

Attentional Focus and Attitudes Toward Peers with Disabilities: Self Focusing and A Comparison of Modeling and Self-Disclosure

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This study tested aspects of the Attentional Mechanisms Model of Interaction Strain (AMMIS) by examining correlates of dispositionally self-focused attention (self-consciousness) and by comparing two filmed interventions: one of these modeled appropriate behaviors when encountering someone who is blind (symbolic modeling of skills), while the second featured a blind man during everyday activities (self-disclosure). Results indicate that self-focused attention is related to negative outcomes and that both the modeling and the self-disclosure films had beneficial effects on thoughts, feelings, self-efficacy beliefs, and attitudes, compared to no intervention. While symbolic modeling was expected to result in more favorable outcomes, self-disclosure generally produced superior results. Implications for research, skills training, and attitude change are discussed.

Casual interaction between nondisabled individuals and strangers who have a disability can be made difficult by a variety of factors (Berry & Meyer, 1995; Elliott & Frank, 1990; Gibbons, 1986; Gouvier, Coon, Todd, & Fuller, 1994; Katz, Wackenhut, & Glass, 1986; Kleck, 1966; Kleck, Ono, & Hastorf, 1966; Marinelli & Kelz, 1973; Stephan, Stephan, Wenzel, & Cornelius, 1991; Yucker, 1992). These include uncertainty about appropriate behavior, anxiety, and lack of confidence in one's ability to behave effectively in the situation. Ambivalent and negative attitudes, erroneous and stereotyped beliefs, as well as concerns about what the "other person" thinks may also contribute to problematic interaction (Fichten, 1988; Leary & Atherton, 1986).

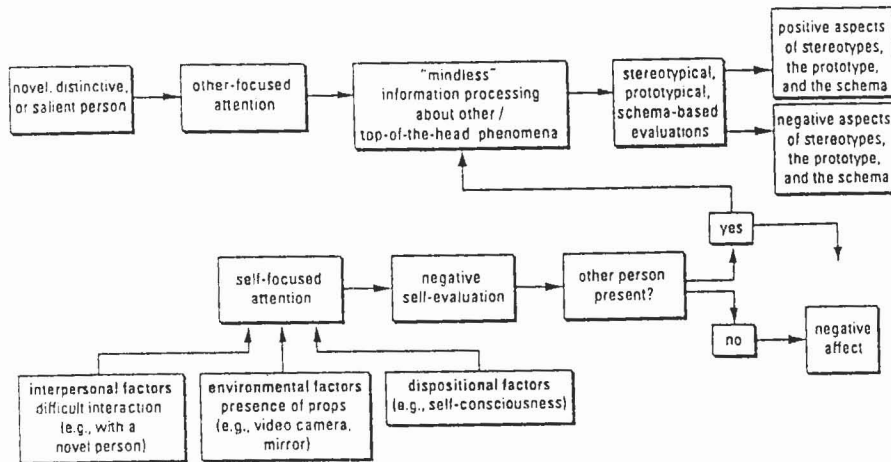
Recently, we proposed the Attentional Mechanisms Model of Interaction Strain (AMMIS) which integrates

known findings and generates hypotheses both about causes of interaction difficulties and about remedies (Fichten, Amsel, Robillard, Sabourin, & Wright, in press; Fichten, Robillard, & Sabourin, 1994). The model, presented in Figure 1, is based on the assumption that difficulties experienced by non-disabled individuals are partly due to a variety of attentional factors. For example, the top row of the model proposes that stereotyped negative evaluations are caused primarily by the automatic, non-thinking nature of attention paid to the person with a disability; this is partly due to the novelty of individuals with disabilities and to the salience of the impairment (cf. Gething, 1994; Langer, Fiske, Taylor, & Chanowitz, 1976; Zola, 1981). The middle row of the model suggests that such "mindless" information processing about the person with the disability is likely to be exacerbated by preoccupation with one's own behavior and the ensuing cognitive "busyness" due to focusing attention on the self (Gilbert & Hixon, 1991; Osborne & Gilbert, 1992). The middle row also predicts that self-focusing leads to negative affect and negative evaluation of the self as well. Indeed, a vast literature shows that self-focused attention typically causes discomfort and negative self-evaluation (Gibbons, 1990).

