

# **Personality, Attentional Focus, and Novelty Effects: Reactions to Peers With Disabilities**

**Catherine S. Fichten**

*Dawson College and Sir Mortimer  
B. Davis - Jewish General Hospital*

**Rhonda Amsel**

*McGill University*

**Kristen Robillard**

*CLSC NDG - Montréal West*

**Stéphane Sabourin**

*Laval University*

**John Wright**

*Université de Montréal*

**ABSTRACT.** Tested the hypothesis that common reactions to people with disabilities are partly due to the attentional consequences of novelty and explored the impact of personality on nondisabled individuals' reactions. Three hundred and fifty one college students completed personality measures (social anxiety, shyness, public self-consciousness, self-monitoring) and indicated their feelings, self and other-focused thoughts, and behavioral intentions concerning a hypothetical encounter with an "average" student or with 2 types of novel peers: student with a disability and an all-round outstanding individual. Implications of the findings, which indicate that (1) novelty provides a partial explanation of interaction problems between nondisabled and disabled peers and (2) personality factors have a different impact on thoughts and feelings about encounters with peers who are novel than on those who are not, are discussed.

The literature indicates that in casual social encounters between people who do not know each other well, nondisabled individuals (1) behave differently with people who have a disability, (2) are less comfortable with disabled than with nondisabled peers, (3) have more negative thoughts when it comes to interacting with people who have physical impairments, and (4) commonly make both overly positive and negative evaluations (Berry & Meyer, 1995;

REHABILITATION PSYCHOLOGY

Vol. 42, No. 3, 1997

© 1997 by the Division of Rehabilitation Psychology of the American Psychological Association  
Published by Springer Publishing Company, Inc., 536 Broadway, New York, NY 10012

Fichten & Amsel, 1986; Elliott & Frank, 1990; Gibbons, 1986; Gouvier, Coon, Todd, & Fuller, 1994; Grove & Werkman, 1991; Katz, Wackenhut, & Glass, 1986; Kleck, 1966; Kleck, 1968; Marinelli & Kelz, 1973; Stephan, Stephan, Wenzel, & Cornelius, 1991; Stovall & Sedlacek, 1983; Yucker, 1992). To better understand why this occurs, we explored the possibility that such reactions are partly due to the attentional consequences of novelty, rather than merely to the presence of a disability. We also examined how characteristics of the other person in an encounter interact with personality factors in determining thoughts and feelings concerning interacting with people with and without disabilities.

### ATTENTIONAL MECHANISMS

Hypotheses related to novelty are based on our Attentional Mechanisms Model of Interaction Strain (AMMIS) (Fichten, et al., in press; Fichten, Robillard, & Sabourin, 1994). This model proposes that the discomfort and negative self-focused thinking which characterize interactions with people who are stigmatized are mediated, in part, by the effects of attentional focus, primarily heightened self-focused attention.

The top row of the AMMIS model, presented in Figure 1, proposes that stereotyped 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 (cf. Langer, Fiske, Taylor, & Chanowitz, 1976), and the attendant salience of the impairment (Zola, 1981), lack of familiarity (Gething, 1994), and perceived dissimilarity (Fichten & Amsel, 1986; Stephan et al., 1991). In support of this prediction, data show that when the partner has a visible disability, people are less aware of an interaction partner's verbal and vocal characteristics as well as of the general range of their nonverbal behaviors (Grove & Werkman, 1991). The middle row suggests that such "mindless" information processing is exacerbated by preoccupation with one's own behavior (Osborne & Gilbert, 1992), and that self-focusing leads to negative affect and negative evaluation of the self as well (Gibbons, 1990). The bottom row suggests that self-focused attention can result from dispositional factors, such as high public self-consciousness, or from situational factors such as the presence of a video camera (Fiske & Taylor, 1991; Ingram, 1990; Scheier & Carver, 1985; Duval, Duval, & Mulilis, 1992). Self-focused attention can also result from expecting to engage in a difficult interaction; a social encounter with a stranger who has a disability is often viewed as problematic and, compared to easier tasks, elicits anxiety and more thoughts, especially negative self-focused thoughts (Daly, Vangelisti, Neal, & Cavanaugh, 1989; Fichten, Amrel, & Robillard, 1988).

One goal of this investigation was to explore, in an analogue context, the AMMIS model's prediction that the atypical behavior, discomfort, negative self-focused thinking, and overly positive and negative evaluations of the other person which characterize nondisabled individuals' encounters with strangers who have disabilities are due, in part, to the attentional aspects of novelty. If

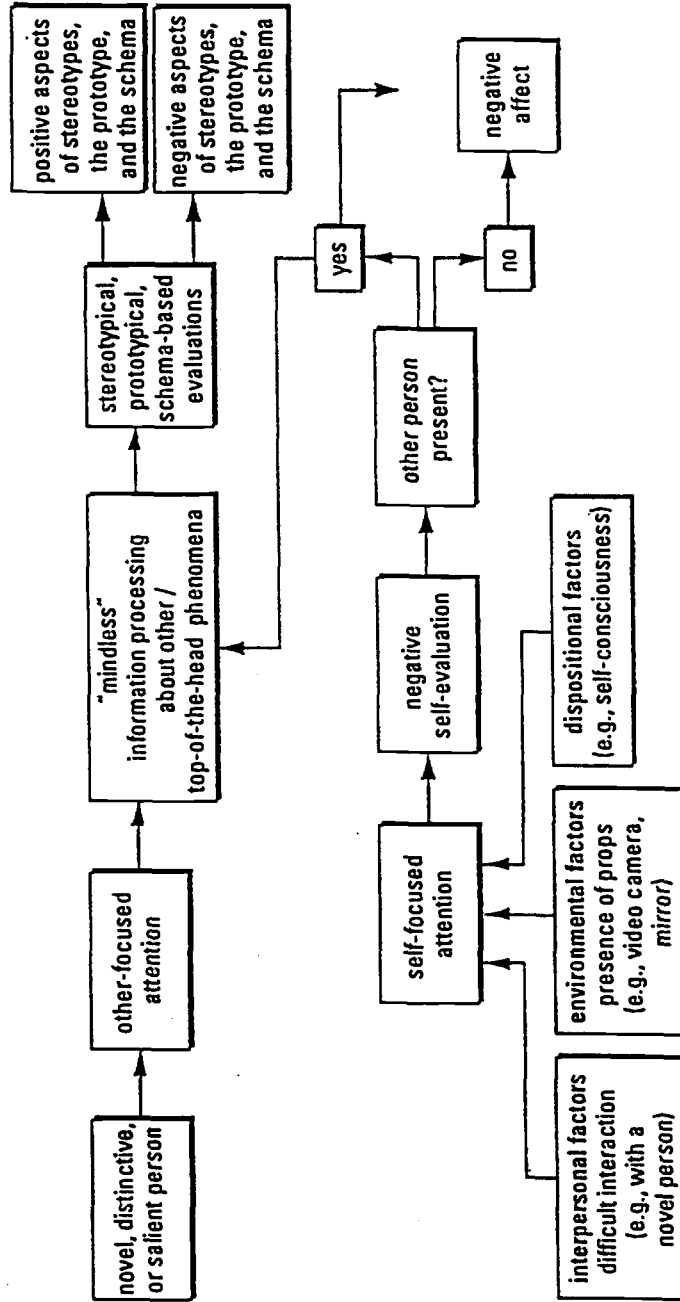


Figure 1. Attentional Mechanisms Model of Interaction Strain (AMMIS)

