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Shy Skaters? Shyness, Coping, and Adjustment Outcomes in Female Adolescent Figure Skaters

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ABSTRACT

The purpose of this study was to examine the associations between shyness and adjustment outcomes in competitive adolescent figure skaters. At Time 1, 40 female figure skaters completed self-reports of shyness, athletic self-esteem and psychological coping style. At Time 2, approximately nine months later, skaters completed a measure of competitive anxiety immediately prior to a competitive performance. Competitive placement at this performance was also recorded. Results revealed that shyness was associated with increased somatic (physiological) anxiety prior to competitive performance. Additionally, shyness was negatively related to athletic self-esteem and competitive performance, but these relations were moderated by the skaters' use of psychological coping styles. The results are discussed in terms of the role of coping style as a protective factor against the potential negative outcomes associated with shyness in the realm of athletics.

Introduction

Competitive single figure skating involves the performance of technically difficult skating skills in an artistic fashion in the presence of both judges and spectators. Given this focus on public performance and evaluation, one would not expect "shy" individuals to excel in this sport. Figure skating has been extensively investigated within the domain of sport psychology (e.g., Garza & Feltz, 1998; Gould, Finch & Jackson, 1993). However, researchers to date have not considered the construct of *shyness* as a potential influential variable in figure skating, or in athletics in general. The purpose of this research was to assess the relations between shyness and indices of adjustment and performance in the figure skating realm. More specifically, we sought to explore the interaction between shyness and psychological coping styles in the prediction of

athletic self-esteem, competitive anxiety, and competitive figure skating performance.

Research on Shyness

Shyness involves the tendency to feel worried, awkward or tense when in the presence of others due to the prospect of interpersonal evaluation (Buss, 1980; Cheek, Melchior & Carpentieri, 1986). Developmental psychologists have argued that shyness may be a behavioral manifestation of earlier childhood inhibition to novelty (Kagan, Reznick & Snidman, 1988). Cheek and Melchoir (1990) conceptualized shyness symptoms to be multidimensional, including behavioral, somatic and cognitive components.

The behavioral component of shyness is manifested as behavioral inhibition during social interactions. Thus, as compared to less shy individuals, shy people are typically characterized as talking less, making less eye contact, and sitting further away from others (Cheek & Buss, 1981; Leary, 1983, Pilkonis, 1977). In terms of somatic symptoms, shy individuals may experience what is commonly referred to as the 'stress response'. That is, they may experience changes in autonomic nervous system activity and increases in cortisol levels (Kagan & Snidman, 1991; Kagan, Reznick, Snidman, Gibbons & Johnson, 1988; Schmidt et al., 1997; Schmidt & Schulkin, 1999). Interestingly, these physiological indices are also characteristic of the fear response seen in animals and humans (Nader & LeDoux, 1999).

Finally, with regard to the cognitive component of shyness, shy individuals report a greater frequency of negative self-referent thoughts as compared to positive thoughts during social interactions (Bruch, Gorsky, Collins, & Gerger, 1989; Bruschi et al., 1995; Garcia, Stinson, Ickes, Bissonette & Briggs, 1991). The tendency to use negative cognitions is thought to be related to worries about receiving disapproval from others (Halford & Foddy, 1982; Leary, Kowalski & Campbell, 1988).

According to Buss (1986), there are two subtypes of shyness. *Fearful* shyness is thought to develop in infancy (during the second half of the first year) and involves inhibited responses to strangers (Buss, 1986). Consequently, individuals with this fear may withdraw or isolate themselves from novel social settings. *Self-conscious* shyness emerges at approximately five or six years of age concomitant to the child's development of a sense of self and their ability to take the perspective of others (Buss, 1986). Buss argued that this ability of perspective taking might lead the individual to develop worries about being evaluated. Support for this theory was obtained by Miller (1995) whose investigation of a sample of undergraduates revealed positive correlations between shyness and a fear of evaluation as well as with approval motivation.

Within the athletic context, shyness has been cited as being a 'deviant' behavior and therefore an undesirable quality (Ikhioya, 1996). This claim was made within the context of team sports. Ikhioya (1996) argued that athletes who are shy would not be assertive enough within their team and thus would not make a sufficient contribution to the team. However, this claim has yet to be substantiated by empirical evidence. Additionally, this argument may not be valid within the context of a single sport where the success of an athlete is based primarily on individual athlete's performance levels. This is not to say that the personality trait of shyness may not pose problems for an athlete. On the contrary, shyness could create difficulties for single sport athletes for

different reasons than what Ikhioya (1996) offered for team sport participants.

