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Cover Page Footnote

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Abstract

Utilizing previous research focusing on the Stigma of Giftedness Paradigm (SGP), this study explains social cognitive beliefs with the help of self-efficacy among students with gifts and talents (SWGT) in Ireland and India. The study considers the concept of person-environment fit with respect to how the SWGT feel they are being seen by others and how they react to their environment, where their self-efficacy plays a role. Irish and Indian students ($N = 430$) were matched by age (15-17) and gender. Data were collected using the Social Cognitive Beliefs scale as an indicator of person-environment fit, and the Multidimensional Scales of Perceived Self-Efficacy. Statistically significant differences were found in social cognition among the two groups with SWGT from Ireland (both males and females) scoring higher, suggesting a poorer fit with peers among them. However, the younger (15 and 16 years old) Indian SWGT had lower scores in peer-related social cognition than all Irish SWGT indicating a better fit with peers. Further, a hierarchical linear regression revealed self-regulated learning as a positive contributor and enlisting parental and community support as a negative contributor to explain social cognition beliefs among both Irish and Indian SWGT. Interestingly, while resisting peer pressure was a positive contributor to fit for the Irish SWGT, it was a negative contributor for the Indian SWGT. Variations in results observed among the SWGT of the two countries are discussed with respect to cultural differences. The study not only contributes to an argument for SWGT to learn in environments where they are surrounded by intellectual peers with similar seriousness and abilities, but also draws attention to both fit in the environment and students' confidence in their abilities by bringing in a cross-cultural perspective.

Keywords: *social cognition • self-efficacy • cross-cultural • person-environment fit*

The perception of social experiences among students with gifts and talents (SWGT), especially during their adolescent years, is considered important in their psychosocial development and academic achievement. These students are often perceived to be socioemotionally and cognitively different from their peers (Gallagher, 1990; Schectman & Silektor, 2012; Tezcan, 2012). As a response to the stigma of giftedness (Coleman, 1985; Coleman & Cross, 1988; T. Cross et al., 1993) SWGT from different parts of the world apply social coping strategies in order to manage their recognition among peers and social situations (J. Cross et al., 2019; Foust & Booker, 2007; Striley, 2014). Due to this stigma, SWGT often feel the need to choose between their achievement and social acceptance (Jung et al., 2012), what Gross (1989) called "the forced-choice dilemma" (p. 189). Jung et al. (2012) also found that vertical allocentric (valuing of inequality and interdependence) and vertical idiocentric (valuing of inequality and independence) orientations among Australian secondary students were

strong predictors of motivation for academic success. Further, this motivation for academic success and the need for peer acceptance were found to be predictors of forced choice dilemma. However, no relationship was found among cultural orientations and need for peer acceptance. The present study was motivated by such evidence to explore how SWGT from different cultural orientations perceive their fit in their own environment. We attempt to address the existing gap in the literature by explaining social cognitive beliefs with the help of self-efficacy among two countries with varied cultures, Ireland and India.

Social Cognition

In general, adolescents are often concerned about and compare themselves with others in terms of physical attractiveness, grades, and relationship status (Fujita, 2008), which influence and are influenced by their self-efficacy and social cognitive beliefs. Social cognition is defined as "cognition in which people perceive, think about, interpret, categorize, and judge their own social behaviors and those of others" (American Psychological Association [APA], 2020). Social cognitive theory

(Bandura, 1977) suggests that behavioral changes occur when there is a personal sense of control, and human beings with higher perceived self-efficacy can master challenging situations with the help of adaptive action (Luszczynska & Schwarzer, 2015). This is important among SWGT, because self-efficacy can have an influence on how they prepare for action in their environment. Self-related cognitions and social cognitive beliefs are major ingredients in the motivation and achievement process. Additionally, significant correlations between adjustment and self-efficacy have been found among SWGT (Turki & Al-Qaisy, 2012) and enhancement of self-efficacy can be inferred to promote their psychological well-being from a study that found self-efficacy acts as a mediator while studying the effects of adjustment problems on psychological distress (Chan, 2006). Additionally, high self-esteem has been associated with academic achievement (Marsh et al., 1999) and self-esteem has been seen to be influenced by high ability (Humphrey et al., 2004).

Burney (2008), while applying social cognitive theory to gifted education, claimed that the social environment is a major part of the learning context and, though SWGT often have a high level of confidence in their abilities to perform, it is important for them to see that learning is a combination of academic capability and effort. In fact, attitudes of students towards school and a sense of connectedness towards school are associated to both self-esteem and academic self-efficacy (Booth & Gerard, 2012). In other words, the environment of the SWGT and how they perceive it may depend on their social cognition and self-efficacy, which can further determine their academic achievement (Usher & Pajares, 2008).