the prospect of an encounter with a novel stimulus person is, by itself, problematic, then thinking about interaction with a “different” peer, whatever the nature of the novelty, should result in atypical behavior and more negative affect and self-focused thinking (e.g., nervousness, negative self-evaluation) than would interaction with a familiar peer. If, on the other hand, it is the presence of a disability, rather than novelty, that causes difficulties then one would expect that the prospect of interaction with an average peer and a highly valued novel individual, such as an all-round outstanding nondisabled person, would be similar, and that both of these encounters would elicit more positive thinking and affect than the possibility of interacting with a peer who has a disability. It was one goal of the present investigation to test the novelty hypothesis by evaluating affect, self- and other-focused thoughts, and behavioral intentions concerning interaction with three kinds of people: “average” nondisabled peers (not novel), and two types of novel individuals: average college students who have a visual impairment and “outstanding” nondisabled college students.

We expected that participants would feel more comfortable with non-novel average peers than with novel individuals. We also expected them to have fewer negative self-focused thoughts concerning interacting with non-novel than with novel peers, regardless of the nature of novelty (*Hypothesis 1*). We also expected that both the presence and the nature of the novelty would influence other-focused thoughts: more positive other-focused thoughts in the outstanding condition, and more positive as well as negative other focused thoughts in the visually impaired condition than in the non-novel average condition (*Hypothesis 2*). Behavioral intentions were expected to reflect both self and other-focused evaluations; we predicted that participants would be most likely to indicate that they would stay with a peer in the non-novel average condition, leave in the visually impaired condition, with intermediate results in the outstanding condition (*Hypothesis 3*).

A related objective was to examine the model’s prediction that there exists a negative relationship between dispositional self-focusing (public self-consciousness) and negative evaluations of oneself as well as “mindless” evaluations of the other person. It has already been demonstrated that those who are highly public self-conscious have more negative self-focused thoughts than low self-conscious individuals in dating interactions with non-novel peers (Johnson & Glass, 1989). Confirming this prediction requires demonstrating that dispositional self-consciousness is closely related to negative affect and negative evaluations of oneself during an interaction, regardless of the status of the interaction partner, and to overly favorable and/or unfavorable evaluations of the other person in an interaction when he or she is novel (*Hypothesis 4*).

## PERSONALITY AND SITUATIONAL FACTORS

Personality factors such as social anxiety, shyness, and the tendency to self-monitor have long been known to influence behaviors as well as beliefs,

thoughts and feelings about social encounters in many contexts (Buss, 1986; Fenigstein & Vanable, 1992; Glass & Arnkoff, 1994; Pozo, Carver, Scheier, & Wellans, 1991; Schlenker & Weingold, 1990). For example, people who are dispositionally socially anxious or shy are more likely to be uncomfortable in most social situations as well as to have more negative and fewer positive thoughts during social interactions (Bruch, Gorsky, Collins, & Burger, 1989; Garcia, Stanson, Ikes, & Bissonette, 1991; Johnson & Glass, 1989; Melchior & Cheek, 1990). People who are skilled at impression management through acting, extraversion, and other-directedness have been shown to score high on Snyder's (1974; Snyder & Gangstead, 1986) measure of self-monitoring. They have also been found to behave more socially appropriately than people who lack these attributes (Miller & Thayer, 1989; Snyder, 1987; Tobey & Tunnell, 1981; Briggs & Cheek, 1988). Consistent with these findings, we expected people who are shy, socially anxious, and high on self-monitoring to have more self-focused negative thoughts about a social encounter than their low scoring counterparts (*Hypothesis 5*).

Situational factors, including characteristics of the other person in an encounter, have also been shown to influence thoughts, feelings, and behaviors (Glass & Arnkoff, 1994). For example, difficult interactions as well as encounters with both unfamiliar and with successful people have been shown to have an impact on various aspects of interpersonal relations (Buss, 1980; Fichten, et al., 1988; Russell, Cutrona, & Jones, 1986).

In the disability literature it is generally assumed that personality characteristics have the same influence on behaviors, thoughts, and feelings about encounters with different types of people. Nevertheless, both casual observation as well as the social skills literature suggest that personality and situational factors interact. For example, Zimbardo (1977) reported that encounters with attractive opposite sex individuals were among the most difficult for shy people, and it has been shown that shy individuals experience more difficulties with a self-confident partner than with one who is shy (Melchior & Cheek, 1990).

Thus, people who lack social poise may react differently from their more confident peers when interacting with various types of people. Consistent with this assumption, we expected that an encounter with a less threatening individual, such as a novel peer with a visual impairment, would be easier for individuals who are socially anxious, shy, or relatively unskilled at impression management than would interacting with an average peer. We expected that an encounter with a novel outstanding individual would be most problematic (*Hypothesis 6*).

## METHOD

### Measures

**Self-Consciousness Scale.** (Fenigstein, Scheier, & Buss, 1975). This popular 23 item self-report instrument has 3 subscales: Public Self-Consciousness (awareness of the self as a social object: "I'm concerned about what other

people think of me”), Private Self-Consciousness (awareness of the inner aspects of self: “I reflect about myself a lot”), and Social Anxiety (e.g., I feel anxious when I speak in front of a group”). Respondents indicate, on 5-point scales, the extent to which each statement is characteristic of them. Only the Public Self-Consciousness and Social Anxiety subscales are of interest in the present research. The scale’s authors demonstrated good psychometric properties for the measure (e.g., high internal consistency and test-retest correlation coefficients which vary from .78 to .84). There is substantial documentation of the good reliability and validity of this scale (Carver & Scheier, 1981; Fenigstein, 1987). Those who are highly public self-conscious are more attentive to how they are viewed by others, more accurate in predicting the impression they make, and more likely to conform than those who are low on this subscale (Buss, 1980; Fenigstein, et al., 1975; Tobey & Tunnell, 1981).

**Shyness Scale.** Cheek and Buss’ (1981) 9 item scale evaluates dispositional shyness, including distress (e.g., “I am often uncomfortable at parties and other social functions”) and lack of social poise (e.g., “I am socially awkward”). Respondents indicate, on 4-point scales, the extent to which each statement is characteristic of them. The authors of the scale have shown that the test is internally consistent ( $\alpha = .79$ ) and temporally stable ( $r = .74$ ), that scores correlate highly with other measures of shyness, and that people scoring high on the measure behave differently in dyadic encounters.

