Adolescents' perceptions of moral character: The self-enhancement effect

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Abstract

The objective of the current study was to investigate the perceptions of how Chinese adolescents perceive themselves and adolescents in general on moral character traits, and to examine the socio-demographic correlates of perceived moral character traits. Self-report data were acquired from 2,474 adolescents who attended high schools in Hong Kong. Results showed that adolescents perceived the moral traits of themselves as above the midpoint of the scale and the moral traits of the general adolescent population at the midpoint of the scale. Consistent with our hypothesis on the self-enhancement effect, the respondents perceived themselves as more morally superior to the general adolescent population. Female adolescents and those with higher maternal educational levels also showed higher levels of perceived moral character traits. These findings support the self-enhancement effect in the evaluation of moral character traits in Hong Kong adolescents.

Keywords: Moral character; adolescents; self-evaluation; self-enhancement

Introduction

Moral character can be regarded as personality attributes of a person regarding aspiration and attainment of moral goals (1). The competence in making moral judgment is "the capacity to make decisions and judgements, which are moral (i.e., based on internal principles) and to act in accordance with such judgements" (2). Many educators and researchers have studied moral character and moral behavior within the sphere of moral education (3). In different societies, the cultivation of moral character of young people is a key focus of youth policy.

Adolescence is an important developmental stage for the formation of moral character, as adolescents have a greater sense of self-awareness

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of their capabilities as well as an increased capacity for self-criticism (4). According to the ecological model, the formation of moral character in adolescence is heavily influenced by multiple factors in different social systems, such as the family, peers, school, and media (5). For example, friendship and peer influence have been identified as major shaping forces of moral character of adolescents (6, 7).

Studies showed that sound moral character promoted adolescents' positive behaviors and reduced problem behaviors (8, 9). First, a higher level of moral competence was associated with lower levels of delinquent behaviors and problem behavioral intention (9, 10). Second, moral character attributes in the form of sympathy promoted subjective well-being (11, 12), whereas kindness reduced the risk of emotional problems (e.g., fewer symptoms of depression) and improved life satisfaction by developing a sense of purpose and connection with others (13). Similarly, positive moral character was also related to meaning in life and life satisfaction based on self-reported and peer-reported measures (14, 15).

Third, moral character also influences impression formation of groups and individuals, which would eventually affect their interpersonal relationships. For example, Leach, Ellemers, and Barreto (16) showed that perceived in-group moral qualities were more important than competence or sociability in their evaluation of peer groups and judging their willingness to cooperate with other members. The evaluation of an unfamiliar group and impressions of another person were also found to be substantially influenced by the ratings of moral traits than competence and sociability (17, 18). Evidence suggests that the common moral traits shared among peers are important indicators in maintaining healthy relationships.

Researchers have commonly used self-report methods to assess moral character. However, there are concerns about the accuracy of self-perceptions in moral qualities, which highlights the motives toward social desirability that may result in an inaccurate and inflated self-assessment. Self-reports may also be distorted by the optimistic bias of social comparison that leads to self-enhancement or better-than-average effect, in which self-report

of personality characteristics and behavioral traits is unrealistically desirable about oneself (19-23). Despite this limitation, self-report has been commonly used as a methodology in different fields of psychology (9, 10, 11, 13).

The tendency of perceiving oneself as more favorable than the average population is pronounced in the self-evaluation studies of moral character. Most individuals generally believe they possess more positive moral character attributes (e.g., fairness, respectfulness, and principle) and less negative moral character characteristics (e.g., insincerity, prejudice, and disloyalty) than the average person (24). The self-estimation on character traits commonly lies above the midpoint of a scale, whereas the estimation for others corresponded more closely at the midpoint of a scale (21, 22, 25). In a comprehensive meta-analysis that included 124 published articles with over 950,000 participants, the occurrence of self-enhancement effect was prevalent across all study samples and its effect was larger in the case of personality traits than abilities and positive dimensions as opposed to negative dimensions (26). Desirable and positive moral character traits, such as honesty and trustworthiness, are consistently reported to have the largest difference between individual self-judgments and the judgment of the average person (21, 22).