Perception of Person-Environment Fit

Students' perception of school climate, encompassing culture, infrastructure, resources, values, and social networks (Thapa et al., 2013), have been found to influence their academic, social and behavioral performances (Gage et al., 2016). In fact, gifted achievers and underachievers have also shown differences in their attitudes and perception toward school and teachers (Cakir, 2014). This implies the importance of social interactions and their perception of that environment in the development of SWGT, which may be understood through person-environment fit theory (Hunt, 1975). This theory states that "behavior, motivation, and mental health are influenced by the fit between the characteristics individuals bring to their social environments and the characteristics of these social environments" (p. 478, Eccles et al., 1993). A positive person-environment fit has been found to be associated with higher academic achievement (Harms et al., 2006). Additionally, Eccles and Midgley's (1989) model of stage-environment fit

(drawing ideas from person-environment fit theory) specifically focuses on the influence of experiences and transitions in school on the development of adolescents. According to this theory, educational environments that do not support the needs of students based on their developmental stage may result in motivational and behavioral declines among adolescents (Eccles & Midgley, 1989). Specific assessments of matching motivational orientation to the learning environments have confirmed academic success based on performance in school settings (Harackiewicz et al., 2002). Studies have also found relationships among academic performance/success, motivational beliefs, personality development and interests with the classroom or learning environment of the adolescents (e.g., Harackiewicz et al., 2002; Harms et al., 2006; Wang, 2012), and perceptions of school by the adolescents have been seen to be significant predictors of academic and psychological competence (Roeser & Eccles, 1998). Lack of environmental fit has been seen to produce deterioration in academic achievement (Gronna, 1999) and lower self-esteem (Richardson, 2000).

Ritchotte et al. (2014) stated that fit has been often found to be difficult to operationalize, as characteristics of the individual and the environment may not share proportionate opportunities. But this operationalization can be achieved when the fit is defined with respect to the degree of incongruity between person and environment (Jansen & Kristoff-Brown, 2006). With respect to SWGT, the level of mismatch between them and their environments has been suggested to increase with the level of giftedness (Jackson & Peterson, 2003; Versteijnen, 2001) and underachievement can occur if there is a discrepancy between the needs of the individual and the demands of the environment (Ritchotte et al., 2014). Furthermore, the person-environment fit (the external congruence) helps in determining whether the behaviors among SWGT can be recognized by others as superior, the kind of feedback that will be generated, and the possibility of future opportunities for the display of gifted behavior (Jeltova & Grigorenko, 2005). Literature supports the importance of challenging cognitive environments for the SWGT (Rogers, 2007), but there is limited evidence on the importance of their social environment (Coleman et al., 2015; J. Cross et al. 2019) and their interaction with the environment to understand the fit. While fit may be observed or measured externally (objective fit, Ritchotte et al., 2014), it is also psychological (subjective fit, Ritchotte et al., 2014).

While Lee et al. (2012) did not find students to perceive their giftedness as a negative factor affecting their peer relationships, they found that SWGT rated their academic self-concept more positively than their social self-concept. Also, SWGT with academic strength in the verbal domain were found to be more likely to face difficulties with peer relationships. However, the study did not explore the person-environment fit of the

students. Other studies using and understanding the conceptual framework of person-environment fit among SWGT often focus on adjustment and academic success. For example, Chang et al. (2021) studied parental psychological control and autonomy granting among Chinese American SWGT and found that adolescents with strong parenting-acculturation (adaptation to the new country) reported higher social acceptance and self-esteem. Additionally, considering SWGT perceptions of their environment, they are less likely to engage and be productive when they do not feel supported (French et al., 2011; Rubenstein et al., 2012). The purpose of the present study is to examine SWGT perceptions of fit with their environment, operationalized as their social cognition.

Fit in the Gifted Context

Challenges to person-environment fit are evident in the stigma of giftedness paradigm (Coleman & Cross, 1988). When SWGT must manage information about their giftedness to have normal social interactions, there will be tension that their peers do not experience. In their study of social cognition among SWGT, Cross et al. (1993) found the majority of students perceived differences from peers that affected their social behaviors. A perception of similarity between SWGT and their peers was associated with a stronger desire of SWGT to be integrated with their peers (Cross et al., 1995). In other words, those who believed others viewed them as similar to peers perceived a better fit in their environment. The forced-choice dilemma (Gross, 1989) describes SWGT's belief that they must choose between social and academic goals, as they could not be successful in both arenas.

SWGT who are, by definition, highly intellectually capable, will have goals for achievement based in part on their cultural orientation toward individualism (Di Giunta et al., 2013). Previous research indicates some SWGT feel frustrated with peers' different attitudes toward learning and the need to wait for them to "catch up" (Coleman et al., 2015; J. Cross et al., 2018; J. Cross et al., 2019). These studies were based primarily in Western, individualist societies.

Role of Culture

Culture has been seen to impact social cognition (Vogele & Roepstroff, 2009) and self-efficacy (Oettingen & Zosuls, 2006). In the case of SWGT, particularly, attitudes toward competition in their environment may play an important role in how they perceive "their own social behaviors and those of others" (APA, 2022). Triandis (1995) described societal preferences for autonomy and independence (individualism) or harmony and interdependence (collectivism) as critically important in individual development. Western societies, such as American and European, tend to value individualism, promoting

individual self-interest and competition (Hofstede et al., 2010). Eastern societies, Asian in particular, tend to have a stronger group orientation, emphasizing cohesion and harmony. These society-level preferences have important implications for SWGT, whose subjective fit with their environment will be perceived through a cultural lens.