**Self-Monitoring Scale - Revised.** The 18 item revision of Snyder’s (1974) well known Self-Monitoring Scale taps the extent to which individuals observe and control their expressive behavior and self-presentation (Snyder & Gangstead, 1986). Higher scores indicate a greater tendency toward self-monitoring. It is assumed that high self-monitors are outwardly oriented and try to behave in a socially appropriate way, while low self-monitors are inwardly oriented and try to behave in a manner consistent with their internal states (c.f., Miller & Thayer, 1989; Snyder, 1987). Psychometric data provided by the measure’s authors indicate that the revised scale has good internal consistency (e.g., coefficient alpha = .70) and that it is a better measure of the construct than the original 25 item version.

**Ease.** This single item measure evaluates general level of ease-discomfort with same sex able-bodied, visually impaired and outstanding students (Fichten, 1986). A 10-point scale is used (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, et al., 1988, Fichten, Tagalakis, & Amsel, 1989). It should be noted that this scale measures generalized, overall levels of ease with different types of people, rather than comfort in specific situations.

**College Interaction Self-Statement Test Revised (CISST-R).** This inventory measure of thoughts about interaction with college students evaluates the frequency (5-point scale; 0 = hardly ever, 4 = very often) 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, the revised measure evaluates self and other-focused positive and negative thought frequencies; the revised CISST, however, has 4 item subscales (Fichten, et al., in press). Of interest to the present investigation are subscales which evaluate two aspects of Self-Focused thinking: Knowing What to Say or Do [e.g., "I'll just see how things go" (+), "I don't know what to say to her" (-)] and Affect [e.g., "Why worry - what's the worst that can happen?" (+) "I feel uncomfortable" (-)] and one aspect of Other-Focused thinking: Evaluation [e.g., "She is probably likable" (+), "He probably has a tough life" (-)]. Scores 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)]. Psychometric data on the original CISST show that scores are logically 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 .54 to .95 for the subscales used in this investigation and from .69 to .96 for SOM scores.

**Behavioral Intentions.** This 10-point item, developed by our team, inquires about what respondents are likely to do in the hypothetical interaction described on the CISST-R. Lower scores indicate that respondents are likely to remain with the stimulus person after classmates leave, higher scores indicate that respondents are likely to leave after their classmates leave. No psychometric data are available for this measure.

### **Participants and Procedure**

Participants were 351 non-disabled college students, 142 males and 209 females (mean age = 19). All were enrolled in psychology courses at an urban junior/community college. Professors in each of the 18 participating course sections provided time at the end of class to allow volunteers to participate. Approximately 90% of students present on the day of testing volunteered.

Subjects first completed the personality measures. All completed the SC-Scale and the Self-Monitoring Scale. Because it was added part way through testing, only 212 participants completed the Shyness Scale.

Students in each course section were randomly assigned to one of the three experimental conditions: hypothetical interaction with a same-sex nondisabled peer who was not novel (average: able-bodied peer), or with one of two "novel" stimulus persons: one who was average in other ways but was described as having a visual impairment (novel: average peer with a visual impairment), and one who was nondisabled but described as an all-round outstanding individual

(novel: nondisabled outstanding peer). Subjects indicated their general level of Ease (10-point scale) with such peers. They then imagined that they were participants in an interaction with the stimulus person. The written description of the hypothetical interaction specified that the subject was sitting in the cafeteria with friends when one of them sees a same-sex classmate getting food and proceeds to tell the subject about him or her. The subject is introduced to this student and shortly thereafter, everyone else leaves. It appears that the subject, who has 15 minutes before class, will be left alone with this student. After reading the description subjects completed the CISST-R and the Behavioral Intentions item.

Approximately 40% of subjects in each condition were males, and 60% were females. There were no significant differences among groups on age, sex distribution, or any of the personality measures.

**Stimulus Persons.** All stimulus persons were described, in paragraph form, as college students who had 4 positive and 2 negative traits. The 4 positive traits (hard-working, self-disciplined, good natured, polite) were all shown to be common to both able-bodied and disabled student stereotypes; of the 2 negative traits, one (self-centered) is part of the able-bodied stereotype and the other (not aggressive enough) is part of the disabled stereotype (Fichten & Amsel, 1986).

The one paragraph description of the stimulus person depicted him or her as 20 years old, enrolled in the final year of a social science program, and as having the 4 positive and 2 negative personality characteristics described above. A second paragraph designated the student as Outstanding (has been nominated for an award granted to the most outstanding all-round graduating student), Visually Impaired (has a visual impairment, is considered legally blind, uses a white cane), or Average (no specifics). Regardless of designation, the student was described as having an interest in swimming, listening to the radio, ecology, and studying; these are common pursuits for college students in general and are "ecologically valid" activities for young adults with visual impairments (Tobin & Hill, 1988).

## RESULTS

A series of analyses comparing responses by males and females indicated no significant differences. Therefore, to simplify the presentation, data from males and females are combined in subsequent analyses.

### Novelty

To explore predictions about novelty, the significant multivariate analysis of variance was followed by a series of 1-way analysis of variance (ANOVA)



comparisons (3 Experimental Conditions: Non-Novel Average, Novel-Outstanding, Novel-Visually Impaired). Results provide support for Hypothesis 1, partial support for Hypothesis 2, and no support for Hypothesis 3.

Figure 2 illustrates the overall direction of findings. These show significant differences for Ease,  $F(2,345) = 4.54, p < .05$ , Behavioral Intentions,  $F(2,336) = 4.66, p < .01$ , and Self-Focused Affect SOM scores,  $F(2,348) = 4.99, p < .01$ . Tukey HSD tests, with  $\alpha$  level set at .05, indicate that scores in the Non-Novel Average condition differ significantly from scores in the Visually Impaired condition; scores in the Outstanding condition were intermediate, and did not differ significantly from either of these. These results show (1) that participants were more comfortable with Non-Novel Average individuals than with novel peers who have a Visual Impairment, with intermediate scores in the Outstanding condition, (2) that findings on the balance of Positive to Negative Self-Focused Affect thoughts showed the same pattern, and (3) that in spite of their discomfort and more negative thinking concerning the encounter, participants were more likely to indicate that they would remain in the interaction when the stimulus person had a Visual Impairment than if he or she was a Non-Novel Average student. The comparison on Other-Focused SOMs, while not significant, shows means in the same direction. Self-Focused Knowledge SOM scores, which were similar in the three experimental conditions, also did not differ significantly.