As the bottom row of the model indicates, self-focused attention can be due to dispositional factors, such as high public self-consciousness, or to situational factors such as the presence of mirrors, video cameras, and the like (Carver, Peterson, Follansbee, & Scheier, 1983; Fiske & Taylor, 1991; Ingram, 1990; Scheier & Carver, 1985; Duval, Duval, & Mulilis, 1992; Wicklund, 1975). Self-focusing can also result from expecting to engage in a difficult task. A social encounter with a person who has a disability is often viewed as problematic; compared to easier tasks, it can elicit anxiety and more thoughts, especially negative self-focused and self-evaluative thoughts such as low self-efficacy expectations (Daly, Vangelisti, Neel, & Cavanaugh, 1989; Fichten, Amsel, & Robillard, 1988).

The model also predicts that there will be a variety of favorable consequences to disrupting self-focusing and the associated negative affect and self-evaluation. This includes paying more attention to the other person, which is likely to

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result in less stereotyping, and more positive evaluations (Fiske, 1993).

The main goal of this investigation was to explore predictions made by the model which deal with self-focused attention. Specifically, two aspects were investigated. (1) One explored, using correlational analyses, the predicted relationship between dispositional self-focusing (self-consciousness) and evaluations of both the self and the other person. (2) The second evaluated the effects of manipulating interpersonal factors by examining the effects of a skills training intervention (symbolic modeling) on aspects of both self and other evaluation. A third objective was to provide additional validity data for measures which were developed relatively recently.

The requirement for testing hypothesis 1 is reasonably straightforward. It requires the demonstration that dispositional self-consciousness is closely related to negative affect and negative evaluations of both oneself as well as of people with disabilities.

To test hypothesis 2 we conducted an experiment to evaluate the impact of a symbolic modeling intervention whose goal was to modify interpersonal factors and thereby diminish self-focus and negative self evaluation associated with interacting with someone who has a disability. Symbolic modeling - by portraying needed interaction skills - was expected to make encounters with a novel person easier through improving confidence in one's ability to successfully execute a task.

The expectation that one can successfully perform a behavior (strong self-efficacy beliefs) is likely to influence how comfortable one feels as well as whether one engages in interaction (cf. Bandura, 1982, 1986a, 1986b). There is every reason to believe that low confidence in one's ability to function competently with a peer who has a physical

disability will lead to a similar pattern (Amsel & Fichten, 1988; Fichten, Bourdon, Amsel, & Fox, 1987).

One promising means of changing maladaptive self-focusing and fostering strong self-efficacy expectations is through the cognitive-behavioral technique of modeling. Symbolic modeling, which usually involves the audio-visual presentation of appropriate behavior, has long been known to be effective in changing affect and behaviors in many realms (cf. Gambrill, 1977; Kazdin, 1984). In fact, this technique is one of the key components of social learning programs for skills deficits, phobias, and exposure treatments for a host of behavior problems.

Symbolic modeling would be expected to directly address poor skills, negative self-evaluations and low self-efficacy expectations concerning relations with people who have a disability. Also, symbolic modeling should reduce self-focusing by exerting a beneficial effect on thoughts about the self. Eliminating, "I don't know what to do" thoughts should decrease the frequency of other types of negative self-focused thoughts as well (e.g., feelings of discomfort, negative consequences, wish to avoid). Moreover, the AM-MIS model predicts that reduction of self-focus can free up attention so that thoughts about the other person may become more "mindful" and less stereotyped as well.

Providing instructions about how to relate effectively in the context of interaction between people who do and who do not have a disability is not a new notion (e.g., Bailey, 1991; Belgrave & Mills, 1981; Evans, 1976; Hastorf, Wildfogel, & Cassman, 1979; Mills, Belgrave, & Boyer, 1984; Salend & Knops, 1984; Towner, 1984; Vargo, 1989). What is new in the present investigation is the evaluation of the mediational mechanism underlying changes brought about by various skills training approaches, namely, improved

self-efficacy expectations and more "mindful" evaluation of the other person.