In the present study, differences in social cognition among SWGT from a Western nation (Ireland) and an Asian nation (India) will be explored, shedding light on the person-environment fit in these two different cultures. In an analysis of countries' tendencies toward individualism—a self-orientation emphasizing individual effort and competition—Ireland rated a 70 (on a 100-point scale) and India rated a 48 (Hofstede et al., 2010). Indian culture tends more toward collectivism, with a group orientation, emphasizing relationships and cooperation. How the academic and social experiences of SWGT are processed may differ based on the cultural norms in the country where one has developed (Chen & French, 2008). One's perceptions of the goodness of fit in one's environment (their subjective fit) will be associated with one's perceptions of their abilities, both social and academic.

The Present Study

Considering the existing literature and the paucity of research in this area, the present study aims to explain social cognitive beliefs with the help of self-efficacy in two countries with varied cultures. The following research questions guided the study:

1. Are there differences in social cognition between Irish and Indian SWGT?
2. Does self-efficacy explain social cognition over and above demographics?
3. If so, does the variance explained differ between Irish and Indian SWGT?

The study attempts to explain the person-environment fit with the help of the perceptions of SWGT of their social environment, that is, how they feel they are being seen by others and how they react to their environment, along with their self-efficacy.

Method

Participants were students 15-17 years old who scored at the 95th percentile or higher on standardized achievement tests ($N = 430$; 50.2% female). The sample was matched on age and gender for Irish and Indian students. In each program, the sample was 50.2% female, with the same number of 15- ($n = 16$), 16- ($n = 126$), and 17-year-olds ($n = 73$). The Irish students ($n = 215$) were participants in the 2015 summer program at the Centre for Talented Youth, Ireland (CTYI) at Dublin City University. To be admitted to CTYI programs, students take an out-of-level test designed for college admission.

Eligibility is determined by an age-corrected score in the 95th percentile. Students from India ($n = 215$) were from West Bengal, where they were attending the 2017 and 2018 programs conducted by the Jagadis Bose National Science Talent Search (JBNSTS) and Innovation in Science Pursuit for Inspired Research (INSPIRE) programs. To be eligible, students scored in the top 1% on national board examinations (INSPIRE) or through aptitude testing and interviews.

Instruments

Social Cognitive Beliefs

Social cognition was measured by the Social Cognitive Beliefs (SCB) scale, which was adapted from Cross et al. (1995). The SCB was developed from interviews with many SWGT who expressed their beliefs about how they were seen by others (SCB_SEE) and their perceptions of themselves in relation to peers (SCB_PEER; Cross et al., 1993, 1995). Some of these interviews were described in Coleman and Cross (1988). Figure 1 presents the SCB instrument.

The original Cross et al. (1995) items were analyzed individually, whereas this adaptation combines them to assess students' general social cognition as SWGT. The responses to the original scale were dichotomous (agree or disagree). Likert-type response options allowed for a more nuanced indicator of beliefs. The SCB_SEE items

(Cronbach's $\alpha = .71$) are measured on a different scale (1 = Exactly the same as to 5 = Totally different from) from the SCB_PEER (Cronbach's $\alpha = .57$) items (1 = Strongly Disagree to 5 = Strongly Agree). Therefore, these two dimensions are not analyzed in combination. The four items of the SCB_PEER dimension were submitted to an exploratory factor analysis with Maximum Likelihood extraction and Direct Oblimin rotation in both the CTYI and JBNSTS samples. One factor was extracted in each sample, with an eigenvalue of 1.76, explaining 44.04% of the variance in the CTYI data and an eigenvalue of 1.44, explaining 36.08% of the variance in the JBNSTS data. Although Cronbach's α values below .70 are commonly considered unacceptable as a measure of reliability, Taber (2018) argues there are limitations to this heuristic, including the potential inefficiency introduced by the redundancy required to reach that criterion. A unidimensional factor is an indicator of validity, which Taber claims is equally important in assessing instrument quality. Future uses of the SCB could include additional items that reflect the unique cognitions of SWGT in relation to their peers, including reworded SCB_SEE items on the same disagree-agree scale. However, this analysis indicates the current instrument is a valid unidimensional tool for assessing SWGT's cognitions about themselves in relation to their peers and a proxy for their person-environment fit, with lower scores indicating a better perceived fit.