Results on valenced Self-Focused thought frequencies reveal significance only on Negative Affect,  $F(2,348) = 10.30, p < .001$ ; the Tukey HSD test shows that scores in the Visually Impaired Condition ( $M = 7.83$ ) are significantly higher than scores in the other two conditions, which were found not to differ significantly (Outstanding:  $M = 6.65$ ; Non-Novel Average:  $M = 6.03$ ). On Other-Focused thoughts, however, there are significant findings on both Positive,  $F(2,348) = 6.68, p < .01$ , and Negative frequencies,  $F(2,348) = 7.02, p < .01$ ; scores in the Visually Impaired condition are significantly higher ( $M = 11.22$ ;  $M = 6.42$ , respectively) than scores in either the Outstanding ( $M = 9.71$ ;  $M = 5.16$ , respectively) or the Non-Novel Average condition ( $M = 9.94$ ;  $M = 4.91$ ) on *both* Positive and Negative frequencies. Other-Focused thoughts in the Outstanding and the Non-Novel Average condition did not differ significantly.

Given the findings on Other-Focused thoughts in the Visually Impaired condition, we tried to ascertain whether it is the same individuals who have both frequent Positive and frequent Negative Other-Focused thoughts. Correlations reveal a low but significant *negative* correlation,  $r(123) = -.25, p < .01$ , indicating that participants who have many Negative Other-Focused thoughts about interacting with a peer who has a Visual Impairment tend to have fewer Positive Other-Focused thoughts. This suggests that in the ANOVAs on Other-Focused thoughts, some participants in the Visually Impaired condition had more Positive thoughts while others had more Negative thoughts.

We also examined the relationship between thoughts during the interaction and Behavioral Intentions in the encounter as well as overall levels of Ease with

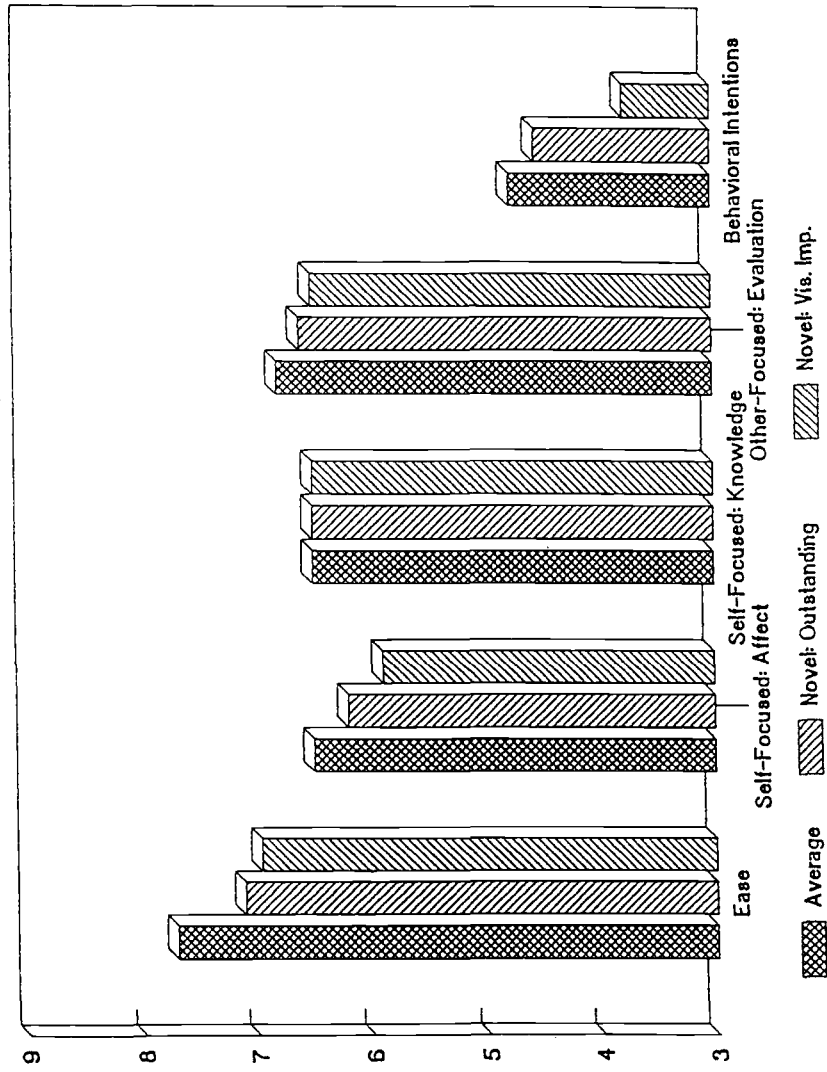


Figure 2. Ease, Thinking, & Behavioral Intentions

different kinds of people. Correlations in Table 1 show that a more favorable balance of Self-Focused Positive to Negative thinking during the interaction is related to staying with the stimulus person, regardless of experimental condition. Findings on Other-Focused thoughts, while generally in the same direction, were less clear cut.

Table 1 also shows the relationships between thoughts during the Interaction and generalized levels of Ease with different types of people. Coefficients indicate that both Self and Other-Focused Positive and Negative thought frequencies are logically related to Ease with people who have a Visual Impairment. The situation in the Non-Novel Average condition is dramatically different, however. Here, none of the coefficients is related significantly to Ease scores. Findings in the Outstanding condition again show intermediate outcomes; here, results show only that people who have many Self-Focused Negative thoughts during the interaction are likely to experience lower levels of generalized Ease with Outstanding peers.

**Public Self-Consciousness.** Based on the AMMIS model, in Hypothesis 4 we predicted that Public Self-Consciousness would be associated with Negative Self-Focused thinking in all experimental conditions and with "mindless" overly Positive and/or Negative evaluations of the other person when he or she was novel. As can be seen in Table 1, consistent with expectations, Public Self-Consciousness scores were significantly related to the frequency of both kinds of Negative Self-Focused thoughts and, to a lesser extent, with SOMs. Scores were generally not related significantly to either kind of Positive thought frequency in any experimental condition. Contrary to expectations, correlations with Other-Focused thoughts were generally low and non-significant in all experimental conditions.

**Social Anxiety, Shyness, and Self-Monitoring.** To explore the relationship between social poise and thoughts and feelings about interacting with various types of people we correlated scores on these personality measures with scores on the CISST-R. Consistent with Hypothesis 5, results in Table 2 indicate that Social Anxiety, Shyness, and Self-Monitoring scores were all logically, consistently, and significantly related to *all* evaluations of Self-Focused thinking in the two non-disabled experimental conditions. Consistent with Hypothesis 6, these personality variables were weakly, if at all, associated with Self-Focused thinking in the Visually Impaired condition. Scores on the personality measures were not consistently related to Other-Focused evaluations in any of the experimental conditions.