Shyness in the Context of Figure Skating

Conceptually, there are several reasons why shyness might be expected to have a negative impact on various aspects of figure skaters' individual and competitive 'adjustment'. Competitive figure skating involves many scenarios that may represent particular challenges for shy figure skaters. For example, daily training sessions typically involve skaters receiving one-on-one instruction from a private coach. During this time, coaches will ask the skater to execute certain skills to allow for an evaluation of the skater's progress followed by constructive criticism. Parents and spectators may also be observing the practices. These two factors may pose a challenge for shy skaters who are uncomfortable being the center of attention and being evaluated. Moreover, these feelings are likely compounded tremendously during times of competition.

In the present study, we explored adjustment outcomes within the realm of figure skating that were hypothesized to be theoretically related to individual differences in skaters' shyness. These outcomes included indices of 'personal' adjustment (i.e., athletic self-esteem) as well as 'competitive' adjustment (i.e., competitive anxiety, competition performance).

Shyness and self-esteem. Self-esteem involves the degree to which individuals positively regard themselves (Sonstroem & Morgan, 1989). Self-esteem is regarded as a multidimensional construct (Marsh, Byrne, & Shavelson, 1988), which can be assessed within specific domains, such as academic self-esteem or athletic self-esteem (Crozier, 1995). Results from research have consistently indicated negative relations between shyness and self-esteem (e.g., Cheek & Melchior, 1990; Crozier, 1981; Crozier, 1995; Lawrence & Bennett, 1992; Lazarus, 1982; Miller, 1995). For example, Crozier (1995) reported that shyness was significantly negatively correlated with scholastic competence, social competence and global self-worth in a sample of young adolescents.

It is presumed that doubts about one's ability to contribute effectively to social interactions, coupled with fears of being negatively evaluated by others, could contribute to the inhibited behavior and social anxiety that characterize the behavioral and somatic manifestations of shyness (Crozier, 1995). Additionally, subsequent self-derogatory cognitions may then have a negative impact on self-esteem (Bruch et al., 1995; Crozier, 1995). Leary (1992) argued that the sport context might foster the creation of a variety of negative images by athletes when they are worried about being evaluated by others. This fear of evaluation could be an issue both in training and during competition. More specifically, it was argued that athletes risk projecting images of being unskilled, incompetent, unprepared, unfit or unable to handle pressures (Leary, 1992). Quite possibly, an athlete who is shy and who generally worries about being negatively evaluated may not feel good about herself and may suffer from low athletic self-esteem.

Some empirical support for this notion has emerged from larger studies exploring the relations between shyness and various components of the self-system, where negative associations have been reported between shyness and perceived athletic competence (e.g., Crozier, 1995; Hymel, Bowker & Woody, 1993). However, the focus of these studies was on

children within school settings, and the samples were comprised of both athletes and non-athletes.

Shyness, competitive anxiety, and performance. Skaters who are shy may also experience difficulties in their ability to perform during competitions. Certainly, an individual sport such as figure skating highlights the individual athlete during a competitive performance. Skaters are required to perform on the ice surface alone while being evaluated by a panel of judges and while being observed by competitors, coaches and spectators. Whereas shyness has yet to receive much attention within the athletic setting, the impact of an athlete fearing evaluation has been investigated a number of times within research examining competitive anxiety.

Competitive anxiety is a multidimensional construct that may be examined as a state or trait variable. It is typically subdivided into somatic and cognitive anxiety (Martens, Vealey & Burton, 1990). *Somatic* anxiety refers to the physiological responses to the anxiety of performing within a competitive setting, whereas *cognitive* anxiety pertains to the mental component of anxiety within the sport setting. There is a clear conceptual link between shyness and both subtypes of competitive anxiety. All three involve negative expectations about success and the anticipation and fear of negative evaluations. It is thus possible that skaters who experience trait shyness may also experience greater competitive anxiety.

