

The Influence of Body Image on Interpersonal Self-Efficacy among Junior Middle School Students

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ABSTRACT

Objective To explore the present status of body image and interpersonal self-efficacy, and analyze the impact of body image on interpersonal self-efficacy among junior middle school students. **Methods** A random cluster sampling was used to select 995 junior middle school students. They were investigated with Multidimensional Body-Self Relations Questionnaire (MBSRQ) and Adolescent Interpersonal Communication Self-Efficacy Scale (AICSE). **Results** (1) The scores in the three subscales of MBSRQ, such as appearance evaluation, appearance orientation and self classified weight, were greater than 2.5 and less than 3.5, and the scores of body area satisfaction and over weight preoccupation were less than 2.5. (2) Junior middle school students scored less than 2.5 in the dimension of communication ability and factors of persistence, self-ability and expression ability of AICSE. At the same time, the total score and scores of the dimension of communication strategy and the other four factors of AICSE were greater than 2.5 and less than 3.5. (3) Multiple linear stepwise regression showed that appearance assessment positively predicted the total score of AICSE ($\beta=.433$, $P<.001$). Appearance orientation negatively predicted the total score of AICSE ($\beta =-.394$, $P<.001$). **Conclusion** The body image and interpersonal self-efficacy of junior middle school students need to be improved. Body image may be an important influencing factor of interpersonal self-efficacy.

Key Words: Junior Middle School Students, Body Image, Interpersonal Self-Efficacy Influencing Factors, Multiple Linear Stepwise Regression.

Self efficacy, one of the core contents of Bandura's social cognitive theory, refers to people's self perception of self-control over events that affect them (Bandura, 1977). Self efficacy is not only a preestimate of future actions, but also directly affects the function of individuals in the process of psychological motivation to perform relevant activities, which has become an internal reason for determining human behavior. Self efficacy guides individuals to choose specific behavior styles and social environment, challenge difficulties (Bandura, 1986), pay as much effort as

possible to complete tasks (Bandura, 1986), show stronger persistence and adjustment ability (Schunk, 1989), and use more effective strategies (Schunk, 1989).

Interpersonal self-efficacy refers to the individuals' self-evaluation of communication effectiveness achieved by adopting their communication ability, skills, as well as strategies in line with communication rules in different communication situations (Bandura, 1986).

As one of the most important indicators of mental health, interpersonal communication is the basic form and way for teenagers to establish their interpersonal relationships, understand themselves, others and society, so as to form and improve self-identity. At the same time, harmonious interpersonal relationship is one of the basic conditions for success. Due to immature personality and lack of interpersonal skills, teenagers are prone to setbacks in actual social communication. In the face of setbacks, whether to take a proactive response, timely summarize experiences and lessons, and strive to improve social skills, or produce wrong self-evaluation and attribution (Locke, et al, 2018), cause psychological confusion (Hodis & Hodis, 2012; Locke, et al., 2018) and social disorders, such as interpersonal trust deficiency (Ying Liang et al), communication disorder (Ying Liang et al), social anxiety (Chu Xiaowei, 2016; Titzmann & Jugert, 2017), social withdrawal (Zhang Pingping, 2007), etc., **interpersonal self-efficacy plays a key role** (Locke, et al, 2018; Caprara, 2010).

Body image is one's perception of the aesthetic or sexual attraction of his own body. Compared with the standards set by society, it emphasizes how individuals see themselves. In a broad sense, body image consists of the way people see themselves, including their memories, experiences, assumptions and comparison of their appearance, as well as their overall attitude towards their height, body shape and weight - all of which are shaped by popular social culture (David, 2003).

Body image is one of the core components of self-concept. Negative body image will affect all aspects of adolescents, cause psychological and behavioral disorders such as emotional disorders (Diann et al, 2002), eating disorder (Jean, 2020), social distress (Rice et al, 2021) and social withdrawal (Hu Shi, 2014; Strand et al., 2021). How does body image affect adolescents' interpersonal self-efficacy? This study aims to answer this question.