To test the two hypotheses we assessed the impact of a modeling intervention on self-efficacy expectations, attitudes, and thoughts and feelings and evaluated the relationship between these variables and dispositional self-focusing [public self-consciousness (Scheier & Carver, 1985)]. Participants completed a measure of dispositional self-focusing and were then presented either with a symbolic modeling filmed intervention which described "what to do" or with a self-disclosure filmed intervention which consisted of the usual type of "sensitizing" material. We thought of the self-disclosure condition as a control group, equating for the effects of filmed exposure to someone who is blind. We also included a no intervention control group in order to assess self-efficacy expectations, attitudes, and thoughts and feelings in the "natural" environment and to explore the relationship between dispositional self-focusing and these variables.

Method

Stimulus Materials

Two 13 minute films, each portraying a middle aged blind man in the 1970s during an average day's activities, constituted the two interventions. The film used in the symbolic modeling condition, "What Do You Do When You See a Blind Person?" (American Foundation for the Blind, 1971), is a humorous depiction of misconceptions concerning people who are blind. Through a narrator and some cinematic tricks, Phil, the hero of the film, learns the right (and wrong) way to walk, talk and have lunch with a person who is blind. This film has been shown to have positive effects on attitudes of several populations (Elliott & Byrd, 1983, 1984).

In the self disclosure condition an edited version of the film, "As a Blind Person" (American Foundation for the Blind, 1984) was used. While it was released in 1984, cars, clothing and hairstyles suggest that the film portrays events in the early 1970s. The film provides a profile of Bill Schmidt, a blind school teacher and principal of an elementary school. It illustrates that a person who is blind can effectively work at a job many consider difficult for a sighted person. This 1/2 hour film was professionally edited to last 13 minutes; this was necessary in order to equate exposure times. Whole scenes were eliminated; this resulted in a coherent brief version of the film which retained the original thrust and format.

While the two films were by no means equivalent, there were many similarities. Both portray middle aged professional men with "average" physical appearance. The two films depict the same era - the 1970s - and both portray positive images of people who are blind. Both films were produced by the American Foundation for the Blind and both were clearly intended to educate nondisabled individuals. A key difference is that the **modeling film has no**

self-disclosure aspects while the self-disclosure film contains no "how to" tips or modeling scenes.

Subjects

Subjects were 255 non-disabled college students, 110 males and 145 females (mean ages: males = 18.62, females = 18.66). All were enrolled in psychology courses at an urban junior/community college. Professors in each of the 9 participating class sections (3 sections each of General, Social, and Abnormal Psychology courses) provided time at the end of classes to allow volunteers to participate. Approximately 90% of students present on the day of testing volunteered. One section of each of the 3 courses was randomly assigned to each experimental condition.

Measures

Self-Consciousness Scale - Revised (SC Scale-R) (Fenigstein, Scheier, & Buss, 1975; Scheier & Carver, 1985). A commonly used measure of dispositional self-consciousness, the 22 item revision of this well-known measure of self-focusing has 3 subscales: Public Self-Consciousness (measures awareness of oneself as a social object), Private Self-Consciousness (evaluates the tendency to be aware of one's thoughts and feelings), and Social Anxiety. Respondents indicate, on 4-point scales, the extent to which each statement is characteristic of them. Satisfactory reliability and validity for the scale have been reported; for example, internal consistency coefficients for the three subscales vary between .75 and .84 and test-retest correlation coefficients range from .74 to .77. Correlations with the original version were in the low to mid .80s and the factor structure of the two versions is highly similar (Scheier & Carver, 1985).

Ease. General level of comfort with same sex able-bodied and blind students is assessed using 10-point scales (1 = very uncomfortable, 10 = very comfortable). Data on 4 week test-retest reliability show correlation coefficients ranging from .58 to .92. Also, Ease scores have been found to be significantly related to relevant criterion variables such as scores on self-statement inventories and measures of social anxiety, fear of negative evaluation, self-efficacy expectations, and attitudes toward persons with disabilities (Amsel & Fichten, 1988; Fichten & Amsel, 1988; Fichten, Amsel & Robillard, 1988; Fichten, Tagalakis, & Amsel, 1989).