## DISCUSSION

Before discussing the findings, it should be noted that the present investigation has methodological limitations which require comment. First, although

Table 1. Relationships Between Behavioral Intentions, Ease, Public Self-Consciousness and Self and Other-Focused Thoughts

Experimental Condition	Self-Focused Thoughts				Other Focused Thoughts				
	Positive		Negative		Positive		Negative		
	Affect	Knowledge	Affect	Knowledge	Affect	Knowledge	Evaluation	SOM Ratio <sup>1</sup>	
<b>Behavioral Intentions<sup>2</sup></b>									
Non-Novel Average	-.38**	-.25**	.30**	.32**	-.39**	-.39**	.21*	.07	-.19*
Outstanding	-.33**	-.15	.08	.15	-.20*	-.20*	-.28**	-.06	-.06
Visually Impaired	-.31**	-.10	.27**	.33**	-.32**	-.29**	-.12	.29**	-.28**
<b>Ease with Peers</b>									
Non-Novel Average	.16	.06	-.05	-.07	.13	.10	.07	-.11	.16
Outstanding	.11	.07	-.21*	-.23*	.23*	.18	.07	-.08	.04
Visually Impaired	.36**	.21*	-.41**	-.27**	.47**	.36**	.27**	-.41**	.46**
<b>Public Self-Consciousness</b>									
Non-Novel Average	-.02	-.05	.35**	.38**	-.27*	-.34**	.04	.22*	-.21**
Outstanding	-.16	-.29*	.46**	.50**	-.45**	-.43**	-.03	.08	-.05
Visually Impaired	-.08	-.01	.19*	.25**	-.19*	-.20*	-.07	.02	-.05

\* $p < .05$ \*\* $p < .01$

**Table 2.** Relationships Between Personality Attributes and Self-Focused Thinking

Experimental Condition	Self-Focused Thoughts					
	Positive		Negative		SOM Ratio <sup>1</sup>	
	Affect	Knowledge	Affect	Knowledge	Affect	Knowledge
<b>Social Anxiety</b>						
Non-Novel Average	-.35**	-.30	.27**	.40**	-.37**	-.50**
Outstanding	-.33**	-.38**	.43**	.51**	-.56**	-.52**
Visually Impaired	-.19*	-.12	.10	.20*	-.16	-.23*
<b>Shyness</b>						
Non-Novel Average	-.30**	-.20*	.54**	.53**	-.57**	-.50**
Outstanding	-.42**	-.56**	.45**	.47**	-.54**	-.57**
Visually Impaired	-.25*	-.11	.19	.34**	-.27*	-.33**
<b>Self-Monitoring</b>						
Non-Novel Average	.33**	.20*	-.22*	-.23*	.34**	.28**
Outstanding	.24*	.35**	-.24*	-.20*	.32**	.33**
Visually Impaired	-.01	.04	.00	.05	.00	-0.00

\* $p < .05$ \*\* $p < .01$ <sup>1</sup>States-of-Mind ratios: higher scores reflect a more favorable balance of Positive to Negative thinking.

we intended to create two equally novel interaction partners, it is possible that our stimulus persons were different in degree of novelty as well as in type.

Sitting at a table with a college student who has a visual impairment may be more unusual - more novel - than doing this with an all-round outstanding college student. Moreover some of the participants themselves may have been "outstanding," while others may have had substantial contact with people with visual impairments. Second, the measure used to collect self- and other-focused thoughts was designed to assess interaction with peers who are average and those who have a disability. It was not specifically designed to evaluate thoughts about someone who is outstanding. This, too may have had an impact on the findings, especially on other-focused evaluations. As recommended elsewhere, open-ended thought listings should be used in future investigations whenever the specific content of possible responses are not known (Fichten, et al., 1988). Perhaps most important, all interactions in the present study were hypothetical. Although data show that hypothetical and actual interactions result in similar thoughts and ratings (Zweig & Brown, 1985), the analog nature of the investigation presents a threat to ecological validity. Thus, the present findings must be considered preliminary and future investigations should examine the issues in a more naturalistic environment.

### *Attentional Consequences of Novelty*

**Generalized level of comfort.** If novelty were the sole basis for discomfort with people who have disabilities, then participants should have been equally uncomfortable with both types of novel individuals: those who are outstanding and those who have an impairment. This was not the case. If, on the other hand, novelty were irrelevant, and only the social desirability of the stimulus persons mattered, then participants should have been most comfortable with outstanding - but novel - peers and least comfortable with peers who have a disability. The results show that this proposition, too, is incorrect: levels of comfort with outstanding (novel) individuals was intermediate, with the greatest ease experienced with average individuals and the lowest with disabled (novel) peers. Thus, the findings on ease provide some support for Hypothesis 1 and suggest that novelty provides at least a partial explanation of the discomfort experienced with individuals who have disabilities.

**Self-focused thoughts during the interaction.** Findings on self-focused thinking extend those on generalized comfort levels. Here, results show (1) that participants reported more negative self-focused affect thoughts - which deal with mood and self-evaluation - in the disabled than in the average stimulus person condition, with intermediate scores in the outstanding condition, and (2) that the balance between positive and negative thinking also showed this pattern, with the best scores in the average and the worst in the visually impaired condition. These results are consistent with Hypothesis 1 and provide partial support for the AMMIS model's prediction that encounters with novel individuals are associated with more negative self evaluation and affect. There were no significant differences on self-focused knowledge thoughts, suggesting that task related thoughts, such as not knowing what to do in the situation does not mediate the results on affect and self evaluation. This failure to show differences on knowledge thoughts is consistent with findings reported using a different technique to assess thoughts as well as different average and disabled stimulus persons (Fichten, et al., 1991).

**Other-focused evaluations during the interaction.** In partial support of Hypothesis 2, data on other- focused thoughts show considerably more positive as well as negative thinking about peers with disabilities than about outstanding or average peers, who were found not to differ. This is similar to findings in a study on average and wheelchair user stimulus persons where an open-ended instrument was used to collect thoughts and feelings in 12 different situations (Fichten, 1986). Because the results do not show either more frequent positive or negative evaluations of novel outstanding individuals, it appears that this effect is characteristic of reactions toward people with disabilities. Data which show that nondisabled individuals often seek out more information about people with disabilities than about nondisabled people (e.g., Fichten, et al., 1991; Grove & Werkman, 1991; Langer et al., 1976) suggest that these findings may reflect curiosity.

It is well known that both highly favorable as well as very unfavorable evaluations of people with disabilities are common, and that there exist both well defined positive and negative stereotypes of people who have physical impairments (e.g., Belgrave, 1985; Elliott & Frank, 1990; Fichten, & Amsel, 1986; Katz, et al., 1986; Katz, et al., 1988; Tagalakis, et al., 1988). Stereotypes of outstanding individuals may be less common and more poorly defined. Therefore, it is possible that the findings on other-focused evaluations simply reflect the relative cognitive availability of stereotypes of people with disabilities and of nondisabled people who are outstanding. This is an empirical question which can be studied in future research. Of course, it is also possible that the measure used to collect other-focused thoughts in the present study, because it was not developed or validated for interaction with outstanding individuals, simply did not contain the appropriate evaluative statements. Further investigation using open-ended thought listing would help resolve this issue.

Results on the balance of positive to negative other-focused thoughts were not significant; this was also the case for self-focused affect thoughts. However, scores on other-focused SOM ratios follow the pattern on self-focused thoughts and means indicate slightly more favorable evaluations of average peers than of peers who have disabilities, with intermediate scores in the outstanding condition.