Passer (1983) provided preliminary evidence that a fear of failure and a fear of negative competitive performance evaluation may be a mediator of competitive anxiety. Rainey and Cunningham (1988) also reported a significant positive association between trait competitive anxiety and fear of failure/negative performance evaluation amongst college-age athletes. As well, Wilson and Eklund (1998) found that greater self-presentational concerns (i.e., performance inadequacies, physical appearance, appearing athletically untalented) were related with higher competitive anxiety (particularly cognitive aspects).

Wilson and Eklund (1998) suggested that future researchers should investigate sports such as figure skating where impression management is crucial to performance outcome. Indeed, qualitative studies by Gould, Jackson, and Finch (1993) and Scanlan, Stein and Ravizza (1991) have identified social evaluative concerns among elite figure skaters. For example, 'worry about what others think' was cited as a source of stress by the skaters.

It is also possible that shyness in figure skaters may be negatively related to their placement at a competition. Presumably, skaters who are anxious, fearful, and/or self-conscious about how others perceive them, or their performance, may not perform up to their abilities. Moreover, when performing in front of a crowd and essentially becoming the center of attention and being evaluated by judges may represent particular challenges to shy skaters. A preoccupation with self-conscious thoughts may distract skaters from focusing on essential aspects of their performance, which may result in a lower placement at a competition.

Coping with Stressful Situations

Clearly, the competitive figure skating environment represents a potentially extremely stressful environment for shy individuals. Coping with stressful situations involves the use of cognitive and behavioral strategies aimed at reducing stress levels (Compas, 1987). *Coping styles*

reflect the tendency to respond in a predictable manner when confronted with stress either across situations, or over time within a given situation (Compas, 1987). However, some coping styles may either be adaptive or maladaptive in reducing individual stress levels. The use of adaptive styles of coping with environmental stress has been identified as being a moderating variable, or a buffer, to the potential harmful consequences of stress. For example, adaptive coping styles buffer individuals from an increased susceptibility to physical illness (Cohen, Tyrrell, & Smith, 1993) and to the occurrence of athletic injury (Heil, 1993).

Endler and Parker (1990) have described three different styles of coping with stress; task-orientated, avoidance-orientated, and emotion-orientated coping. *Task-orientated* coping involves using a problem-solving approach to eliminate stressors. For example, perceiving a demanding schedule as being stressful and deciding to use time management skills as a means to prioritize one's demands would be an example of task-orientated coping. Using this coping style has been deemed as an adaptive or good way to cope with stress (Endler & Parker, 1990).

Avoidance-oriented coping style involves turning away from the stressors, possibly by ignoring it, psychologically distancing oneself from it, or engaging in another task. An avoidance coping style may not effectively eliminate stress since this style of coping does not actively reduce stress. However, engaging in substitute tasks may be beneficial as a means of temporarily removing oneself from stress until you are more able to actively face stress issues and implement a task-orientated coping style (Endler & Parker, 1990). Recent research findings have suggested that the use of an avoidance-orientated coping style may serve a protective function for individuals that are in situations in which they can not control the stressor that they are faced with (e.g., Simon-Thomas, Kamman, Silverman & Rothman, 2001). For example, children that were exposed to the stressor of parental argument (stressor that they cannot control) were found to be protected/buffered from the effect of interparental conflict on child internalizing behaviors if they engaged in avoidance-orientated coping (e.g., Thomas et al., 2001). Thus, depending upon the nature of the stressor, avoidance-orientated coping may be seen as either maladaptive or adaptive.

Emotion-orientated coping has been defined in the psychology literature in two different ways. The first definition refers to the use of efforts aimed at regulating emotional states that are associated with, or are the result of the stress (Leventhal et al., 1993). According to this definition, emotion-orientated coping would be an adaptive style of coping and could be exemplified by the use of positive self-talk or relaxation. On the other hand, Endler and Parker (1990) describe emotion-orientated coping as comprising emotional reactions that are self-orientated but that may actually increase stress levels since they fail to actively reduce stress and may instead heighten the negative emotional component of the stress experience. Examples of such maladaptive reactions include blaming oneself for being too emotional, worrying about what one is going to do, or getting angry. The coping inventory administered in the present study was created by Endler and Parker (1990), hence for the purposes of this research, emotion-orientated coping was viewed as a maladaptive style of coping with stress.