College Interaction Self-Efficacy Questionnaire - Visual (CISEQ-V). This 40 item measure provides 2 scores: Comfort Level and Strength of Self-Efficacy expectations concerning social interaction with same-sex visually impaired students in a variety of contexts. Data indicate internal consistency coefficients which range from .94 to .99 and the findings show that scores on the measure are significantly related to knowledge of behaviors as well as to attitudes toward people with disabilities (Fichten, Bourdon, Amsel, & Fox, 1987). Moreover, people who feel at ease with individuals who have disabilities have significantly higher scores on the measure than do those who feel ill at ease (Fichten, Tagalakis, & Amsel, 1989) and respondents

Table 1

Relationships Among Variables: Pearson Product-Moment Correlation Coefficients

| | Self-Consciousness | | | Affect CISEQ | Comfort Ease | Self- Efficacy CISEQ | Thoughts | | | | | |
|----------------------------------|--------------------|---------|----------|-----------------|-----------------|----------------------------|----------|-------|----------|--------|-----------|--------|
| | Social | | | | | | Positive | | Negative | | SOM Ratio | |
| | Private | Anxiety | Attitude | | | | Self | Other | Self | Other | Self | Other |
| Dispositional Self-Consciousness | | | | | | | | | | | | |
| SC Scale Public | .39** | .74** | -.30* | -.23* | -.19 | -.16 | -.06 | -.05 | .39** | .30* | -.31** | -.31** |
| SC Scale Private | | .14 | .08 | .01 | .13 | .07 | .34** | .29* | .05 | .30* | .17 | -.01 |
| Dispositional Social Anxiety | | | | | | | | | | | | |
| SC Scale Social Anxiety | | | -.09 | -.13 | -.18 | -.10 | -.08 | -.08 | .18 | .07 | -.15 | -.14 |
| Attitude | | | | | | | | | | | | |
| DSR-V | | | | .42** | .28* | .45** | .35** | .27* | -.52** | -.38** | .59** | .57** |
| Feelings | | | | | | | | | | | | |
| CISEQ-V Comfort | | | | | .37** | .92** | .41** | .22 | -.53** | -.39** | .65** | .55** |
| Ease with Blind Peer | | | | | | .34** | .42** | .37** | -.37** | -.30* | .55** | .57** |
| Self-Efficacy Beliefs | | | | | | | | | | | | |
| CISEQ-V Certainty | | | | | | | .46** | .25* | -.49** | .34** | .64** | .53** |
| Thoughts | | | | | | | | | | | | |
| Positive | | | | | | | | | | | | |
| Self-Focused | | | | | | | | .71** | -.15 | .08 | .64** | .47** |
| Other-Focused | | | | | | | | | -.03 | .28* | .41** | .53** |
| Negative | | | | | | | | | | | | |
| Self-Focused | | | | | | | | | | .75** | -.84** | -.67** |
| Other-Focused | | | | | | | | | | | -.54** | -.64** |
| SOM Ratios | | | | | | | | | | | | |
| Self-Focused | | | | | | | | | | | | .79** |
| Other-Focused | | | | | | | | | | | | |

Note. Control group data only. Ns range from 71 to 73

*p<.05

**p<.01

who have had prior contact with individuals who have disabilities score higher on the measure than do respondents with no such prior experience (Fichten et al., 1987).

College Interaction Self-Statement Test - Revised (CISST-R). This 32 item revision is an inventory measure of thoughts about interaction with college students. It evaluates the frequency of positive and negative self and other-focused thoughts experienced in a hypothetical interaction between same-sex students in the college context (Fichten & Amsel, 1988; Amsel & Fichten, 1988). Like the original CISST, the measure yields overall positive and overall negative thought frequency scores as well as self-focused and other focused subscales. These are reported as valenced frequencies as well as in the form of Schwartz and Garamoni's (1986, 1989) States-of-Mind (SOM) ratio [Positive / (Positive + Negative)]. The revised CISST also has subscales which evaluate two aspects of self-focused think-

ing - Knowledge and Affect - and two aspects of other-focused thinking - Evaluation and Consequences.

Psychometric data on the original 40 item CISST indicate internal consistency coefficients for subscales which range from .54 to .87 and test-retest correlation coefficients between .28 and .89. Validity data show that subscale scores are meaningfully related to pertinent criterion variables (Amsel & Fichten, 1988; Fichten & Amsel, 1988). Unpublished data on the CISST-R indicate 4 week test-retest reliability coefficients which range from .44 to .95 for the 8 subscales and from .72 to .85 for total Positive and total Negative categories.