*Behavioral intentions.* We expected results on behaviors to reflect the findings on both feelings and on self- and other-focused thoughts (Hypothesis 3). This was not the case. Consistent with reports of others who have shown that behaviors of nondisabled individuals with those who have disabilities are different from their reactions to able-bodied persons (e.g., Gouvier et al., 1994, Kleck, 1966; Kleck, Ono, & Hastorf, 1966), the present findings on behavioral intentions show that participants were significantly more likely to indicate that they would remain with the other person in the interaction when the other person had a visual impairment than if he or she was described as average or outstanding. Because the likelihood of staying was associated with a better balance between positive and negative self-focused thinking in all conditions and because this balance was worse in the disabled than in the other two conditions, this finding probably reflects the "kindness norm" or "sympathy effect;" these result in using very lenient criteria to evaluate people who have disabilities and in social norms which support helping someone "less fortunate" (Belgrave, 1985; Elliott & Frank, 1990; Fichten, et al., 1991; Gibbons, Stephan, Stephenson, & Patty, 1980; Katz et al., 1988; Kleck, 1968; Scheier, et al., 1978; Tagalakis et al., 1988).

### **Attentional Consequences of Self-Focusing**

The AMMIS model predicts that self-focusing, be it due to situational or to dispositional factors, is associated with negative self-evaluation and

stereotyped thinking about the other person in an interaction (Hypothesis 4). Consistent with the first part of Hypothesis 4, the results indicate that high dispositional public self-consciousness was significantly related to negative self-focused thinking - both affect (mood and self evaluation) and knowledge related - regardless of the characteristics of the other person in the interaction. Moreover, the data also suggest that these findings on public self-consciousness do not simply reflect a generalized interpersonal discomfort. Of all personality measures evaluated in this study, public self-consciousness was the only one to be significantly related to both types of negative self-focused thinking in all experimental conditions and to be unrelated to any aspect of positive thinking. This pattern is similar to results reported by Johnson and Glass (1989), whose investigation of dating also showed high correlations between public self-consciousness and negative self-statements, but only weak and nonsignificant correlations with positive thoughts. Consistent with the ambiguous findings on the role of other-focused evaluations, predictions made in the second part of Hypothesis 4 about the relationship between public self-consciousness and stereotyped evaluations of the other person in the interaction were not supported by the data.

#### **Personality and Situational Factors**

The results also suggest that novelty can influence the extent to which situational factors are salient in influencing thoughts and feelings. The findings show that generalized levels of comfort with people, independent of any specific interaction context, (1) were unrelated to thoughts and feelings concerning average peers during the interaction we specified, (2) were somewhat more closely related to these in the outstanding condition, and (3) were closely and logically related to both positive and negative self and other-focused thinking during the interaction in the visually impaired condition. These results are consistent with findings reported in an earlier investigation on different nondisabled and disabled (wheelchair user) stimulus persons (Fichten & Amsel, 1988). Thus, it seems that in encounters with familiar peers, thoughts and feelings about the interaction are determined by the specific aspects of the situation. In the case of a novel individual - such as someone with a physical impairment - generalized level of comfort seems to be a strong mediator of thoughts and feelings, and may even over-ride the constraints of specific situations. As in other comparisons, scores in the outstanding condition were intermediate, suggesting that the all-round outstanding individual we described may not have been as novel as a person with a visual impairment.

One of the goals of this investigation was to ascertain whether personality characteristics of participants which typically influence their thoughts, feelings and behaviors during encounters with familiar peers have a similar impact when the encounter is with novel, rather than familiar individuals. The results suggest that the answer to this question is a qualified, "No."



Consistent with Hypothesis 5, our results indicate that in encounters with familiar peers, people who are socially anxious, shy, or poor at impression management had "worse" scores than their more socially poised counterparts. Specifically, the findings show that they were less comfortable and had a poorer balance of positive to negative self-focused thoughts in the average condition - a finding also demonstrated in many other investigations (see Glass & Arnkoff, 1994, for a review). This phenomenon of "worse" scores was also demonstrated, perhaps even more forcefully, when the encounter was with an outstanding (novel) individual; this, too, is consistent with others' reports (Mahone, Bruch, & Heimberg, 1993; Melchior & Cheek, 1990). Personality scores were not related significantly to other-focused thoughts.

Socially less adept individuals, however, did not have worse self-focused or other-focused scores than their more socially poised counterparts in the visually impaired condition. This is consistent with Hypothesis 6 as well as with findings where the stimulus person was a wheelchair user and where different measures of personality and thinking were utilized (Fichten & Amsel, 1986; Fichten, et al., 1988). It seems that people who find casual social interaction with "average" peers problematic, compared to their more socially poised counterparts, experience relatively more difficulty with exceptionally successful, outstanding individuals. Thoughts and feelings seem to be independent of social poise when the interaction is with peers who have a disability.

The literature shows that people high in social anxiety or shyness are self-focused and, compared to those low in social anxiety, construe others' reactions toward them more negatively (Bruch et al., 1989; Pozo, et al., 1991; Schlenker & Weingold, 1990). As Buss (1986), in his theory of shyness suggests, self-consciousness involves both feelings of being scrutinized as well as of feeling uniquely different. In a social encounter with an individual who has a disability, it is possible that less socially poised individuals do not feel as threatened by a negative evaluation from individuals who possesses less "socially desirable" characteristics, such as the presence of a physical impairment. Before reaching firm conclusions about this possibility, further research is needed both to replicate the present findings on personality as well as to explore the mechanisms by which personality factors exert their effects.

## CONCLUSIONS AND IMPLICATIONS

The results provide partial support for the AMMIS model. The prediction that self-focusing would be related to negative affect and negative self evaluation was upheld. Predictions related to other-focused evaluations were, generally, not confirmed. Indeed, the only notable finding on other-focused evaluations is that participants had more thoughts about the other person - both positive and negative - if he or she had a disability. Although this is consistent with a novelty explanation, other explanations are also possible. Predictions related to the impact of novelty on self-focused thinking were supported, as

people were found to be consistently less comfortable and to experience more negative thinking during interaction with novel individuals than with average peers. However, the type of novelty also had an effect, with the visually impaired condition producing the most negative self-focused thoughts and feelings.

Personality factors were also shown to be important mediators of self-focused thoughts and feelings about encounters with different kinds of individuals. Here, the findings frequently showed an interaction between personality factors and the characteristics of the other person in the encounter. These indicate that the demonstrated relationships between thoughts and feelings concerning encounters with average, outstanding and visually impaired individuals hold true primarily for socially confident individuals. Compared to socially poised individuals, less socially talented people were more negative about an encounter with a highly successful, outstanding novel individual. This was not the case when the encounter was with a novel individual who has a disability. Therefore, it would be mistaken to assume that socially nonconfident people—those who already have a tough time interpersonally—are likely to experience even more severe difficulties in encounters with people who have disabilities. Indeed, these individuals may find it easier to relate to someone with a disability than to a high status or an “average” nondisabled peer. Thus, the results suggest that the novelty hypothesis provides only a partial explanation of interaction problems between individuals with and without disabilities. Personality characteristics of the nondisabled individuals and the presence of an impairment in the interaction partner also seem to play important roles.