Figure 1: Social Cognitive Beliefs Instrument

a. Social Cognitive Belief: Seen by others (SCB_SEE)

	exactly the same as	mostly the same as	somewhat the same as, somewhat different from	mostly different from	totally different from
01. Students in my school see me as being _____ other students.	1	2	3	4	5
02. Teachers in my school see me as being _____ other students.	1	2	3	4	5

b. Social Cognitive Belief: Perception in relation to peers (SCB_PEER)

	Strongly Disagree	Disagree	Somewhat agree, somewhat disagree	Agree	Strongly Agree
03. I find that I get bored quicker with "small talk" than do other students.	1	2	3	4	5
04. I prefer to work independently on school projects.	1	2	3	4	5
05. I am more serious about learning than other students.	1	2	3	4	5
06. The other students in my class get in the way of my learning.	1	2	3	4	5

Multidimensional Scales of Perceived Self-Efficacy

Bandura's (1989) Multidimensional Scales of Perceived Self-Efficacy (MSPSE) is a 57-item instrument that assesses belief in one's capabilities in a variety of areas. Three items were dropped to make the scale age appropriate. The MSPSE includes nine domains that access direct personal agency, proxy, and collective agency (Bandura, 2001): Enlisting Social Resources, Academic Achievement, Self-Regulated Learning, Leisure-Time Skills and Extracurricular Activities, Self-Regulatory Efficacy (to resist peer pressure for high-risk behaviors), Self-Efficacy to Meet Others' Expectations, Social Self-Efficacy, Self-Assertive Efficacy, and Enlisting Parental and Community Support. The stem for each item is "How well can you...". Sample items for each domain are in Table 1. Response options for the MSPSE items were 1 = Not Well at All, 3 = Not Too Well, 5 = Pretty Well, and 7 = Very Well. Response options 2, 4, and 6 were left blank according to administration instructions. The MSPSE exhibited strong reliability, with Cronbach's $\alpha = .92$ for CTYI and .89 for JBNSTS. Subscale reliabilities are presented in Table 1.

Procedure: Students in both countries received a battery of tests that included the instruments used in the present analysis. They were administered in a paper-pencil format during a 1-hour group testing session.

Analysis: All analyses were conducted with SPSS version 27 for Mac. To determine differences in social cognition between CTYI and JBNSTS SWGT, independent-samples t-tests were conducted, with SCB_SEE and SCB_PEER

as dependent variables. Univariate analysis of variance (ANOVA) was used to analyze differences by program and gender. Hierarchical linear regression was used to explain the variance in SCB_PEER, the dependent variable, by hierarchically entering first gender and age, then self-efficacy subscales as the independent variables.

Results

There were statistically significant differences in social cognition between the two programs. Table 2 presents social cognition and self-efficacy scores by gender and program. SCB_SEE and SCB_PEER differed between CTYI and JBNSTS SWGT, $t(428) = 3.54, p < .001, d = .34$; $t(428) = 8.07, p < .001, d = .78$, respectively. In both dimensions, CTYI scores were higher than JBNSTS, suggesting a poorer fit with their peers among the Irish students. ANOVA identified further differences by gender, $F(3, 426) = 5.85, p < .01, \eta_p^2 = .04$. Post-hoc analysis with Tukey's correction found JBNSTS males perceiving others see them as more similar to other students than did CTYI males or females from both programs. Peer-related social cognition, SCB_PEER, was higher among both CTYI males and females than JBNSTS males and females, $F(3, 426) = 23.30, p < .001, \eta_p^2 = .14$. The Indian students had more positive peer-related beliefs than the Irish students, suggesting a better fit in their social environment. Post-hoc analysis with Tukey's correction of SCB_PEER scores by age and program (see Table 3) found younger (15 and 16 years old) JBNSTS students had lower scores than all CTYI students, but 17-year-old JBNSTS

Table 1: Multidimensional Scales of Perceived Self-Efficacy Sample Items and Reliability

Self-Efficacy Domain	Number of items	Reliability		Sample Item
		CTYI	JBNSTS	
				"How well can you..."
Academic Achievement	9	.70	.64	...learn algebra/reading and writing language skills?
Self-Regulated Learning	11	.86	.81	...plan your school work?
Social Self-Efficacy	4	.78	.70	...make and keep friends of the opposite sex?
Resisting Peer Pressure	6	.71	.71	...resist peer pressure to do things in school that can get you into trouble?
Enlisting Social Resources	4	.63	.54	...get teachers/another student/etc. to help you when you get stuck on schoolwork?
Assertive	4	.82	.56	...stand up for yourself when you feel you are being treated unfairly?
Meeting Others' Expectations	4	.77	.72	...live up to what your parents/teachers/peers/yourself expect of you?
Enlisting Parental and Community Support	4	.79	.65	...get your parent(s)/brothers and sisters/etc. to help you with a problem?
Leisure-Time Skill and Extracurricular Activities	8	.76	.68	...learn sports/dance/music skills?