Disability Social Relationships Scale (DSR). This true/false multidimensional measure of attitudes toward people with different disabilities evaluates disability-specific and social situation specific factors (Grand, Bernier, & Strohmmer, 1982; Strohmmer, Grand, & Purcell, 1984). It incorporates three social relationship subscales (Work, Dat-

ing, Marriage), each consisting of 6 items. The higher the score, the more accepting the attitude. Grand, Bernier, and Strohmer (1982), Strohmer, Grand, and Purcell (1984), and Gordon, Minnes, and Holden (1990) showed that the measure has acceptable psychometric properties, that scores are logically related to theory, and that the scale is a viable multidimensional measure of attitudes toward persons with disabilities. In the present investigation, scores on the 3 subscales were summed and only attitudes toward people with visual impairments were examined.

Procedure

Participating class sections were randomly assigned to one of 3 experimental conditions: symbolic modeling of skills film, self-disclosure film, and no intervention control group. All participants were told that we were studying thoughts and feelings that people have about themselves and about people with visual impairments. They then completed the SC Scale-R.

Participants in the two intervention groups were shown one of the two films after the following introduction, "Because most of you have probably had little or no contact with anyone who has a visual impairment, we will show you a 10 minute film on visual impairment and blindness. Then we will ask you to complete some questionnaires." Subjects in all experimental conditions were then administered the CISST-R, CISEQ-V, DSR, and Ease measure. Of course, participants in the two intervention conditions completed measures after viewing the films. Once all measures were completed, subjects' reactions to the experience were explored.

Results

Relationship Between Self-Consciousness and Evaluations

To explore the AMMIS model's predictions about the relationship between dispositional self-focusing and attitudes, feelings, beliefs, and thoughts about interacting with people who have disabilities, Pearson product-moment correlation coefficients were computed. These are based on data from the 73 Control group subjects only; here there was no intervention to obscure or alter relationships and the number of male and female subjects was nearly identical.

The AMMIS model predicts that self-focusing, be it due to situational or to dispositional factors, would be associated with negative self-evaluation and stereotyped thinking about the other person involved in an interaction. Consistent with these predictions, results in Table 1 indicate that dispositional Public Self-Consciousness was significantly related to discomfort with blind peers, negative attitudes toward people with visual impairments, and negative thinking - both self and other focused - about interacting with a peer who has a disability. The data also show that these findings do not simply reflect a generalized interpersonal discomfort.

Although social anxiety is typically closely related to negative thoughts and feelings about interacting with able-bodied peers (Fichten, Amsel, & Robillard, 1988), in the present study, SC Scale Social Anxiety scores were not significantly related to scores on any of the measures which deal with interaction.

Table 1 also shows that the tendency to be introspective (Private Self-Consciousness) has a completely different relationship with these variables. The data show that the tendency to introspect is significantly related primarily to positive thinking about interacting with a peer who has an impairment.

Data in Table 1 also show that scores on the various measures are logically related to each other, thereby providing additional validation both for measures developed by our team (i.e., CISEQ-V, CISST-R, Ease) as well as by others (DSR, SC Scale-R). For example, positive attitude toward people with visual impairments was related to higher comfort levels, stronger self-efficacy expectations, lower public self-consciousness, and more positive and fewer negative thoughts about interacting with a peer who has a disability. Moreover, as has been shown in previous investigations (Fichten, Amsel, Robillard, & Tagalakakis, 1991), the present results show that the frequencies of Positive and Negative thoughts are independent and that Positive and Negative thoughts are related to different personality variables.

Effects of Filmed Interventions

Equivalence of groups. There were no significant differences among groups on age or on Public Self-Consciousness, Private Self-Consciousness, or Social Anxiety.

Differences between experimental conditions. This study follows a [3 Condition (Modeling / Self-Disclosure / Control) X 2 Sex of Subject (Male/Female)] factorial analysis of variance (ANOVA) design with repeated measures on several dependent variables (e.g., Ease with Blind/Able-Bodied Peers). Of interest to the present investigation are main effects and interactions involving Condition.