OBJECTS AND METHODS

Objects

Two natural classes were selected with the random cluster sampling from each grade of the junior departments of the following three middle schools such as Dongguan Songshanhu middle school, Shenzhen Songgang middle school and Guangzhou No. 16 middle school. A total of 1123 junior middle school students were selected and investigated and 995 valid questionnaires were collected, with an effective rate of 88.6%. Among them, there are 490 boys and 505 girls; **376 in grade one, 333 in grade two, 286 in grade three.**

Tools

Multidimensional Body-Self Relations Questionnaire, MBSRQ

It is a self-report questionnaire, compiled by Thomas F. cash (2000) and revised by Ma Rumeng (2006) into Chinese version. MBSRQ has 93 items, which are divided into 10 subscales. The first

seven subscales mainly involve "evaluation" and "orientation", which are appearance evaluation (AE), appearance orientation (AO), fitness evaluation (FE), fitness orientation (FO), health evaluation (HE), health orientation (HO), and illness orientation (IO). There are three other special subscales: Body areas satisfaction (BAS), over weight preoccupation Scale (OWP) and Self Classified Weight (SCW). Likert 5-point scoring method is used to score from 1 to 5 points corresponding to "completely disagree" to "completely agree". The higher the total score, the more satisfied with one's own body. The higher the score of the subscale, the more satisfied with the physical characteristics represented by the subscale. Five subscales were selected in this study: Appearance evaluation (AE), appearance orientation (AO), body area satisfaction (BAS), self classified weight (SCW) and over weight preoccupation (OWP). In this study, *Cronbach's* coefficient of the total scale is 0.83, and *Cronbach's* coefficients of the five subscales are 0.72, 0.74, 0.76, 0.72, 0.77, respectively.

Adolescent Interpersonal Communication Self-Efficacy Scale (AICSE)

It is compiled by Liu Xun (2004). AICSE has 28 questions, divided into two dimensions and seven factors. The two dimensions are communication ability (CA) and communication strategy (CS), and the seven factors are initiative (IT), persistence (PT), flexible communication (FC), respect and honesty (RH), understanding ability (UA), self ability (SA) and expression ability (EA). Likert 5-point scoring method is used to score from 1 to 5 points corresponding to "completely disagree" to "completely agree". The higher the total score, the higher the interpersonal communication self-efficacy. In this study, *Cronbach's* coefficient of the total table is 0.84, *Cronbach's* coefficients of the two dimensions are 0.80 and 0.76, respectively, and *Cronbach's* coefficients of the seven factors are 0.67 ~ 0.75.

Data Processing

SPSS 20.0 software is used for statistical analysis. The main statistical methods include descriptive statistics, Pearson correlation analysis and multiple linear stepwise regression analysis.

RESULTS

General situation of body image and interpersonal self-efficacy among junior middle school students

It can be seen from table 1 that the scores of two subscales of BAS and OWP are less than 2.5, belonging to the low scores, while scores of the other three subscales of MBSRQ in this group are greater than 2.5 and less than 3.5, belonging to the middle level (MA Rumeng, 2006); The scores of dimensions of CA, PT, SA and EA of AICSE are less than 2.5, which belong to the low scores, while the total score, scores of dimension of CS and the other four factors of AICSE are more than 2.5 and less than 3.5, which belong to the middle level (Liu Xun, 2004).

Table 1 Descriptive Statistics of MBSRQ and AICSE Scores (n=995)