Table 2: Social Cognitive Beliefs and Self-Efficacy Mean Scores and Standard Deviations

	CTYI				JBNSTS				CTYI			JBNSTS			t-test		
	Female n=108		Male n=107		Female n=108		Male n=107		Total n=215		Total n=215		M	SD		M	SD
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD					
Social Cognitive Beliefs Range 1-5																	
SCB_SEE	3.23 ^a	0.84	3.15 ^a	0.90	3.01	0.93 ^{a,b}	2.75 ^b	0.94	3.19	.87	2.88	.94	t(428) = 3.54, p < .001, d = .34				
SCB_PEER	3.66 ^a	0.68	3.46 ^a	0.78	3.01 ^b	0.70	3.01 ^b	0.67	3.56	.74	3.01	.68	t(428) = 8.07, p < .001, d = .78				
Self-Efficacy Subscales Range 1-7																	
Academic Achievement	5.74 ^a	0.79	5.68 ^a	0.75	5.30 ^b	0.73	5.14 ^b	0.70	5.71	0.77	5.22	0.72	t(419) = 6.73, p < .001, d = .66				
Self-Regulated Learning	4.57 ^{b,c}	1.07	4.43 ^c	1.06	5.17 ^a	0.84	4.79 ^b	0.87	4.50	1.06	4.98	0.87	t(419) = -5.12, p < .001, d = .50				
Social Self-Efficacy	4.96 ^b	1.10	5.17 ^{a,b}	1.03	5.44 ^a	1.13	5.15 ^{a,b}	1.15	5.07	1.07	5.29	1.15	t(419) = -2.09, p = .04, d = -.20				
Resisting Peer Pressure	6.11 ^{a,b}	0.92	6.38 ^a	0.78	5.98 ^{b,c}	0.79	5.75 ^c	1.20	6.24	0.86	5.87	1.02	t(419) = 4.07, p < .001, d = .40				
Enlisting Social Resources	4.10 ^c	1.15	4.49 ^b	1.06	5.00 ^a	1.08	4.77 ^{a,b}	1.05	4.30	1.12	4.88	1.07	t(419) = -5.50, p < .001, d = -.54				
Assertive	4.62	1.30	5.42	1.05	5.10	1.15	4.89	0.95	5.02	1.24	4.99	1.06	t(419) = 0.22, p = .83, d = .02				
Meeting Others' Expectations	4.55	1.26	5.05	1.12	4.87	1.12	4.90	0.98	4.80	1.21	4.89	1.05	t(419) = -0.80, p = .42, d = -.08				
Enlisting Parental and Community Support	4.20 ^b	1.33	4.18 ^b	1.38	4.94 ^a	1.35	4.64 ^{a,b}	1.24	4.19	1.35	4.79	1.30	t(419) = -4.66, p < .001, d = -.46				
Leisure-Time Skill and Extracurricular Activities	4.38 ^a	1.19	4.42 ^a	0.98	4.09 ^{a,b}	1.08	3.90 ^b	1.01	4.40	1.09	3.99	1.04	t(419) = 3.93, p < .001, d = .38				

Note: Superscript letters indicate homogeneous subsets; Bolded mean scores differ by program; Post-hoc tests were completed only for significant program comparisons.

students had SCB_PEER scores similar to those of CTYI students, $F(5, 424) = 14.45$, $p < .001$, $\eta_p^2 = .15$.

There were numerous differences among the students in the self-efficacy subscales (see Table 2). In some cases, CTYI students had higher self-efficacy than JBNSTS students (i.e., academic achievement, the ability to resist peer pressure, leisure-time skill and extracurricular activities). In others, JBNSTS students had higher self-efficacy (i.e., self-regulated learning, social self-efficacy, enlisting social resources, enlisting parental and community support). In their self-efficacy for assertiveness and for meeting others' expectations, the programs were not significantly different. Notably, JBNSTS female students had the highest level of confidence in their ability for self-regulated learning and CTYI females had the lowest confidence in their ability to enlist social resources.

To identify how much of social cognition could be explained by demographics and self-efficacy beliefs, a hierarchical regression analysis (see Table 4) was executed for each sample. With the addition of self-efficacy beliefs, the second model offered a significant improvement in the amount of variance explained in both samples: $\Delta R^2 = .20$ for CTYI and $\Delta R^2 = .16$ for JBNSTS. For CTYI students, the model explained 18% of the variance in SCB_PEER, adjusted $R^2 = .18$. Gender and age were not significant, but several self-efficacy subscales were. Positive contributors were self-efficacy for academic achievement ($\beta = .18$), self-regulated learning ($\beta = .30$), and resisting peer pressure ($\beta = .16$). As confidence was stronger in these areas, CTYI students perceived greater differences from peers and were more negative in their appraisal of them. Negative contributors were self-efficacy for enlisting social resources ($\beta = -.19$) and parental and community support ($\beta = -.18$). As they had greater confidence in their ability to enlist these resources, CTYI students perceived their peers and the experience of working with them more positively.