Results of ANOVA comparisons show that outcomes for the Self-Disclosure condition were usually equivalent or superior to those for the modeling intervention, and that both were generally superior to the no intervention control condition. As Table 2 shows, some comparisons are significant, while others merely approach significance. What is notable is that **all** differences are in the same direction, with Self-Disclosure having the most favorable results. For example, the comparison on overall thoughts (CISST-R Total SOMs) was significant, $F(2,235) = 3.56, p < .05$, as was the comparison on Comfort Level in various situations [CISEQ-V, $F(2,235) = 3.17, p < .05$]. While in the same direction, tests on Strength of Self-Efficacy expectations (CISEQ-V) and on Attitude toward people with visual impairments (DSR-V), only approached significance, $F(2,241) = 2.34, p < .10$; $F(2,235) = 2.54, p < .10$. However, a 3-way ANOVA comparison on Ease scores [3 Conditions X 2 Sex X 2 Stimulus Person (Blind/Able-Bodied)] showed both a sig-

Table 2
Summary of Results: Means and Findings

| Thoughts | Experimental Condition | | | Direction of Findings ¹ | Significance of ANOVA |
|--|------------------------|----------|---------|------------------------------------|-----------------------|
| | Self-Disclosure | Modeling | Control | | |
| Attitude Toward People with Visual Impairments (DSR-V) | 12.73 | 12.82 | 11.55 | Self-Disclosure=Modeling>Control | p < .10 |
| Self-Efficacy Beliefs (CISEQ-V) | | | | | |
| Strength of Self-Efficacy Expectations | 47.18 | 43.02 | 37.80 | Self-Disclosure>Modeling>Control | p < .10 |
| Thoughts (CISST-R) | | | | | |
| SOM ratio | .55 | .52 | .51 | Self-Disclosure>Modeling=Control | p < .05 |
| Frequencies | | | | | |
| Positive | 56.29 | 54.03 | 50.33 | Self-Disclosure>Modeling>Control | interaction |
| Negative | 48.26 | 50.15 | 49.62 | Positive>Negative | p < .05 |
| Feelings | | | | | |
| Comfort Level in Various Contexts (CISEQ-V) | 3.65 | 3.57 | 3.28 | Self-Disclosure=Modeling>Control | p < .05 |
| Ease | | | | | |
| With Blind Peers | 6.29 | 5.89 | 6.30 | Self-Disclosure=Control>Modeling | interaction |
| With Able-Bodied Peers | 7.87 | 7.92 | 7.50 | Able-Bodied>Blind | p < .05 |

Note. Higher scores denote more positive outcomes, except for Negative Thought Frequencies, where lower is better. p values are based on Condition main effects in 2-way ANOVA comparisons, except for Ease and Thought Frequencies, where results reflect the interaction.

nificant Stimulus Person main effect, $F(1,241) = 134.42$, $p < .001$, indicating greater Ease with able-bodied than with blind peers, as well as a significant Condition X Stimulus Person interaction, $F(2,241) = 3.47$, $p < .05$. This shows that subjects were least at Ease with Blind, compared to Able-Bodied Stimulus persons in the Modeling condition.

These findings suggest that, in general, the Self-Disclosure film produced the most favorable results and no intervention (control group) the least favorable.

Positive and negative thoughts. Because the Modeling and Self-Disclosure interventions could have had differential effects on Positive and on Negative thoughts, a series of 3-way ANOVA comparisons [3 Condition X 2 Sex X 2 Valence (Positive/Negative)] were made to explore thought frequencies in the three experimental conditions. In particular, symbolic modeling was expected to change Self-Focused Knowledge thoughts (by decreasing the frequency of "I don't know what to say/do" thoughts and increasing the frequency of "I know what to say/do" thoughts).