Skilled athletes appear to use a variety of coping styles (e.g., task, avoidance) in response to different acute stressors within the competitive context (Anshel, Williams, & Williams, 2000). Results from qualitative interviews conducted with national champion figure skaters (e.g., Gould, Finch & Jackson, 1993) and United States Olympic wrestlers (Gould, Eklund & Jackson, 1993)

have revealed that these athletes used a more 'flexible' style of coping, in general to suit the demands of the specific situation. Thus, athletes who may perceive stress may use a task-orientated approach (problem-solving approach) when appropriate (e.g., at home or outside the training environment). However, there are scenarios that figure skaters must deal with that would seem better served by an avoidance coping style. For example, during a competition skaters have to concentrate on their performance and would benefit by temporarily avoiding their life stress, or 'putting it aside', to focus on the task at hand that is under their control at that moment. They could then implement a task-orientated coping style at a better time when they are able to control their life stress. Thus, a combination of coping styles that is based on whether or not there is control over the stressor(s) may be a more effective approach for skaters. In the present study, the combination of both task-oriented and avoidance-oriented coping styles was conceptualized as a 'positive' coping style for dealing with stress.

There have been some research results to suggest that coping with stress may reduce levels of shyness expressed by both children and adults. For example, Deffenbacher, Lynch, Oetting and Kemper (1996) found that a treatment program consisting of cognitive relaxation techniques coupled with task-orientated coping skills training lowered levels of shyness in children in grades six to eight. Moreover, Flanagan (1990) emphasized the importance of equipping individuals with self-knowledge and personal coping skills in order to reduce their psychological difficulty that may be expressed in the development of phobias, depression, obsessive-compulsive disorders and shyness, to name a few. Whereas a positive psychological coping style may reduce levels of shyness, it is also possible that being equipped with this type of coping style may reduce the impact that shyness has on factors, such as self-esteem or levels of performance.

The Present Study

The goal of this short-term longitudinal study was to explore the relations between shyness, coping skills, athletic self-esteem, competitive anxiety and competitive performance in a sample of adolescent figure skaters. Based on the extant literature, it was hypothesized that shyness would be negatively associated with both personal (athletic self-esteem) and competitive adjustment (competitive anxiety, competitive performance) among skaters. However, the relations between shyness and adjustment were expected to be moderated by the skaters' psychological coping style. More specifically, the negative relations between shyness and indices of adjustment were expected to be most pronounced among those skaters who did not tend to employ positive coping strategies.

Method

Participants

The participants were 40 adolescent female skaters aged 11.5 to 19 years of age ($M = 14.7$, $SD = 2.2$). The skaters were recruited from a local figure skating club in the Ottawa-Carleton region where they were training at a summer skating school. The participants were primarily Caucasian and from middle class backgrounds. The competitive levels of the skaters included recreationally competitive, juvenile, pre-novice, novice, junior and senior competitive.

Procedure

During summer training (Time 1), each skater was provided with a questionnaire packet to complete. This included questionnaires assessing the skaters' levels of shyness, athletic self-esteem, and their use of psychological coping skills.

Approximately nine months later (Time 2), skaters competed in a spring competition held in the Ottawa-Carleton region. Immediately after each participant's competitive performance, they were asked to complete another questionnaire pertaining to their competitive state. This questionnaire was returned to the principal researcher upon completion. Past research has demonstrated that retrospective reports of competitive anxiety are reliable (e.g., Randle & Weinberg, 1997).

Measures

Shyness. Skaters completed the Cheek and Buss Shyness Scale - revised (CBSS-r, Cheek, 1983), a 13-item scale designed to assess both the behavioral ("I have trouble looking someone right in the eye") and subjective aspects ("I have doubts about my social competence") of trait shyness. Cheek (1983) reported a coefficient alpha of .90 for this scale and a 45-day retest reliability of .88. This measure has been used with adolescent populations (Jones & Cheek, 1986). In the present sample, Cronbach's alpha for this scale was calculated as $a = .89$.

Athletic self-esteem. Participants also completed the Self-Perception Profile for Adolescents (Harter, 1988), a 45 item self-report measure designed to assess various domains of perceived competence, as well as global self-worth. Items are rated on a 4-point Likert scale. The reliability and validity of this measure are well established (e.g., Cauce, 1987; Connolly & Konarski, 1994; Granleese & Joseph, 1994; Harter, 1982, 1988). Of particular interest for the present study was the subscale of athletic self-worth (e.g., "some teenagers do not feel they are very athletic but other teenagers feel that they are very athletic"; 5 items). The Cronbach's alpha calculated in the present sample for this sub-scale was $a = .87$.