Findings on novelty and on other-focused evaluations suggest that attitude change programming—where the aim is to produce more positive images of people with disabilities—is likely to be useful in the social integration of persons with disabilities. Our results suggest that the mechanism of action of such benefits is likely to be through making people with disabilities less novel. Results on discomfort and on self-focused thinking, too, suggest that making nondisabled individuals more familiar with people who have disabilities is likely to help. Thus, the mere presence of people with disabilities in the community, in the workplace, in commercials, and on television shows, doing everyday ordinary things, is likely to help resolve interaction difficulties.

## NOTES

This article was prepared during the tenure of grants from the Social Sciences and Humanities Research Council of Canada, Fonds FCAR pour la formation de chercheurs et l'aide à la recherche, and the Direction générale de l'enseignement collégial. We are grateful for the generous support of these organizations. In addition, we would like to thank Jackie Cohen, Louise Jarrold, Harriet Lennox, John Martos, Kathleen McAdams, Sue McKenzie, Sam Parkovnick, Alan Ross, and Betty Sunerton for their assistance with various stages of this investigation.

## REFERENCES

- Amsel, R., & Fichten, C. S. (1988). Effects of contact on thoughts about interaction with students who have a physical disability. *Journal of Rehabilitation*, *54*, 61-65.
- Belgrave, F. Z. (1985). Reactions to a black stimulus person under disabling and nondisabling conditions. *Journal of Rehabilitation*, *51*, 53-57.
- Berry, J. O. & Meyer, J. A. (1995). Employing people with disabilities: Impact of attitude and situation. *Rehabilitation Psychology*, *40*, 211-222.
- Briggs, S. R., & Cheek, J. M. (1988). On the nature of self-monitoring: Problems with assessment, problems with validity. *Journal of Personality and Social Psychology*, *54*, 663-678.
- Bruch, M. A., Gorsky, M. A., Collins, T. M., & Burger, P. A. (1989). Shyness and sociability reexamined: A multicomponent analysis. *Journal of Personality and Social Psychology*, *57*, 904-915.
- Buss, A. H. (1980). *Self-consciousness and social anxiety*. San Francisco: Freeman.
- Buss, A. H. (1986). A theory of shyness. In W. H. Jones, J. M. Cheek, and S. R. Briggs (Eds.), *Shyness: Perspectives on research and treatment* (pp. 39-46). New York: Plenum Press.
- Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior*. New York: Springer-Verlag.
- Cheek J. M. & Buss, A. H. (1981) Shyness and sociability. *Journal of Personality and Social Psychology*, *41*, 330-339.
- Daly, J. A., Vangelisti, A. L., Neel, H. L., & Cavanaugh, P. D. (1989). Pre-performance concerns associated with public speaking anxiety. *Communication Quarterly*, *37*, 39-53.
- Duval, T. S., Duval, V. H., & Mulilis, J. (1992). Effects of self-focus, discrepancy between self and standard, and outcome expectancy favorability on the tendency to match self to standard or to withdraw. *Journal of Personality and Social Psychology*, *62*, 340-348.
- Elliott, T. R., & Frank, R. G. (1990). Social and interpersonal reactions to depression and disability. *Rehabilitation Psychology*, *35*, 135-147.
- Fenigstein, A. (1987). On the nature of public and private self-consciousness. *Journal of Personality*, *55*, 543-554.
- Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, *43*, 522-527.
- Fenigstein, A., & Vanable, P.A. (1992). Paranoia and self-consciousness. *Journal of Personality and Social Psychology*, *62*, 129-138.
- Fichten, C. S. (1986). Self, other and situation-referent automatic thoughts: Interaction between people who have a physical disability and those who do not. *Cognitive Therapy and Research*, *10*, 571-587.
- Fichten, C. S., & Amsel, R. (1986). Trait attributions about physically disabled college students: Circumplex analyses and methodological issues. *Journal of Applied Social Psychology*, *16*, 410-427.

- Fichten, C. S., & Amsel, R. (1988). Thoughts concerning interaction between college students who have a physical disability and their nondisabled peers. *Rehabilitation Counseling Bulletin, 32*, 22-40.
- Fichten, C. S., Amsel, R., & Robillard, K. (1988). Issues in cognitive assessment: Task difficulty, reactivity of measurement, thought listing vs. inventory approaches, sequences vs. frequency counts. *Behavioral Assessment, 10*, 399-425.
- Fichten, C. S., Amsel, R., Robillard, K., & Tagalakis, V. (1991). Thoughts about interaction between nondisabled and disabled individuals: Situational constraints, States-of-Mind, valenced thoughts. *Cognitive Therapy and Research, 15*, 345-369.
- Fichten, C. S., Lennox, H., Robillard, K., Wright, J., Sabourin, S., & Amsel, R. (in press). Attentional focus and attitudes toward peers with disabilities: Self focusing and a comparison of modeling and self-disclosure. *Journal of Applied Rehabilitation Counseling*.
- Fichten, C. S., Robillard, K., & Sabourin, S. (1994). The attentional mechanisms model of interaction strain. *Journal of Developmental and Physical Disabilities, 6*, 239-254.
- Fichten, C. S., Robillard, K., Tagalakis, V., & Amsel, R. (1991). Casual interaction between college students with various disabilities and their nondisabled peers: The internal dialogue. *Rehabilitation Psychology, 36*, 3-20.
- Fichten, C. S., Tagalakis, V., & Amsel, R. (1989). Effects of cognitive modeling, affect, and previous contact on attitudes, thoughts and feelings toward college students with physical disabilities. *Journal of the Multihandicapped Person, 2*, 119-137.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.
- Garcia, S., Stinson, L., Ickes, W., Bissonnette, V., & Briggs, S. (1991). Shyness and physical attractiveness in mixed-sex dyads. *Journal of Personality and Social Psychology, 61*, 3549.
- Gething, L. (1994). The Interaction with Disabled Persons Scale. *Journal of Social Behavior and Personality, 9*, 23-42.
- Gibbons, F. X. (1986). Stigma and interpersonal relationships. In S. C. Ainlay, G. Becker, & L. M. Coleman (Eds.), *The dilemma of difference: A multidisciplinary view of stigma* (pp. 123-144). New York: Plenum.
- Gibbons, F. X. (1990). Self-attention and behavior: A review and theoretical update. In M. P. Zanna (Ed.), *Advances in experimental social Psychology* (Vol. 23, pp. 249-303). New York: Academic Press.
- Gibbons, F. X., Stephan, W. G., Stephenson, B., & Petty, C. R. (1980). Reactions to stigmatized others: Response amplification vs. sympathy. *Journal of Experimental Social Psychology, 16*, 591-605.
- Glass, C. R., & Arnkoff, D. B. (1994). Validity issues in self-statement measures of social phobia and social anxiety. *Behavior Research and Therapy, 32*, 255-267.
- Gouvier, W. D., Coon, R. C., Todd, M. E., & Fuller, K. H. (1994). Verbal interactions with individuals presenting with and without physical disability. *Rehabilitation Psychology, 39*, 263-268.