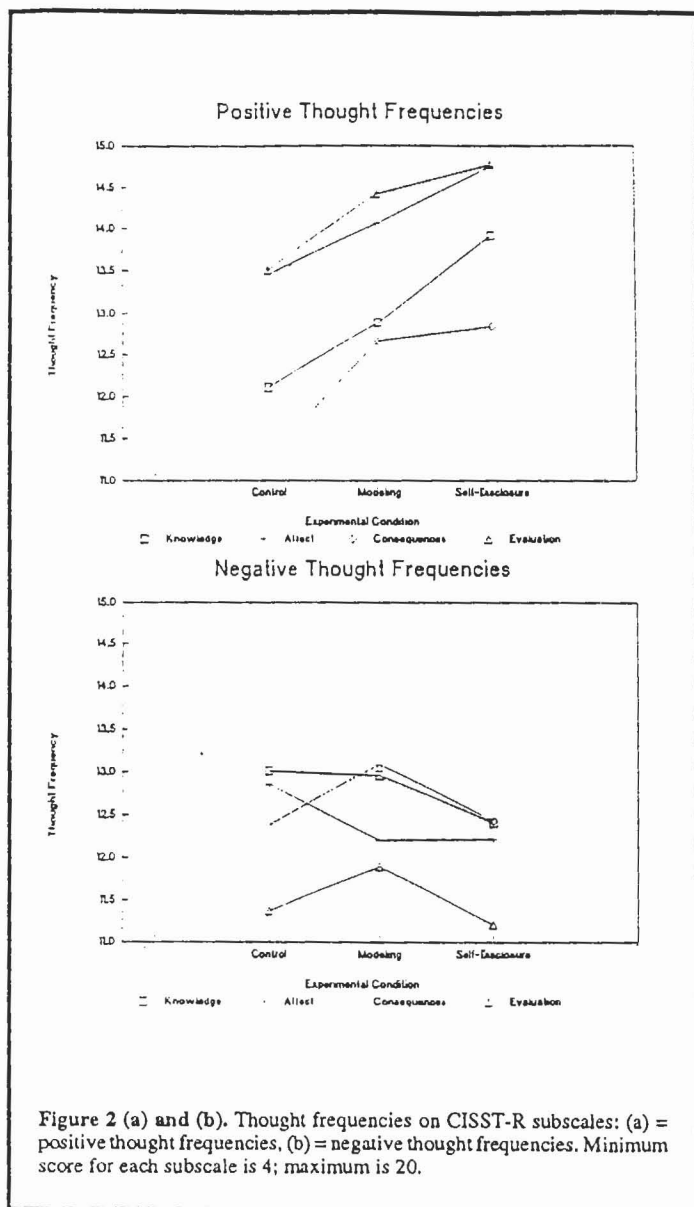
Results on overall valenced thoughts show a significant Condition X Valence interaction, $F(2,247) = 3.23$, $p < .05$; as can be seen in Table 1, scores in the Self-Disclosure condition reflect the highest Positive and the lowest Negative frequencies. To understand the basis for this significant finding on overall valenced scores, ANOVAs were conducted on the subscales. Three of the 4 interactions approached significance ($p < .10$). As is evident from Figure 2(a), thought frequencies in each of the four Positive subscales were highest in the Self-Disclosure, intermediate in Modeling, and lowest in the Control condition. On the four Negative subscales, however, Figure 2(b) shows that the highest scores on both Other-Focused subscales were obtained in the Modeling condition.

Again, the findings suggest that, overall, the Self-Disclosure intervention had the best results. Also, contrary to expectations, the results indicate that Modeling did not have a particularly beneficial effect on Self-Focused thoughts and that it may have had a deleterious effect on Other-Focused negative thoughts (i.e., thoughts about the person who is blind).

Discussion

The AMMIS model predicts that self-focused attention would be associated with negative self-evaluation and affect as well as stereotyped, "mindless" evaluations of people with disabilities. The present results provide some support for the model; our data indicate that dispositional self-focused attention, as measured by the Public Self-Consciousness subscale (Scheier & Carver, 1985), is related to discomfort with blind peers, negative attitudes toward people with visual impairments, and negative thinking - both self and other focused - about interacting with a peer who has a disability. The data also show that these findings do not simply reflect a generalized interpersonal discomfort, as dispositional social anxiety was found to be unrelated to these variables. The data also show that two kinds of dispositionally based self-focused attention - Public Self-Consciousness and Private Self-Consciousness - are associated with different variables, and that AMMIS model predictions apply only to self-focusing associated with Public Self-Consciousness.

Public Self-Consciousness was found to be related to a host of negative outcomes, including negative self and other focused thinking; it was not related to the frequency of positive thoughts experienced. These findings replicate results from another investigation (Fichten, et al., 1996). On



the other hand, Private Self-Consciousness was not found to be related to any of the variables assessed, with the exception of positive thinking - both self and other focused. In this regard, our data are also consistent with other research which indicates that positive and negative thoughts are independent and that they do not constitute a bipolar dimension. As in the case of affect (e.g., Diener & Emmons, 1985; Garamoni, Reynolds, Thase, Frank, & Fasiczka, 1992; Watson, 1988), positive and negative thoughts seem to reflect independent factors which are related to different personality characteristics, disorders, mood states, and aspects of well-being.