Dimension	N	M	SD	MIN	MAX
Appearance evaluation (AE)	995	3.31	.61	1.70	4.85
Appearance orientation (AO)	995	3.19	.30	2.36	4.26
Body area satisfaction (BAS)	995	2.79	.36	1.66	3.83
Self classified weight (SCW)	995	2.33	.54	1.91	3.76
Over weight preoccupation (OWP)	995	2.42	.69	1.33	4.18
Total score of AICSE (TSA)	995	2.52	.59	1.09	4.07
Communication ability (CA)	995	2.44	.59	1.07	3.93
Communication strategy (CS)	995	2.57	.63	1.03	4.20
Initiative (IT)	995	2.53	.71	1.00	4.50
Persistence (PT)	995	2.46	.66	1.00	4.63
Flexible communication (FC)	995	2.83	.79	1.00	4.72
Respect and honesty (RH)	995	2.53	.84	1.00	4.67
Understanding ability (UA)	995	2.80	.58	1.00	4.27
Self ability (SA)	995	2.05	.52	1.00	4.00
Expressive ability (EA)	995	2.42	.64	1.00	4.30

The relationship between body image and interpersonal self-efficacy among junior middle school students

Correlation analysis between body image and interpersonal self-efficacy

It can be seen from table 2 that scores of the two subscales of AE and AO of MBSRQ are significantly correlated with the total score, scores of two dimensions and six factors (except RH) of AICSE (all $P < 0.01$).

Table 2 Correlation Analysis of MBSRQ and AICSE Scores (n=995)

Dimension	AE	AC	SB	CSW	OW
TSA	.171**	-.160**	.191**	.202**	.194**
CA	.142**	-.169**	.180**	.184**	.182**
CS	.184**	-.153**	.172**	.243**	.186**
IT	.275**	-.234**	.367**	.225**	.244**
PT	.191**	-.177**	.255**	.137**	.125**
FC	.219**	-.153**	.123**	.045	.014
RH	.116**	-.009	.007	.011	.016
UA	.185**	-.121**	.017	.033	.018
SA	.131**	-.168**	.193**	.341**	.231**
EA	.204**	-.108**	.129**	.041**	.051

Note : ** $P < 0.01$

Multiple linear stepwise regression analysis of the impact of MBSRQ scores on the total score of AICSE

Taking the total score of AICSE as the dependent variable and the scores of five subscales of MBSRQ (AE, AO, BAS, SCW and OWP) as the independent variables, a multiple linear stepwise regression analysis is carried out within the 95% confidence interval, and the results are shown in Table 3.

It can be seen from Table 3 that the score of AE is positively correlated with the total score of AICSE ($\beta = .433$, $P < .001$). The score of AO is negatively correlated with the total score of AICSE ($\beta = -.394$, $P < .001$).

Table 3 Multiple Linear Stepwise Regression Analysis of the Relationship between 5 Subscales of MBSRQ and Total Score of AICSE (n=995)

Dependent Variable	Independent Variables	B	SE	β	t	P	R^2	R_{adj}^2
TSA	AE	.476	.057	.433	6.358	<.001	.449	.445
	AO	-.417	.063	-.394	-5.530	<.001		

DISCUSSION

The scores of appearance evaluation, appearance orientation and self classified weight in MBSRQ belong to the middle level, and the scores of body area satisfaction and over weight preoccupation belong to the low level; The scores of communication ability, persistence, self ability and expression ability in AICSE belong to the low level, and the total score, scores of dimension of communication strategy and other four factors of AICSE belong to the middle level. The above results are consistent with those of previous studies (Hu Shi, 2014; Jean, 2020; Liu Xun, 2004; Liu Yanhua, et al., 2008; Gong Jie, et al., 2020), suggesting that the body image of current junior middle school students is not positive enough, and the sense of interpersonal self-efficacy needs to be greatly improved.

The appearance evaluation of junior middle school students positively predicts interpersonal self-efficacy, and their appearance orientation negatively predicts interpersonal self-efficacy, which is consistent with the results of previous studies (Liu Jing, 2015; Sun yuan, 2015), suggesting that body image can affect individuals' social function and mental health.