For JBNSTS students, slightly less of the variance in SCB_PEER, 14%, adjusted $R^2 = .14$, was explained by fewer significant contributors. Age was significant in this group, $\beta = .14$. As students were older, they were slightly more likely to have a negative perception of their fit with peers. The strongest contributor to this perception was their self-efficacy for self-regulated learning, $\beta = .32$. As they had higher confidence in their ability to plan and manage their time to succeed in school, they were more likely to perceive their fit with peers as negative. In this group, the ability to resist pressure from peers to engage in inappropriate behaviors (e.g., skipping school, using illicit drugs) was a negative contributor to SCB_PEER, $\beta = -.25$. As students could resist pressure, they were less likely to perceive a negative fit with peers; they were less likely to prefer to work independently or consider themselves more serious learners than peers, for example. Confidence in their ability to enlist the support of family or community

Table 3: SCB_PEER Mean Scores and Standard Deviations by Age and Program

Age	n	CTYI		JBNSTS		
		M	SD	n	M	SD
15	16	3.56 ^a	0.63	16	3.03 ^b	0.74
16	126	3.55 ^a	0.74	126	2.91 ^b	0.69
17	73	3.59 ^a	0.76	73	3.17 ^{a,b}	0.63

Note: Superscript letters indicate homogeneous subsets

members to help with a problem or to participate in their activities was also associated with a better perceived fit with peers, $\beta = -.27$.

Given the significance of a person's fit in their environment (e.g., Eccles et al., 1993; Harms et al., 2006), it is important to examine the beliefs of SWGT about others in their environment. Decades of research on the stigma of giftedness (Coleman & Cross, 1988; J. Cross et al., 2019, 2022; Manor-Bullock et al., 1995; Striley, 2014; T. Cross et al., 1991; T. Cross et al., 1993; Swiatek, 1995, 2001; Swiatek & Cross, 2007) indicate its significant impact on SWGT. There is evidence that SWGT believe they are different from peers (J. Cross et al., 2019; Striley, 2014; T. Cross et al., 1993), although some do not perceive great differences (T. Cross et al., 1993). The present study contributes to our understanding of SWGT's social cognition, which is representative of fit in their social environments. Cross-cultural differences have implications for educators, counselors, and others who work with and care for SWGT.

Cultural Differences

Social cognition, including students' perceptions of how others see them, was more positive among JBNSTS students. They were significantly less likely than CTYI students to believe teachers and peers see them as different from other students and to believe they were different in their seriousness about learning and willingness to engage in "small talk." Further research is needed to determine the reasons for these differences. It is possible the JBNSTS students are in an environment that more strongly caters to their intellectual needs. Additionally, due to the higher population in India, JBNSTS students tend to face a greater amount of competition. Academic success may be more accepted or desirable in their environment, leading to a broader peer group with less interest in "small talk" or taking their learning more seriously. It is also possible that the group-oriented nature of the Indian culture discourages the cultivation of negative comparisons with others and rejection of peers in school. In such societies, where group harmony is prioritized, one's preference for individual stimulation (not being bored with "small talk," pursuing learning more seriously) or working independently, would be less important than in more individualistic societies like Ireland (Chen & French, 2008).

Table 4: Hierarchical Linear Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	β	t	p
CTYI						
1	(Constant)	3.70	1.38		2.67	.01
	Gender	-0.19	0.10	-0.13	-1.88	.06
	Age	0.01	0.08	0.01	0.11	.92
2	(Constant)	1.46	1.40		1.05	.30
	Gender	-0.10	0.10	-0.07	-0.98	.33
	Age	0.07	0.08	0.05	0.84	.40
	Academic Achievement	0.17	0.07	0.18	2.40	.02
	Self-Regulated Learning	0.20	0.05	0.30	3.70	< .001
	Social Self-Efficacy	-0.10	0.06	-0.15	-1.82	.07
	Resisting Peer Pressure	0.13	0.06	0.16	2.27	.02
	Enlisting Social Resources	-0.12	0.05	-0.19	-2.42	.02
	Assertive	-0.03	0.05	-0.06	-0.69	.49
	Meeting Others' Expectations	0.02	0.05	0.03	0.30	.77
	Enlisting Parental and Community Support	-0.10	0.04	-0.18	-2.24	.03
	Leisure-Time Skill and Extracurricular Activities	0.00	0.05	0.01	0.09	.93
JBNSTS						
1	(Constant)	0.27	1.30		0.21	.83
	Gender	-0.02	0.09	-0.01	-0.17	.87
	Age	0.17	0.08	0.15	2.13	.04
2	(Constant)	1.35	1.39		0.98	.33
	Gender	-0.02	0.09	-0.01	-0.18	.86
	Age	0.16	0.08	0.14	2.04	.04
	Academic Achievement	-0.01	0.08	-0.01	-0.07	.95
	Self-Regulated Learning	0.25	0.07	0.32	3.44	< .01
	Social Self-Efficacy	-0.03	0.04	-0.04	-0.58	.57
	Resisting Peer Pressure	-0.17	0.05	-0.25	-3.48	< .01
	Enlisting Social Resources	-0.04	0.05	-0.07	-0.88	.38
	Assertive	0.00	0.05	0.00	-0.06	.95
	Meeting Others' Expectations	-0.04	0.05	-0.06	-0.67	.51
	Enlisting Parental and Community Support	-0.14	0.04	-0.27	-3.25	< .01
	Leisure-Time Skill and Extracurricular Activities	0.01	0.05	0.02	0.18	.86

Note: Dependent Variable SCB_PEER; Significant results highlighted by bolding.

