the present study. First, the cognitive measure was dependent on subject self-report which must always be noted for its subjectivity. Objective measures are not yet available and this hampers this line of research. A second weakness was that the present study involved analysis of data which had already been collected, so further inquiry or clarification was not possible. Another possible problem involved the assumption made with the cognitive assessment tool that the the total number of thoughts endorsed and produced equals 100% of the subjects's attentional resources. It was possible that

attention was allocated to thoughts which were not reported. However, again due to the subjective nature of thought content, this assumption was necessary to quantify this data.

The present study was one of the first to attempt to collect empirical evidence for the hypothetical thought contnet shift which is assumed to occur during sexually dysfunctional behavior. In a sexual context, SFs attend more to sexually arousing thoughts when not distracted, and SDs attend to more off-task, sexually unarousing thoughts when not distracted. This investigation may help form the foundation of basic research into the role of attentional factors in sexual dysfunction, with implications for theory and therapy.

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APPENDIX

Film # ____

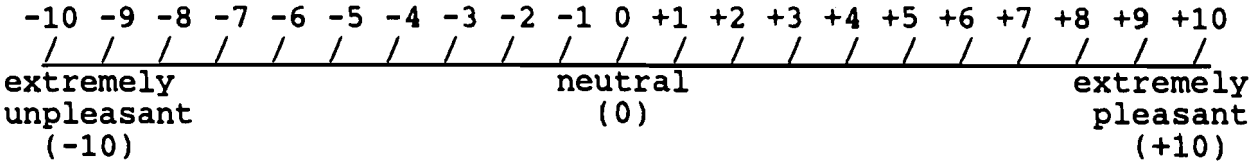
INSTRUCTIONS:

First, place an "x" next to each thought you had during the film in the column marked "X".

Second, list any other thoughts you had, and place an "x" next them also.

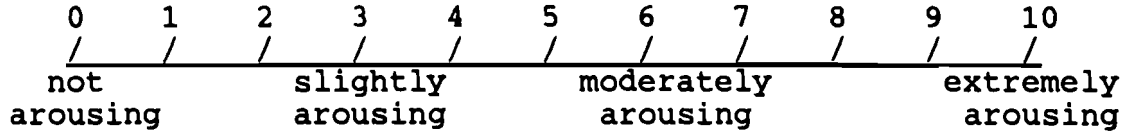
Third, rank each thought you checked from 1 on up in terms of how predominant the thought was (how long the thought was in your mind). For example, a rank of "1" means the thought was the least predominant, "2" means next most predominant, "3" means next most predominant, and so forth. Place these ranks in the column marked "R" (for rank).

Forth, rate each thought you checked in terms of how "pleasant or unpleasant" it was using the following scale:



Place these ratings in the column marked "P" (for pleasantness).

Fifth, rate each thought you checked in terms of how "sexually arousing" it was using the following scale:



Place these ratings in the column marked "A" (for arousal).

Here is an example using three thoughts:

"A"	"P"	"R"	"X"	
0	-5	3	x	1) I thought about a my toe hurting.
				2) I thought about the carpet.
0	0	1	x	3) I thought about my car.

Film # ____

"I thought about..."

4th "A"	3rd "P"	2nd "R"	1st "X"	
___	___	___	___	1)...the breast of the women in the film.
___	___	___	___	2)...the numbers I heard.
___	___	___	___	3)...the room I am sitting in.
___	___	___	___	4)...how turned on and sexually aroused the women in the film were.
___	___	___	___	5)...how much or little of an erection I was getting.
___	___	___	___	6)...the rear ends of the women.
___	___	___	___	7)...how physically comforable I was.
___	___	___	___	8)...the vaginas of the women in the film.
___	___	___	___	9)...the technical quality of the film.
___	___	___	___	10)...how much of an erection I was getting compared to the man in the film.
___	___	___	___	11)...how sexy the women in the film were.
___	___	___	___	12)...how good my partner(s) think I am sexually.
___	___	___	___	13)...how unusual and unique these circumstances are.
___	___	___	___	14)...having sex.
___	___	___	___	15)...the fact that someone is monitoring me.