- Grove, T. G., & Werkman, D. E. (1991). Conversations with able-bodied and visibly disabled strangers: An adversarial test of predicted outcome value and uncertainty reduction theories. *Human Communication Research, 17*, 507-534.
- Ingram, R. E. (1990). Self-focused attention in clinical disorders: Review and a conceptual model. *Psychological Bulletin, 107*, 156-176.
- Johnson, R. L. & Glass, C. R. (1989). Heterosocial anxiety and direction of attention in high school boys. *Cognitive Therapy and Research, 13*, 509-526.
- Katz, I., Hass, R. G., & Bailey, J. (1988). Attitudinal ambivalence and behavior toward people with disabilities. In H. E. Yuker (Ed.), *Attitudes toward persons with disabilities* (pp. 47-57). New York: Springer.
- Katz, I., Wackenhut, J., & Glass, D. C. (1986). An ambivalence - amplification theory of behavior toward the stigmatized. In S. Worchel and W. G. Austin (Eds.), *Psychology of intergroup relations* (2nd ed., pp. 103-117). Chicago: Nelson-Hall.
- Kleck, R. (1966). Emotional arousal in interactions with stigmatized persons. *Psychological Reports, 19*, 12-26.
- Kleck, R. E. (1968). Physical stigma and nonverbal cues emitted in face-to-face interaction. *Human Relations, 21*, 19-28.
- Kleck, R. E., Ono, H., & Hastorf, A. H. (1966). The effect of physical deviance upon face-to-face interaction. *Human Relations, 19*, 425-436.
- Langer, E. J., Fiske, S., Taylor, S., & Chanowitz, B. (1976). Stigma, staring and discomfort: A novel stimulus hypothesis. *Journal of Experimental Social Psychology, 12*, 451-463.
- Mahone, E. M., Bruch, M. A., & Heimberg, R. G. (1993). Focus of attention and social anxiety: The role of negative self-thoughts and perceived positive attributes of the other. *Cognitive Therapy and Research, 17*, 209-224.
- Marinelli, R. P., & Kelz, J. W. (1973). Anxiety and attitudes toward visibly disabled persons. *Rehabilitation Counseling Bulletin, 16*, 198-205.
- Melchior, L. A., & Cheek, J. M. (1990). Shyness and anxious self-preoccupation during a social interaction. *Journal of Social Behavior and Personality, 5*, 117-130.
- Miller, M. L., & Thayer, J. F. (1989). On the existence of discrete classes in personality: Is self-monitoring the correct joint to carve? *Journal of Personality and Social Psychology, 57*, 143-155.
- Osborne, R. G., & Gilbert, D. T. (1992). The preoccupational hazards of life. *Journal of Personality and Social Psychology, 62*, 219-228.
- Pozo, C., Carver, C. S., Wellens, A. R., & Scheier, M. F. (1991). Social anxiety and social perception: Constructing others' reactions to the self. *Personality and Social Psychology Bulletin, 17*, 355-362.
- Russell, D., Cutrona, C. E., & Jones, W. H. (1986). A trait analysis of shyness. In W. H. Jones, J. M. Cheek, and S. R., Briggs (Eds.), *Shyness: Perspectives on research and treatment* (pp. 239-249). New York: Plenum Press.
- Scheier, M. F., & Carver, C. S. (1985). The Self-Consciousness Scale: A revised version for use with general populations. *Journal of Applied Social Psychology, 15*, 687-699.

- Scheier, M. F., Carver, C. S., Schultz, R., Glass, D. C., & Katz I. (1978). Sympathy, self-consciousness and reactions to the stigmatized. *Journal of Applied Social Psychology*, 8, 270-282.
- Schlenker, B. R., & Weingold, M. F. (1990). Self-consciousness and self-presentation: Being autonomous versus appearing autonomous. *Journal of Personality and Social Psychology*, 59, 820-828.
- Schwartz, R. M., & Garamoni, G. L. (1986). A structural model of positive and negative states of mind: Asymmetry in the internal dialogue. In P. C. Kendall (Ed.), *Advances in cognitive-behavioral research and therapy* (Vol. 5, pp. 1-62). New York: Academic.
- Schwartz, R. M., & Garamoni, G. L. (1989). Cognitive balance and psychopathology: Evaluation of an information processing model of positive and negative states of mind. *Clinical Psychology Review*, 9, 271-294.
- Snyder, M. (1974). The self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30, 526-537.
- Snyder, M. (1987). *Public appearances' private realities: The Psychology of self-monitoring* (Chapters 1-3). San Francisco: Freeman.
- Snyder, M., & Gangstead, S. (1986). On the nature of self-monitoring: matters of assessment, matters of validity. *Journal of Personality and Social Psychology*, 51, 125-139.
- Stephan, W. G., Stephan, C. W., Wenzel, B., & Cornelius, J. (1991). Intergroup interaction and self-disclosure. *Journal of Applied Social Psychology*, 21, 1370-1378.
- Stovall, C., & Sedlacek, W. E. (1983). Attitudes of male and female university students toward students with different physical disabilities. *Journal of College Student Personnel*, 24, 325-330.
- Tagalakakis, V., Amsel, R., & Fichten, C. S. (1988). Job interview strategies for people with a visible disability. *Journal of Applied Social Psychology*, 18, 520-532.
- Tobey, E. L. & Tunnell, G. (1981). Predicting our impressions of others: Effects of public self-consciousness and acting, a self-monitoring subscale. *Social Psychology Bulletin*, 7, 661-669.
- Tobin, M. J., & Hill, E. W. (1988). Visually impaired teenagers: Ambitions, attitudes and interests. *Journal of Visual Impairment and Blindness*, 82, 414-416.
- Yuker, H. E. (1992). Attitudes toward persons with disabilities: Conclusions from the data. *Rehabilitation Psychology News*, 19, 17-18.
- Zimbardo, P. G. (1977). *Shyness*. New York: Jove Publications.
- Zola, I. K. (1981). Communication barriers between 'the able-bodied' and the 'handicapped'. *Archives of Physical Medicine and Rehabilitation*, 62, 255-259.
- Zweig, D. R., & Brown, S. D. (1985). Psychometric evaluation of a written stimulus presentation format for the Social Interaction Self-Statement Test. *Cognitive Therapy and Research*, 9, 285-295.

*Offprints.* Requests for offprints should be directed to Catherine Fichten, PhD, Dawson College, Department of Psychology, 3040 Sherbrooke West, Montréal, Québec, Canada, H3Z 1A4.