Frustration with peers who were less serious about learning or who could not learn at the same pace was found in numerous studies (e.g., Coleman et al., 2015; J. Cross et al., 2018; J. Cross et al., 2019). CTYI students may experience more of this frustration than the JBNSTS students, depending on their academic environments. JBNSTS students may not feel the same pressures for individual achievement, or they may be discouraged from expressing their frustration due to societal norms. In both programs, it may be that their perceived superiority poses relational threats where peers become jealous or are uncertain of how to interact with SWGT (J. Cross et al., 2019, 2022; Striley, 2014), leading to difficulty in building relationships and a poor fit in their environments.

Self-Efficacy Contributors to Perceptions of Fit

The most significant positive contributor to fit, as indicated by students' social cognition, was self-efficacy for self-regulated learning, which increased by .30 (CTYI) and .32 (JBNSTS) for each unit of increase in negative perceptions of their social environment. Self-regulated learning as measured by the MSPSE represents successful student behaviors, including the ability to complete work in a timely manner without being distracted, meeting goals, being organized, and staying motivated for schoolwork (Bandura, 1989). In both countries, as students were better able to self-regulate for learning, they were more likely than peers to get bored more quickly with "small talk," want to work independently, see themselves as more serious learners, and see peers as getting in the way of their learning. Endorsement of self-regulated learning behaviors was associated with an increased negative fit in their environment.

Self-efficacy for academic achievement was significantly related to fit only among CTYI students, $\beta = .18$. As they more strongly believed they can learn different subjects, such as algebra or foreign languages, the CTYI SWGT had increased negative perceptions of fit. This relationship may be a reflection of the greater heterogeneity of the environments CTYI SWGT experience. Whereas the JBNSTS students, at the top 1% of scorers, may have received special attention to their needs in their educational experiences, CTYI students attend schools across the country where little attention is given to their need for differentiation (J. Cross et al., 2014). The differences between them and their classmates may be exacerbated by an environment that does not fulfill their academic needs.

A cultural interpretation of the insignificance of JBNSTS students' achievement self-efficacy to their fit perceptions relates to the more cooperative nature of Indian culture. The more individualistic culture in Ireland (Hofstede et al., 2010) may encourage SWGT to view their nongifted peers as impediments to achievement of their potential—to being able to learn these subjects well.

The emphasis on relationships in Indian culture may discourage SWGT from perceiving peers as problematic to their success in learning.

In both CTYI and JBNSTS students, fit was more positive as they felt they could enlist the support of parents or siblings to help them with a problem or get parents or community members to take an interest in their school activities. This was even more true among JBNSTS students; CTYI $\beta = -.18$, JBNSTS $\beta = -.27$. SWGT who felt they could enlist this support were less likely to prefer working independently or see their peers as an unwelcome distraction.

The ability to get help from teachers, peers, or family members with schoolwork or social problems (Enlisting Social Resources) was only significantly associated with perceptions of fit among CTYI students, $\beta = -.19$. When they felt they could get help when they needed it, CTYI SWGT had more positive perceptions of fit in their environment. This relationship was not significant among JBNSTS SWGT. It is notable that for SWGT in both countries, social self-efficacy was not a significant contributor to their perceptions of fit with peers. Their confidence in their ability to make and keep friends, "carry on conversations with others," and to work well in a group would seem to relate to their desire to work independently or to see themselves as more serious than peers. This was not the case, however.

One of the more interesting findings of this study is the opposite relationship of self-efficacy to resisting peer pressure in the two countries. In India, the JBNSTS SWGT had a fairly strong negative association, $\beta = -.25$, between their beliefs about being able to resist peer pressure to get into trouble (e.g., skip school, smoke cigarettes, drink alcohol, take illegal drugs) and their fit in the environment (e.g., wanting to work independently, seeing themselves as more serious than peers, etc.). As they could resist these pressures more effectively, they had more positive perceptions of fit. Among CTYI SWGT, the relationship was the opposite, $\beta = .16$. As they could resist peer pressure better, they perceived more negative fit. Perhaps the Irish students perceived efforts to pressure them as distractions from their academic efforts, which they were competitively pursuing, whereas the Indian students may see peer pressure as evidence of having a connection with peers. Or perhaps they experienced less pressure to engage in troubling activities, if their peers were more engaged in academics. A stronger ability to resist pressure from peers would be related to their seriousness about learning and fit with peers because those pressures were not in their immediate environment. If the JBNSTS SWGT were surrounded by more academically focused peers, their fit would remain strong while they were able to resist outside pressure to misbehave. Research indicates that CTYI students are unlikely to be in classes with intellectual peers outside of their time in CTYI programs (J. Cross et al., 2019, 2022). A closer examination of the

social environment for both groups of students could help to explain these opposite relationships.