Coping style. Participants then completed the adolescent version of the Coping Inventory for Stressful Situations (CISS, Endler, & Parker, 1990), a 48-item self-report measure of coping styles for adolescents. Task-orientated, avoidance, and emotion-focused coping are each assessed by 16 separate items rated on a 5-point scale. The CISS has been shown to have reliability coefficients ranging from .75 to .90 and test-retest reliabilities ranging from .59 to .72 (Endler & Parker, 1990). In the present study, a composite measure of 'positive' coping was created by aggregating the subscale scores of avoidance-orientated coping and task-oriented coping ($r = .33$, $p < .05$). Cronbach's alpha in the present sample this combined sub-scale was $a = .91$.

Competitive anxiety. At the competition site, skaters completed the Competitive State Anxiety Inventory-2 (CSAI-2, Martens, Vealy & Burton, 1990). The CSAI-2 is a self-report inventory containing three subscales: cognitive anxiety, somatic anxiety and self-confidence. It is comprised of 27 items, with nine items in each of the three subscales. Reliability coefficients for the CSAI-2 range from .79 to .90 (Marten, Vealey & Burton, 1990). Martens et al., (1990) have reported norms for the CSAI-2 for the age groups to be used for this study. The Cronbach's alphas

calculated in the present sample for the three sub-scales were $a = .93$ for the cognitive anxiety subscale, $a = .95$ for the somatic anxiety subscale and $a = .93$ for the self-confidence subscale.

Competitive performance. This information was obtained from the skaters' placement in a spring competition. The results from this competition were made available to the public. A lower numerical value (e.g., 1, 2 or 3) indicates a *better* competitive performance than a higher number (e.g., 10, 11, 12, etc.). Each skater had to compete in a category with at least 10 skaters in order to be included in this study.

Results

Preliminary Analyses

The goal of these preliminary analyses was to explore the relations between skaters' age and competitive levels and variables of interest in the present study. Results from a series of correlational analyses indicated no significant associations between skater age or competitive level and measures of shyness, athletic self-concept, competitive anxiety, positive coping style and competition placement. As a result, skaters' age and competitive levels were not controlled for in subsequent analyses.

The highest possible score for shyness on the CBSS-r is a score of 65. The shyness scores for the present sample ranged from a minimum score of 13 to a maximum score of 54. The mean shyness score for this sample was 32.56 ($SD = 9.43$), indicating that an average for the skaters of 'somewhat shy'.

Correlational Analyses

Results from a series of correlations computed between all measures are displayed in Table 1. Shyness was significantly and positively associated with somatic anxiety ($r = .40, p < .05$), but not significantly related to other indices of adjustment. Positive coping style was not significantly correlated with any of the other variables.

Table 1. Intercorrelations Between Measures of Shyness, Coping, and Indices of Adjustment

Variable	1	2	3	4	5	6	7
Shyness	--	-.19	-.24	.40*	.09	-.25	.17
Positive coping		--	.01	-.12	-.31	.14	.13
Athletic self-concept			--	-.21	-.16	.18	-.18
Somatic anxiety				--	.62***	-.65***	-.04
Cognitive anxiety					--	-.43**	.06
Self-confidence						--	-.02
Placement at competition							--

* $p < .05$, ** $p < .01$, *** $p < .001$

Hierarchical Regression Analyses

The goal of this next set of analyses was to explore the interactive relations between shyness and coping style in the prediction of adjustment outcomes. Interactions between predictor variables were explored using Cohen's partialled products technique (Aiken, & West, 1991; Cohen 1978; Cohen & Cohen, 1983). Using this approach, a series of regression equations was computed. All variables were first standardized. Shyness and coping style were entered first into the equation as a block, followed by the interaction term - as represented by the multiplicative product (shyness x coping). The significance in R2 change (ΔR^2) was assessed to determine if the interaction added to the predictiveness of the overall equation. Separate equations were computed to predict each of the measures of adjustment (i.e., athletic self-esteem, cognitive anxiety, somatic anxiety, self-confidence, and competitive performance). Results are summarized in Table 2.