Bandura (1986) analyzed the formation of self-efficacy from the perspective of information processing, and pointed out that whether accurate or wrong, the self-knowledge about individual efficacy is based on four main information sources: success or failure experience of their own behavior, alternative experience, social and verbal persuasion, and emotional and physiological state. (1) Experience of success or failure of one's own behavior. This information source has the greatest impact on self-efficacy. Successful experience will improve self-efficacy, and repeated failure experience will reduce self-efficacy. (2) Alternative experience. When we lack realistic judgment basis and knowledge of our own ability, alternative experience has the greatest influence on our self-efficacy. Seeing the success of people similar to us can promote the improvement of our self-efficacy and increase the confidence to achieve the same goal; Seeing the failure of people similar to us, especially after making great efforts, will reduce our self-efficacy. (3) Social and verbal persuasion. Social and verbal persuasion refer to other people's evaluation, persuasion and self persuasion. Verbal persuasion lacking factual basis has little effect on self-efficacy. Only does persuasion based on direct experience or alternative experience play the greatest role in encouragement. (4) Emotional or physiological state. Previous researches show that when we are in a state of tension or excitement, our ability to

judge success is much worse than when we are calm, excessive anxiety will make us underestimate our ability, fatigue and trouble will make us feel difficult to shoulder heavy responsibilities, and the positive emotions in success and negative emotions in failure will significantly change the sense of our self-efficacy.

According to the above theory, we can analyze the impact of appearance evaluation and appearance orientation on interpersonal self-efficacy. Due to the lack of external absolute judgment standard and their own judgment (especially independent thinking) ability, teenagers tend to form their self-evaluation through social comparison (comparison with others) and others' evaluation. In this way, their self-evaluation is largely the result of the internalization of others' evaluation, and their "self-efficacy" is also largely their subjective feelings and behavioral reactions to the social atmosphere (David, 2003). There is a stereotype of "judging people by their appearance" in our social culture, which is an automatic cognitive processing mode of the brain. Subconsciously, we think that a person with a beautiful appearance (such as "thin") means having good characteristics such as agility, intelligence, ability, loveliness, friendliness and success, while a person with an ugly appearance (such as "fat") means being dull, stupid, incompetent, failure, morbid lazy or self degenerate (Jorge, 2020). Often when we come into contact with the communication objects, we will produce this stereotype immediately, and therefore determine the attitude and coping style towards them, which is difficult to correct through rational thinking such as looking for facts and evidence. When we meet an individual with beautiful appearance, we will involuntarily try to get close to him (her), actively interact with him (her), try to provide him (her) with possible social opportunities, greatly appreciate his (her) good (or even neutral) performance, and forgive and ignore his (her) bad performance. In this way, due to more opportunities for social exercise, the actual interpersonal skills of beautiful people will gradually improve; At the same time, in a good social atmosphere (full of praise and affirmation), beautiful people are more willing to participate in social activities and get more praise. They are more inclined to absorb their own successful social experience (because of the lack of criticism and negation of others), internalize others' praise into self-evaluation, and further improve their subjective evaluation of interpersonal self-efficacy. On the contrary, when we meet individuals with poor appearance, we will involuntarily try to avoid them, criticize their bad (even neutral) performance, and turn a blind eye to their good performance. In this way, due to the lack of opportunities for social exercise, it is difficult to substantially improve the interpersonal skills of those who are not beautiful; At the same time, in the bad social atmosphere (full of contempt and criticism), people with poor appearance are more and more reluctant to participate in social activities to avoid being despised and criticized. They are more inclined to absorb their own social failure experience (because they lack praise and affirmation from others) and internalize others' contempt and criticism into self-evaluation, The subjective evaluation of interpersonal self-efficacy will be further reduced.

Appearance orientation can be said to be the internalization of the above stereotype of "judging people by appearance". Due to the influence of "judging people by their appearance", teenagers also tend to recognize the important and even key role of appearance in society, so they pay great attention to their own appearance. However, most teenagers are not satisfied with their appearance (siham, 2021; Liu Xun, 2004; Liu Yanhua, et al., 2008; Gong Jie, et al., 2020), and think that their appearance is very different from their ideal appearance. Therefore, they

subconsciously think that they can't leave a good impression and feeling on others, and can't achieve good results in social interaction. So, the higher the degree of appearance orientation, the lower the interpersonal self-efficacy.

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