PLEASE LIST ANY OTHER THOUGHTS YOU HAD DURING THE LAST FILM AND INCLUDE THEM IN YOU RATINGS

___ ___ ___ ___ 16)..._____

_____.

___ ___ ___ ___ 17)..._____

_____.

___ ___ ___ ___ 18)..._____.

_____.

___ ___ ___ ___ 19)..._____

_____.

___ ___ ___ ___ 20)..._____

_____.

___ ___ ___ ___ 21)..._____

_____.

PLEASE USE THE BACK OF THIS SHEET IF YOU NEED MORE SPACE TO LIST AND RATE THOUGHTS

Figure Caption

Figure 1. Barlow's (1986) working model of erectile dysfunction.

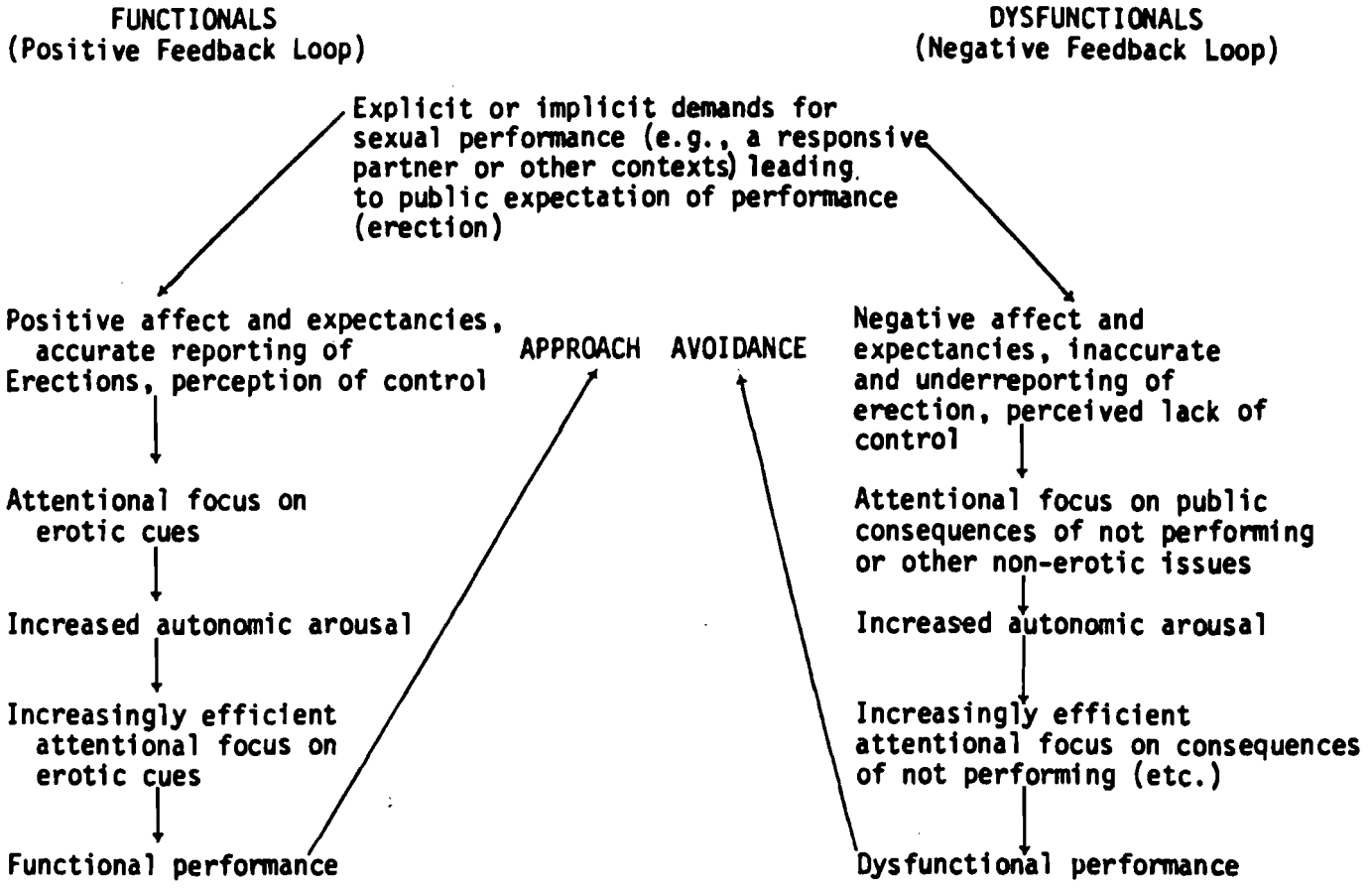

FUNCTIONALS
(Positive Feedback Loop)
DYSFUNCTIONALS
(Negative Feedback Loop)
Explicit or implicit demands for sexual performance (e.g., a responsive partner or other contexts) leading to public expectation of performance (erection)
Positive affect and expectancies, accurate reporting of Erections, perception of control
Attentional focus on erotic cues
Increased autonomic arousal
Increasingly efficient attentional focus on erotic cues
Functional performance
APPROACH
AVOIDANCE
Negative affect and expectancies, inaccurate and underreporting of erection, perceived lack of control
Attentional focus on public consequences of not performing or other non-erotic issues
Increased autonomic arousal
Increasingly efficient attentional focus on consequences of not performing (etc.)
Dysfunctional performance

Figure Caption

Figure 2. Mean penile circumference (cir.) change from baseline in millimeters (mm) by group, per condition.

* denotes significant difference between groups (SFs and SDs) at Distraction X0 ($t = -1.99$, $DF = 18$, $p < .032$).

+ denotes significant difference between conditions (Distraction X0 and Distraction X1) for SFs ($t = 2,99$, $DF = 9$, $p < .016$)

@ denotes significant difference between conditions (Distraction X0 and Distraction X2) for SFs ($t = 2.53$, $DF = 9$, $p < .033$).