Table 2. Prediction of Indices of Adjustment from Measures of Shyness and Coping Style.

Dependent Variable	Main effects (β)		Interaction term (ΔR^2)
	Shyness	Coping	Shyness x Coping
Athletic Self-Esteem	-.25	-.05	.15*
Cognitive anxiety	.08	-.01	.02
Somatic anxiety	.39*	-.05	.01
Self-confidence	-.24	-.09	.05
Competitive performance	.04	.14	.11*

Note: lower values for competitive performance represents higher placement

* $p < .05$

A significant interaction between shyness and positive coping was found for the prediction of athletic self-esteem ($\Delta R^2 = .15$, $DF = 6.56$, $p < .05$). To conduct subsequent simple effects analyses, a median split was utilized to divide the skaters into groups who reported 'more positive' versus 'less positive' coping styles. Separate linear regression equations were then computed for each coping group, with shyness as the independent variable, and athletic self-esteem serving as the dependent variable. Results indicated that among skaters who reported employing less positive coping skills, shyness was significantly and negatively associated with athletic self-esteem ($b = -.56$, $t = -2.93$, $p < .05$). In contrast, among the more positive copers, no significant relation was found between shyness and athletic self-esteem ($b = .25$, $t = 1.05$, ns).

Results also revealed a significant interaction between shyness and positive coping in the prediction of competition performance ($\Delta R^2 = .11$, $DF = 3.95$, $p < .05$). Results from follow-up simple effects regression analyses indicated that among skaters that reported the use of less positive coping, shyness was significantly and positively associated with a lower competitive outcome ($b = .47$, $t = 2.23$, $p < .05$). Recall that higher scores on the measure of competition performance indicate a lower placement in the competition. Among more positive copers, no significant relation was found between shyness and competitive performance ($b = -.37$, $t = -1.59$, ns).

Discussion

The goal of the present study was to examine the relations between shyness and personal and competitive adjustment in female adolescent figure skaters. The results provided some of the first evidence to suggest that trait shyness may be related to various aspects of adjustment among skaters. For example, shy skaters tended to report more somatic anxiety prior to competitions. Furthermore, associations between shyness and both athletic self-esteem and competitive performance were moderated by the skaters' psychological coping style. These findings provide some preliminary insight into the implications of being a shy athlete in an individual sport.

Moreover, our results suggest a direction for the development of intervention programs designed to assist shy athletes.

Shyness and Competitive Anxiety

Shyness was related to higher levels of self-reported somatic anxiety. This result was not surprising considering the numerous investigations that have linked shyness to anxious physiology (e.g., Kagan, Reznick, & Snidman, 1987; Schmidt & Shulkin, 1999). Researchers in shyness have suggested that shy individuals have a lower threshold for physiological arousal in the face of novel or challenging stimuli as compared to their non-shy counterparts (see Schmidt & Shulkin, 1999 for a complete review). More specifically, shy individuals have been found to have higher cortisol levels (Gunnar, Mangelsdorf, Larson & Hertsgaard, 1989; Kagan et al., 1989), greater sympathetic nervous system activity (Schmidt & Schulkin, 1999) and greater right frontal lobe activity (e.g., Fox, Schmidt, Calkins, Rubin & Coplan, 1996) when compared to non-shy individuals. Thus, there seems to be consensus in the literature that shyness can be associated with distinct physiological characteristics.

The competitive context may be a challenging stimulus for athletes in general and thus may elicit cognitive and/or somatic anxiety (Martens, et al., 1990). Many sport psychology researchers have investigated sport performance anxiety, but little attention has been devoted to what specifically is eliciting the anxiety at an emotional level. Leary and Kowalski (1995) suggested that an important factor of competitive anxiety is the athlete's concerns of how they are perceived and evaluated by others. Competitive athletes risk conveying unflattering images of themselves to fans, friends, parents, coaches and opponents. However, for shy athletes in particular, the prospect of being evaluated and presenting such images during a competitive event may be especially problematic and thus more likely to elicit an anticipatory, physiological response that is typical of shyness, as opposed to a significant cognitive response. However, additional research is needed to support this speculation. Although in the expected direction, shyness was not significantly associated with lower state self-confidence prior to the performance. This result was somewhat surprising, but may be attributable to the small sample size. However, it is also possible that repeated exposure may help to 'inoculate' skaters to the stresses of competition.