In spite of - or perhaps because of - these differences between positive and negative thoughts, the States-of-Mind (SOM) ratio (Schwartz & Garamoni, 1986, 1989), which reflects the balance between positive and negative thoughts, appears to provide a better outcome measure in this context than either positive or negative thought frequencies. The size

of correlation coefficients with SOM ratios generally exceeded those obtained using valenced frequencies. Nevertheless, in order to explore specific predictions made by the AMMIS model about self and other-focused thoughts, valenced frequencies appear to constitute the best measure because they provide the required specificity. Therefore, investigators using thought frequencies as outcome measures are urged to report both types of data; in some cases the appropriate dependent measure will be valenced frequencies while in others the SOM ratio is likely to be preferred (cf. Amsel & Fichten, 1996).

Disrupting Negative Self-Evaluation Associated with Self-Focused Attention: Symbolic Modeling Versus Self-Disclosure

The results indicate that, compared to no intervention, both filmed interventions appear to have had beneficial effects on thoughts, feelings, self-efficacy beliefs, and attitudes. This is consistent with findings of other investigations (Dailey & Halpin, 1981; Donaldson & Martinson, 1977, Ralph, 1989). However, while we expected symbolic modeling to result in more favorable outcomes than self-disclosure, especially for fostering strong self-efficacy expectations, this was clearly not the case. In fact, self-disclosure, which we viewed as a control condition, generally produced superior results.

Of course, it is possible that these findings are due to the specific filmed materials or measures used in this investigation. The films were not made for this study and, thus, certainly differed in a variety of ways. Therefore, the results may be due to factors other than symbolic modeling. While data from others' studies (e.g., Elliott & Byrd, 1983, 1984) as well as a detailed examination of our findings suggest otherwise, this possibility must be explored in future investigations. Indeed, because of the importance of both the theoretical and the applied issues, the effectiveness of symbolic modeling in changing self-efficacy beliefs as well as maladaptive attitudes, thoughts, feelings, and beliefs concerning people with disabilities should be investigated in various circumstances.

Because of the popularity of skills training approaches, we feel compelled to comment on the possibility that our findings are due to symbolic modeling rather than to methodological artifacts. There is an urgent need to discuss this possibility because a fine grained examination of our results suggests that symbolic modeling, by showing people how to engage in new behaviors with someone who has a disability, may have highlighted inadequacies in both the nondisabled individual as well as the person with the disability. The instructional film may have created a "mindful" awareness (1) that the nondisabled person is inadequate and needs to learn how to do things differently because he/she doesn't know what to do in this new situation and, perhaps, in other contexts as well (self-focused attention), and (2) that the person with a disability is inadequate in some unexpected ways and can't do things the way others can (other-focused

attention). Indeed, our data suggest that the modeling intervention was associated with negative thinking about interacting with someone who has a visual impairment.

The findings suggest that caution should be exercised when administering a skills training intervention to people who might not have been aware that they lacked skills, who may not have been aware of specific limitations of people who are blind (e.g., needs to be told where a glass of water is located on the table), and who do not expect to need these skills in the near future. This conclusion is supported by data from another study which showed that knowing or not knowing what to do when thinking about an encounter with someone who has a visual impairment had no impact on ease with people who have a visual disability or on thoughts about interacting with them (Fichten, et al., 1996).

In certain circumstances, a modeling approach could even result in negative affect, negative self-evaluation, and negative other-focused thinking. As has been suggested in other contexts, social perception is guided by the characteristics of the perceiver as well as by situational factors which influence the personal relevance of the information (Woike & Aronoff, 1992). Indeed, some of our previous work indicates that thoughts about the person with the disability can become highly negative in helping situations where a nondisabled individual voluntarily helps someone with an impairment (Fichten, Amsel, Robillard, & Tagalakakis, 1991; Fichten, Robillard, Tagalakakis, & Amsel, 1991).

Our data suggest that symbolic modeling can have either a positive, neutral, or negative impact. Factors influencing the direction probably include the target being evaluated - oneself or the other person - and prior awareness of difficulties as well as the expectation of future interaction requiring the modeled behavior. Therefore, inclusion of a skills training intervention should be carefully timed and delivered within the context of an overall multi-component program of attitude and behavior change.

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