However, self-enhancement effect is highly dependent on the perceived difficulty of tasks and level of desirability and controllability (19, 27). Although males were frequently reported to rate themselves as having higher self-confidence in their abilities, females from different cultures scored significantly higher than males on most moral character traits, such as Spain (4) and the United Kingdom (28). The gender differences can be explained by gender stereotypes and the variation of moral motivations for males and females. Nunner-Winkler, Meyer-Nikele, and Wohlrab (29) revealed that in contrast to male adolescents, the stereotypes of female adolescents comprised of positive and morally favorable traits. They also reasoned that male adolescents who have high gender identification had low moral motivation, which generate a desire to fulfill gender role expectations in societies that expect males to be assertive and successful rather than considerate and caring.

Finally, research studying different cultural profiles also found that although similar self-enhancement effect exists in a range of studies in both Western and Eastern cultures, moral assessment scores were consistently higher in Americans than Japanese (30, 31) and Chinese (32). The distinction between individualistic and collectivistic cultures may have been invoked to explain these cultural differences. The prevalence of self-enhancement in Western cultures tends to value personal success and often encourages people to think of themselves in ways that distinguished themselves from others. In contrast, people in Asian cultures commonly emphasize the importance of shared interest and group consciousness for collective benefits with other members of the group. Thus, it indicates a distinctive self-enhancement effect in presenting a favorable image to self than others in a collectivistic cultural perspective (33).

A survey of the literature shows several gaps in the research on moral character traits in adolescence. Primarily, very few studies have been conducted to examine moral character traits in Chinese adolescents. There are two reasons why researchers should study moral character traits in adolescents. First, as Chinese adolescents represent a significant proportion of adolescents in the world, findings based on Chinese adolescents would have implications for the generalizability of the scientific findings (34). Second, as moral character development was emphasized in the traditional Chinese culture, scientific studies in this area are in order. Another research gap is that very few studies have examined the perceptions of moral character traits in themselves and adolescents in the general population in a single study, particularly in different Chinese communities. Based on the literature on self-enhancement (21, 22), it was predicted that adolescents in Hong Kong would be more likely to rate themselves to be better than the general adolescent population on different measures of moral character.

The final research gap is that there are few studies on the socio-demographic correlates of adolescent perceptions of their own moral character traits as well as adolescents in general. Regarding age, although moral character traits (e.g., prosocial values) may increase as adolescents mature, adolescent rebellion may weaken moral character traits in young people.

Concerning gender, existing studies have shown that females tended to rate their moral character traits as more positive than did males (1, 4, 28, 35). Hence, it was predicted that females would have a more positive perception of their moral character traits than do males. Finally, as parents with higher education would have higher expectations for their children (36, 37), it was expected that parental education would be positively associated with moral character attributes in their adolescent children.

In response to the above research gaps, we examined several research questions in this study:

1. What are Hong Kong high school students' perceptions of their own moral character traits?
2. What are Hong Kong high school students' perceptions of the moral character traits in adolescents in the general population in Hong Kong?
3. Are the perceptions of their own moral character attributes different from the perceptions of those in adolescents in the general population in Hong Kong? Based on the previous literature (21, 22), it was predicted that high school students would perceive their moral character traits to be relatively more positive than general population of adolescents in Hong Kong (Hypothesis 1).
4. What are the related socio-demographic correlates (including age, gender, and parental educational level) of perceived moral character attributes in oneself and adolescents in general amongst high school students in Hong Kong? Regarding gender, based on the previous studies (1, 4, 28, 35), it was expected that females would have a better perception of their moral character attributes than did males (Hypothesis 2). Finally, it was expected that there would be a positive relationship between parental education and adolescent moral character traits. As mothers are more involved in the socialization process in the Chinese context (38, 39), it was expected that maternal education would be related to perceived moral character traits of Chinese adolescents (Hypothesis 3).

Methods

The data of this paper were derived from a project entitled "Character Building – A shared mission for a better future" in which a series of studies were conducted to understand moral character traits, social behavior, psychosocial competence, family life, and school life of high school students from the perspectives of students, teachers, and parents. The current study focused on the data on moral character traits collected from high school students in Hong Kong in a collaborative research between The Hong Kong Polytechnic University and Wofoo Foundation.

A total of 2,474 students from 20 high schools from different parts of Hong Kong participated in the study. Amongst them, there were 1,271 adolescent girls and 1,123 adolescent boys (mean age = 14.76 years). We obtained school, parental, and student consent before data collection. Students completed a questionnaire covering different domains of their own psychosocial functioning, such as character traits, life skills, social behavior, and social attitude. They also responded to questions assessing their perceptions of the psychosocial attributes of adolescents in Hong Kong. The details of the measures can be seen in the report of the study. To ensure the quality of the data collected, a trained research assistant was present during data collection.