Shyness and Self-Esteem

Peer interactions provide opportunities for children to learn important social skills (e.g., Rubin, Bukowski & Parker, 1998). Shy children are often thought to be at a disadvantage for the development of these essential social skills due to their limited social interactions. Researchers have speculated that shy children who have underdeveloped social skills may eventually become aware of their shortcoming and may develop feelings of low perceived competence. Indeed, research on shyness has revealed negative associations with self-esteem and self-worth in later childhood and adolescence (e.g., Crozier, 1995; Hymel, Woody & Bowker, 1993; Rubin, Chen & Hymel, 1993).

Measures of self-esteem are typically used as a parameter of emotional adjustment. For example, lower values of self-esteem have been associated with acute levels of depression (Wilson & Krane, 1980), trait anxiety (Rosenberg, 1979) and interpersonal difficulties in

adolescence (Kahle, Kulka, & Klingel, 1980). Moreover, positive correlations have been found between measures of self-esteem and the possession of social skills as well as with the attainment of leadership status (Sonstroem & Morgan, 1989).

In the present study, shyness predicted lowered athletic self-esteem for those figure skaters that reported employing less task- and avoidance-orientated coping styles. These findings suggest that shyer athletes who possess more appropriate and positive general coping strategies within their day-to-day lives may be better 'equipped' to handle and respond to stressors within their athletic training that may be exacerbated by trait shyness. This is in keeping with the results of recent sport-coping research suggesting that athletes need to determine when to avoid a stressor and when to deal with one (Anshel, Williams & Williams, 2000).

This finding connects the traits of shyness and psychological coping style with how figure skaters feel about their general level of athletic ability. Leary (1992) speculated that the competitive context may be extremely stressful for those athletes with self-presentational concerns, but it is also possible that daily training sessions may be stressful for shy athletes for similar reasons, although most likely at a lower intensity level. For example, if a shy skater is practicing her jumps or spins while being observed by spectators during a regular training session, she may perceive this to be a stressful situation due to the possibility of being negatively evaluated and appearing athletically unskilled to the observers. However, our results would suggest that this skater would feel better about her athletic abilities if she opted to focus on the task at hand as opposed to being concerned about possible negative evaluation.

The current results would suggest that this ability to focus could be derived from the more general tendency to engage in a positive coping style when dealing with day-to-day stressors. Thus, the skater might choose to avoid focusing on the spectators (stressful stimuli) and the potential for evaluations, and instead concentrate on her training. This would promote performing to the best of her ability and most likely enhance her level of perceived athletic competence. The same skater might later engage in task-oriented coping strategies by meeting with a sport psychology consultant, for example, to discuss their fears of being evaluated. If however, the skater became preoccupied with whoever was watching her, as well as with any minor or major mistakes she might make, she would be distracting herself from training and would most probably not be skating to the best of her ability. This latter scenario would seem to more likely contribute to the athlete feeling worse about her perceived level of ability.

Competitive Performance

The relation between shyness and competitive performance was also moderated by the skaters' coping styles. Thus, along with feeling worse about their athletic abilities, shy figure skaters who did not tend to employ positive coping strategies also performed worse at a skating competition. Williams and Krane (2000) provided a review of the numerous sport psychology investigations that have been conducted to determine the psychological characteristics of peak competitive performances amongst a variety of athletes. Some of the athletic characteristics of peak performers that were cited included: being totally immersed in the performance; having optimal environmental and situational conditions; the absence of a fear of failure; and feeling

good.

Antithetically, shyness in general can be characterized by social wariness that may be driven by a fear of strangers or a fear of evaluation (Buss, 1986). It may also be associated with varying levels of anxious thoughts (Cheek & Melchoir, 1990) and anxious physiology (e.g., Kagan & Snidman, 1991). The characteristics of a peak performer and those of a shy individual seem to be in contrast to one another. Conceptually, the association between shyness and a lower level of competitive performance may be manifested thorough the link between social-evaluative concerns (e.g., what my parents/coach think) and competitive stress (e.g., James & Collins, 1997). Results from qualitative studies of figure skaters (e.g., Gould et al., 1993; Scanlan, Stein, & Ravizza's, 1991) indicated that a frequently cited source of competitive stress revolved around social evaluation concerns such as 'not wanting to let others down by a poor performance', or 'falling in front of a crowd'. The present findings can also be interpreted as providing additional support for this notion.