Another interesting difference between the CTYI and JBNSTS students was the significance of age in explaining SCB_PEER only in the Indian context. Among JBNSTS SWGT, age was a positive contributor to the variance in SCB_PEER, $\beta = .14$. Because the two datasets were matched on age, this suggests a real cultural difference. Among the CTYI students, fit perceptions were similar among 15- to 17-year-olds. Among the students in India, older students were more likely to perceive fit in a direction similar to that of their CTYI peers. Differences were found between the younger JBNSTS students and the CTYI students (see Table 3), but the older JBNSTS students had scores similar to the CTYI older and younger students. This suggests that JBNSTS students experience stronger perceptions that they are more serious than peers, prefer to work independently, and peers get in the way of their learning, as they mature. CTYI students perceived this misfit earlier in their school experience.

The differences in variance explained by the model between the two programs, 20% for CTYI and 16% for JBNSTS, suggest cultural variations in the students' subjective fit as measured by their social cognitive beliefs. The model included perceptions of self-efficacy, but there must be many other variables involved to make up the greater than 80% of variance left unexplained. Future studies could include variables associated with their learning environments, such as type of school attended or the differentiation they actually experience. There may also be differences associated with the domain of their giftedness (e.g., verbal or quantitative). The present findings identify self-efficacy as a contributor to fit. Lived experience research (e.g., Coleman et al., 2015; J. Cross et al., 2019) may offer valuable additions to this exploration.

Implications

Although the JBNSTS SWGT had SCB_PEER scores indicating a more positive fit in their environment than their CTYI counterparts, there were similarities that have implications for academic success among both groups. The increased negative fit with higher levels of self-efficacy in self-regulated learning is an indication that how they are being asked to learn and who they are learning with may affect their beliefs about both. The diverse academic experiences and needs among CTYI SWGT scoring at the 95th percentile and above may be contributing to perceptions of poor fit among CTYI students. This is in contrast with a more homogeneous profile among the JBNSTS SWGT, who score in the 99th percentile. The cooperative nature of Indian culture also may lead to more cooperative education goals (Roseth et al., 2008), contributing to positive perceptions of fit with peers among the JBNSTS students. The similarity

in fit scores among older JBNSTS students may mean the competition heats up as they approach the end of high school. The students in this sample may represent a more competitive group in the Indian system.

These findings could also contribute to an argument for SWGT to learn in environments where they are surrounded by intellectual peers with similar seriousness and abilities. Out of school programs like CTYI and JBNSTS, advanced classes in school, and even cluster grouping provide opportunities for SWGT to be together. The JBNSTS students may already have this environment as younger students, but attention to their fit as they mature may be significant to their ultimate success. In making a decision about creating environments exclusively for SWGT, it is important to consider potential social impacts, however. J. Cross et al. (2013) found students in a specialized high school for SWGT considered gifted education elitist, even while they benefited both academically and socially from being in such an environment.

Causation cannot be determined by this analysis. It is possible self-efficacy is impacted by social cognition, rather than the other way around. Students who perceive a poor fit with their environment may have reduced efficacy in self-regulated learning, for example. Students who get in the way of their learning, are less serious about learning and the like may make them feel less efficacious in regulating their learning behaviors, rejecting pressure to engage in troubling behaviors, or able to learn in different subject areas. The lesson here is that attention should be paid to both fit in the environment and students' confidence in their abilities.

Limitations

One limitation of the study is the recent development of the SCB instrument. There were two items in one subscale and four in the other. Future versions of the scale should include more items, including the SCB_SEE items altered to be on the same scale as the SCB_PEER items. An additional item ("I see myself as...") from the original scale was not included due to technical problems in the survey administration. The addition of this item would improve reliability and offer a different, meaningful perspective on students' perceptions of fit. Validation on larger samples would be beneficial, including with non-gifted samples. Research on the lived experience of SWGT (Coleman et al., 2015; J. Cross et al., 2019) has implications for an expanded view of their social cognition. Reliabilities on both instruments, the SCB and the MSPSE, were lower for JBNSTS students than CTYI students. This may be due to the instruments' development with primarily Western samples. Further research is needed to better understand psychometric differences in the Indian context. Despite these limitations, the exploration described here furthers our understanding of social cognition among SWGT.

Conclusion

Studies of the lived experience of SWGT have identified the challenges they face in finding a positive person-environment fit (Coleman & Cross, 1988; Coleman et al., 2015; J. Cross et al., 2019). The present study suggests the same challenges may exist in very different cultures around the world, but there are nuanced differences. What has been learned from decades of research on the

social experience of SWGT must be put into a cross-cultural perspective to have the most positive impact on environments. The temptation to consider only objective fit—observable indicators of an appropriate environment—may lead to misinterpretations of the goodness of fit. Students' perceptions must be considered. After all, "a person's experience is what the world is to that person" (Coleman & Cross, 2000, p. 211).

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