Instruments

In this study, we developed a 25-item measure of moral character with reference to the previous studies (40-42). Besides reporting on one's perceived moral character attributes on these items, the respondents also assessed adolescents in Hong Kong on these dimensions. The items were showed/presented in Table 1 and Table 2. Previous analyses showed that this scale possessed adequate reliability and validity (factorial validity and concurrent validity). For each item, the respondent evaluated his/her moral character first and then the adolescents in Hong Kong on the same item. A 5-point scale was used for each item, ranging from "strongly disagree" 1) to "strongly agree" 5). The global

score for the 25 items was computed by averaging the sum of all items.

Data analyses

Percentage analyses were performed to study the profiles of participants' perceptions of the moral characters of in self and in Hong Kong adolescents. In addition, we also explored whether there were differences between perceived moral character traits in oneself and in adolescents in Hong Kong. Finally, we performed Pearson's correlation, linear regression, and multiple regression analyses to understand the association between socio-demographic predictors and students' perceptions of their moral character attributes.

Results

Table 1 shows the percentage of responses to the 25 items. Generally speaking, the participants had positive perceptions of their moral character traits. However, some participants showed disagreement that they had diligence (25.3%), honesty (10.2%), dedication (13.1%), self-discipline (17.0%), and respect traditional culture (14.4%). Table 2 presents the percentage of responses to the items assessing the participants' perception of moral character traits in Hong Kong adolescents. The respondents disagreed that Hong Kong adolescents had certain moral character attributes, including justice (24.2%), diligence (26.4%), respecting others (30.1%), obeying the law (22.7%), dedication (27.7%), self-discipline (27.8%), simplicity (34.7%) and respect traditional culture (34.4%). Besides the descriptive profiles, we also examined differences between perceived moral character traits in oneself and moral character traits in adolescents in Hong Kong (Table 3). As predicted, findings revealed statistically significant differences between self-perception and perception of adolescents in general on each moral character trait ($t(2469) = 47.81$, $p < 0.001$, effect size = 0.96), with moral character traits perceived by the respondents to be relatively more positive than those based on adolescents in Hong Kong.