Other important characteristics of peak performers included having well-developed coping strategies and effective distraction control strategies (Williams & Krane, 2000). Our findings also suggest that athletes' general psychological coping styles may play an important role in the relation between shyness, social-evaluative concerns, and competitive performance. Specifically, shy skaters who possessed better coping styles were not adversely affected during their competitive performances. Being shy does not have be a disadvantage for figure skaters if they have a tendency to use a more positive style of coping in their day-to-day lives. With this particular coping style, a shy athlete can temporarily release their fear by avoiding focusing on the prospect of receiving a negative evaluation and instead can focus on immersing themselves in their performance which is more likely to contribute to a personal best (Williams & Krane, 2000).

'Trait' versus 'State' Coping

There has been some debate in the literature concerning how best to operationalize and assess coping strategies in athletes. For example, some researchers have taken a 'state' approach to the assessment of coping, examining how athletes cope with specific performance challenges within the athletic context (e.g., Crocker & Graham, 1995). Conversely, other researchers have taken more of a 'trait' approach, arguing that coping in sport can be assessed using a general measure of coping strategies (e.g., Giacobbi & Weinberg, 2000) and that task-orientated and avoidance-orientated trait coping styles are stable over a short-term period, whereas emotion-orientated coping is not (e.g., Udry, 1997). Either the trait or state method of assessment seems to be valid, depending on whether information pertaining to coping style is sought for a specific time and place, or for a more general synopsis.

For the present study, we were interested in more of a social psychological perspective of how trait shyness and the general use of trait coping styles would interact with adjustment variables within the figure skating environment. Brustad and Rigger-Taylor (1997) have argued that sport psychology consulting could benefit from a further incorporation of social psychological perspectives. The primary focus of their research was on 'social' issues within the sport context, such as the athletic subculture or eating pressures within the sport. Although these are important issues to consider within sport psychology, it needs to be taken a step further.

Researchers also need to consider how social issues in general (non sport-specific) may play a role within the sporting domain. It seems unlikely that the majority athletes would be able to separate their general tendencies of being shy or their general way of coping with life stressors out of the sport context, especially when it becomes stressful for them. The present research aimed to address this issue by combining trait shyness and trait coping with the sport-specific variables of athletic self-esteem, competitive anxiety and competitive performance. Our results suggest that further consideration of the role of trait personality variables in the athletic context is clearly warranted.

Caveats and Future Directions

In summary, results from the present study provide evidence that personality variables warrant consideration within the sport context. Gill (2000) states that researchers interested in issues related to sport tend to rely mostly on sport-specific measures of personality rather than examining how general personality traits may influence issues related to sport. This research combined sport variables and general life variables to provide a more holistic approach. Although the measures within this study were not solely sport-specific, important associations were identified between general personality factors and competitive results. However, there are aspects of the present study that could be addressed in future investigations.

Future researchers may want to examine a larger sample size that consists of a more homogeneous competitive level. Although it is hard to do so in figure skating, including a representative male sample would be noteworthy. It would also be interesting to re-examine the associations between trait shyness and sport-specific outcomes using a sport-specific measure of athletic coping styles. Additionally, repeated measures of competitive performance, competitive anxiety and coping styles may also be of interest. Finally, it would be interesting to compare the consequences of being shy within team sports and individual sports. It is possible that being shy within sports such as figure skating and gymnastics would comprise an individual's personal adjustment, similar to what was found in this research. However, as Ikhioya, (1996) speculated, shy individuals may not contribute effectively to the team, thus future researchers may want to investigate whether shyness in team sports is associated with personal adjustment as well as team-related consequences, such as rejection by teammates.

Although shyness may at first not seem to be an issue within athletics, the present research has provided preliminary evidence to suggest that it can be comprising for some figure skaters. Additional research is essential to appreciate how shyness may play a role for athletes and how sport psychology consultants can help such athletes effectively cope with the stress of being evaluated. Such interventions might enable shy athletes to enhance their overall sense of athletic self-esteem, lower their competitive anxiety and perform optimally at competitions.

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