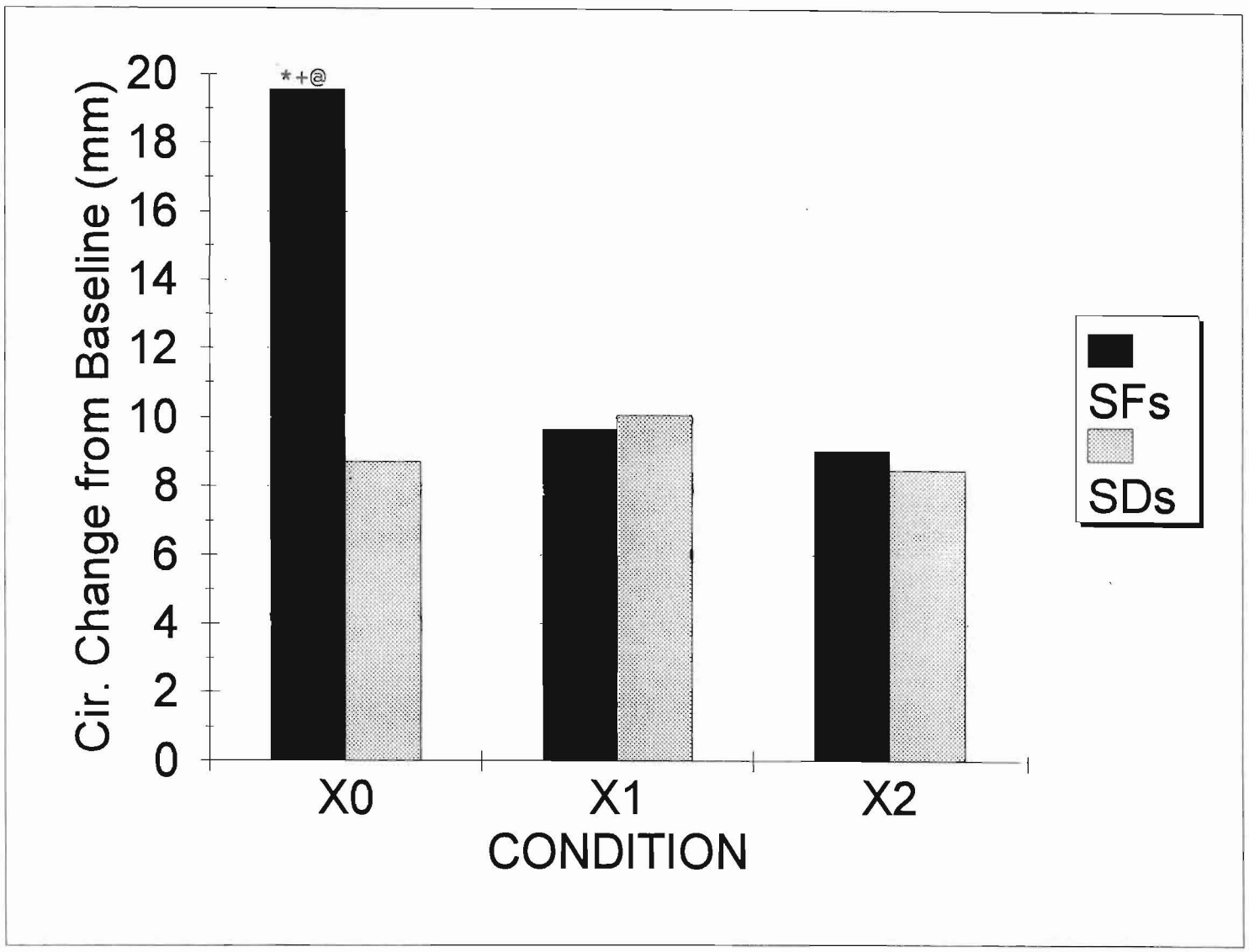

Cir. Change from Baseline (mm)
20
18
16
14
12
10
8
6
4
2
0
*+@
X0
X1
X2
CONDITION
SFs
SDs

Figure Caption

Figure 3. Post-condition rating of percent total on-task thought by group, per condition.

* denotes significant difference between groups (SFs and SDs) at Distraction X1 ($t = 2.05$, $DF = 18$, $p < .029$).

+ denotes significant difference between conditions (Distraction X0 and Distraction X1) for SFs ($t = 2.61$, $DF = 9$, $p < .029$).

@ denotes significant difference between conditions (Distraction X0 and Distraction X2) for SFs ($t = 2.45$, $DF = 9$, $p < .038$).

# denotes significant difference between conditions (Distraction X0 and Distraction X1) for SDs ($t = -2.31$, $DF = 9$, $p < .047$).