Table 1. Students' perception of their own moral character

Item(s)		1	2	1+2	3	4	5	4+5	Mean[a] (SD)	n
		n	n	n	n	n	n	n		n
		(%)	(%)	(%)	(%)	(%)	(%)	(%)		
1.	Justice	19 (0.8%)	165 (6.7%)	184 (7.5%)	926 (37.6%)	1113 (45.1%)	243 (9.9%)	1356 (55.0%)	3.57 (0.79)	2466
2.	Friendliness	14 (0.6%)	59 (2.4%)	73 (3.0%)	407 (16.5%)	1343 (54.4%)	645 (26.1%)	1988 (80.5%)	4.03 (0.76)	2468
3.	Generousness	33 (1.3%)	144 (5.8%)	177 (7.1%)	828 (33.6%)	1164 (47.2%)	295 (12.0%)	1459 (59.2%)	3.63 (0.82)	2464
4.	Helpfulness	17 (0.7%)	100 (4.1%)	117 (4.8%)	582 (23.7%)	1220 (49.6%)	541 (22.0%)	1761 (71.6%)	3.88 (0.82)	2460
5.	Diligence	130 (5.3%)	494 (20.0%)	624 (25.3%)	1006 (40.8%)	626 (25.4%)	212 (8.6%)	838 (34.0%)	3.12 (1.00)	2468
6.	Honesty	35 (1.4%)	217 (8.8%)	252 (10.2%)	914 (37.0%)	988 (40.0%)	314 (12.7%)	1302 (52.7%)	3.54 (0.87)	2468
7.	Kindness	26 (1.1%)	102 (4.1%)	128 (5.2%)	606 (24.6%)	1180 (47.8%)	553 (22.4%)	1733 (70.2%)	3.86 (0.84)	2467
8.	Respecting others	14 (0.6%)	69 (2.8%)	83 (3.4%)	511 (20.7%)	1270 (51.4%)	606 (24.5%)	1876 (75.9%)	3.97 (0.78)	2470
9.	Obeying the law	21 (0.9%)	93 (3.8%)	114 (4.7%)	531 (21.5%)	1037 (42.0%)	787 (31.9%)	1824 (73.9%)	4.00 (0.87)	2469
10.	Dedication	65 (2.6%)	258 (10.5%)	323 (13.1%)	986 (40.0%)	924 (37.5%)	230 (9.3%)	1154 (46.8%)	3.40 (0.89)	2463
11.	Self-Discipline	84 (3.4%)	336 (13.6%)	420 (17.0%)	891 (36.1%)	847 (34.3%)	312 (12.6%)	1159 (46.9%)	3.39 (0.98)	2470
12.	Affectionateness	37 (1.5%)	145 (5.9%)	182 (7.4%)	616 (24.9%)	1170 (47.3%)	503 (20.4%)	1673 (67.7%)	3.79 (0.88)	2471
13.	Empathy	37 (1.5%)	76 (3.1%)	113 (4.6%)	457 (18.5%)	1225 (49.7%)	670 (27.2%)	1895 (76.9%)	3.98 (0.85)	2465
14.	Pride	23 (0.9%)	86 (3.5%)	109 (4.4%)	433 (17.5%)	1101 (44.6%)	826 (33.5%)	1927 (78.1%)	4.06 (0.85)	2469
15.	Modesty	27 (1.1%)	159 (6.4%)	186 (7.5%)	929 (37.6%)	1070 (43.4%)	283 (11.5%)	1353 (54.9%)	3.58 (0.82)	2468
16.	Simplicity	38 (1.5%)	197 (8.0%)	235 (9.5%)	919 (37.3%)	987 (40.1%)	322 (13.1%)	1309 (53.2%)	3.55 (0.87)	2463
17.	Personal cultivation	23 (0.9%)	126 (5.1%)	149 (6.0%)	806 (32.6%)	1101 (44.6%)	413 (16.7%)	1514 (61.3%)	3.71 (0.83)	2469
18.	Sincerity	24 (1.0%)	98 (4.0%)	122 (5.0%)	680 (27.6%)	1151 (46.7%)	514 (20.8%)	1665 (67.5%)	3.82 (0.84)	2467
19.	Politeness	21 (0.9%)	111 (4.5%)	132 (5.4%)	645 (26.2%)	1274 (51.7%)	414 (16.8%)	1688 (68.5%)	3.79 (0.80)	2465
20.	Loyalty	21 (0.9%)	109 (4.4%)	130 (5.3%)	789 (32.0%)	1194 (48.5%)	350 (14.2%)	1544 (62.7%)	3.71 (0.79)	2463
21.	Sense of responsibility	41 (1.7%)	162 (6.6%)	203 (8.3%)	717 (29.1%)	1085 (44.1%)	458 (18.6%)	1543 (62.7%)	3.71 (0.90)	2463
22.	Magnanimity	31 (1.3%)	183 (7.4%)	214 (8.7%)	859 (34.9%)	1030 (41.8%)	360 (14.6%)	1390 (56.4%)	3.61 (0.87)	2463
23.	Honor	42 (1.7%)	209 (8.5%)	251 (10.2%)	915 (37.2%)	957 (38.9%)	338 (13.7%)	1295 (52.6%)	3.54 (0.89)	2461
24.	Respecting the aged	49 (2.0%)	140 (5.7%)	189 (7.7%)	660 (26.8%)	1050 (42.6%)	564 (22.9%)	1614 (65.5%)	3.79 (0.93)	2463
25.	Respecting traditional culture	84 (3.4%)	272 (11.0%)	356 (14.4%)	764 (31.0%)	893 (36.3%)	449 (18.2%)	1342 (54.5%)	3.55 (1.02)	2462
Composite Score									3.70 (0.53)	2473

[a] 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Table 2. Students' perception of Hong Kong adolescents' moral character