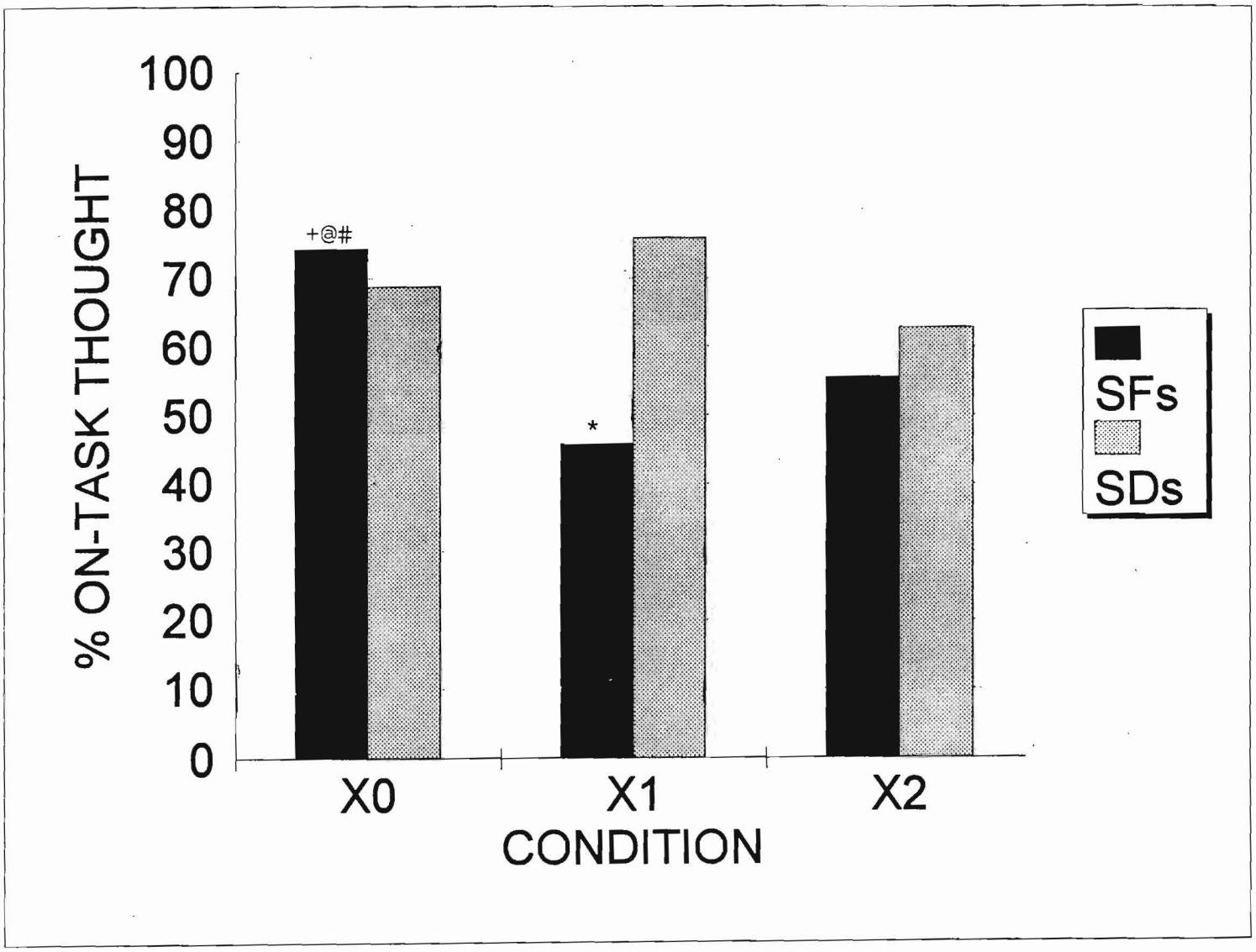

100
90
80
70
60
50
40
30
20
10
0
% ON-TASK THOUGHT
+@#
*
X0
X1
X2
CONDITION
SFs
SDs

Figure Caption

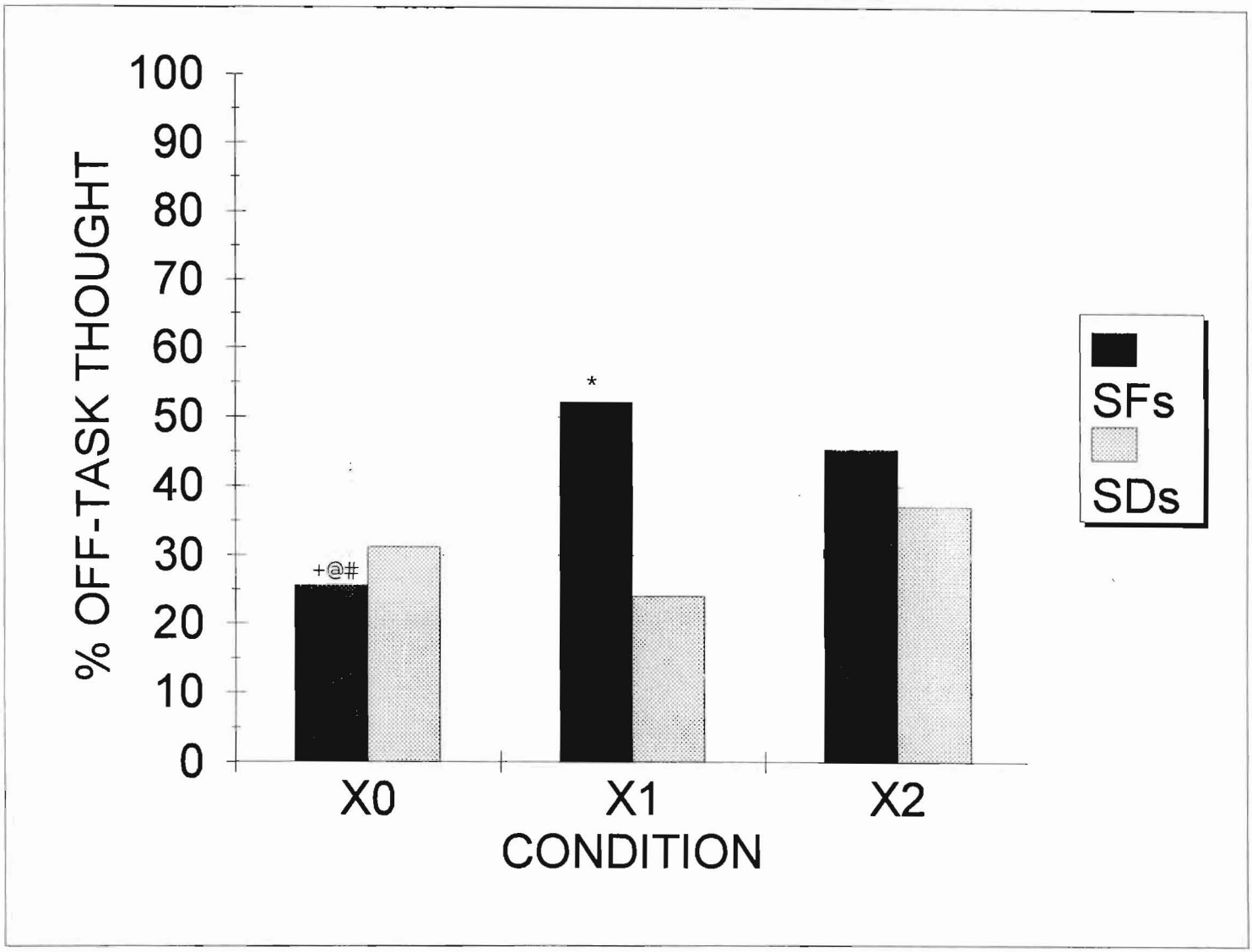
Figure 4. Post-condition rating of percent total off-task thought by group, per condition.

* denotes significant difference between groups (SFs and SDs) at Distraction X1 ($t = 2.05$, $DF = 18$, $p < .029$).

+ denotes significant difference between conditions (Distraction X0 and Distraction X1) for SFs ($t = 2.61$, $DF = 9$, $p < .029$).

@ denotes significant difference between conditions (Distraction X0 and Distraction X2) for SFs ($t = 2.45$, $DF = 9$, $p < .038$).

# denotes significant difference between conditions (Distraction X0 and Distraction X1) for SDs ($t = -2.31$, $DF = 9$, $p < .047$).


100
90
80
70
60
50
40
30
20
10
0
% OFF-TASK THOUGHT
+@#
*
X0
X1
X2
CONDITION
SFs
SDs