Item(s)		1 n (%)	2 n (%)	1+2 N (%)	3 n (%)	4 n (%)	5 n (%)	4+5 n (%)		Mean[a] (SD)	n
1.	Justice	89 (3.6%)	507 (20.6%)	596 (24.2%)	1246 (50.6%)	549 (22.3%)	73 (3.0%)	622 (25.3%)		3.00 (0.83)	2464
2.	Friendliness	59 (2.4%)	275 (11.2%)	334 (13.6%)	1021 (41.4%)	924 (37.5%)	185 (7.5%)	1109 (45.0%)		3.37 (0.87)	2464
3.	Generousness	93 (3.8%)	457 (18.6%)	550 (22.4%)	1168 (47.4%)	655 (26.6%)	90 (3.7%)	745 (30.3%)		3.08 (0.86)	2463
4.	Helpfulness	96 (3.9%)	400 (16.3%)	496 (20.2%)	1009 (41.0%)	822 (33.4%)	132 (5.4%)	954 (38.8%)		3.20 (0.91)	2459
5.	Diligence	148 (6.0%)	501 (20.4%)	649 (26.4%)	1088 (44.3%)	595 (24.2%)	124 (5.0%)	719 (29.2%)		3.02 (0.94)	2456
6.	Honesty	140 (5.7%)	523 (21.3%)	663 (27.0%)	1214 (49.4%)	511 (20.8%)	70 (2.8%)	581 (23.6%)		2.94 (0.87)	2458
7.	Kindness	77 (3.1%)	343 (14.0%)	420 (17.1%)	1122 (45.7%)	791 (32.2%)	122 (5.0%)	913 (37.2%)		3.22 (0.86)	2455
8.	Respecting others	170 (6.9%)	570 (23.2%)	740 (30.1%)	1045 (42.5%)	582 (23.7%)	89 (3.6%)	671 (27.3%)		2.94 (0.94)	2456
9.	Obeying the law	127 (5.2%)	430 (17.5%)	557 (22.7%)	1047 (42.6%)	685 (27.9%)	169 (6.9%)	854 (34.8%)		3.14 (0.96)	2458
10.	Dedication	165 (6.7%)	516 (21.0%)	681 (27.7%)	1204 (49.1%)	506 (20.6%)	62 (2.5%)	568 (23.1%)		2.91 (0.88)	2453
11.	Self-Discipline	133 (5.4%)	550 (22.4%)	683 (27.8%)	1178 (48.0%)	532 (21.7%)	63 (2.6%)	595 (24.3%)		2.94 (0.87)	2456
12.	Affectionateness	93 (3.8%)	312 (12.7%)	405 (16.5%)	1082 (44.0%)	832 (33.9%)	138 (5.6%)	970 (39.5%)		3.25 (0.88)	2457
13.	Empathy	90 (3.7%)	319 (13.0%)	409 (16.7%)	997 (40.6%)	879 (35.8%)	172 (7.0%)	1051 (42.8%)		3.29 (0.91)	2457
14.	Pride	55 (2.2%)	137 (5.6%)	192 (7.8%)	747 (30.5%)	890 (36.3%)	623 (25.4%)	1513 (61.7%)		3.77 (0.97)	2452
15.	Modesty	158 (6.4%)	493 (20.1%)	651 (26.5%)	1213 (49.4%)	517 (21.1%)	74 (3.0%)	591 (24.1%)		2.94 (0.89)	2455
16.	Simplicity	228 (9.3%)	623 (25.4%)	851 (34.7%)	1124 (45.8%)	408 (16.6%)	71 (2.9%)	479 (19.5%)		2.78 (0.93)	2454
17.	Personal cultivation	137 (5.6%)	482 (19.6%)	619 (25.2%)	1220 (49.6%)	533 (21.7%)	86 (3.5%)	619 (25.2%)		2.98 (0.88)	2458
18.	Sincerity	114 (4.6%)	384 (15.6%)	498 (20.2%)	1250 (50.9%)	596 (24.3%)	1140 (4.5%)	1736 (28.8%)		3.08 (0.87)	2454
19.	Politeness	175 (7.1%)	534 (21.7%)	709 (28.8%)	1106 (45.0%)	553 (22.5%)	92 (3.7%)	645 (26.2%)		2.94 (0.93)	2460
20.	Loyalty	95 (3.9%)	370 (15.1%)	465 (19.0%)	1317 (53.6%)	585 (23.8%)	89 (3.6%)	674 (27.4%)		3.08 (0.83)	2456
21.	Sense of responsibility	139 (5.6%)	484 (19.7%)	623 (25.3%)	1149 (46.7%)	593 (24.1%)	97 (3.9%)	690 (28.0%)		3.01 (0.91)	2462
22.	Magnanimity	125 (5.1%)	490 (20.0%)	615 (25.1%)	1242 (50.8%)	505 (20.6%)	84 (3.4%)	589 (24.0%)		2.97 (0.87)	2446
23.	Honor	120 (4.9%)	345 (14.1%)	465 (19.0%)	1096 (44.7%)	731 (29.8%)	162 (6.6%)	893 (36.4%)		3.19 (0.93)	2454
24.	Respecting the aged	218 (8.9%)	551 (22.5%)	769 (31.4%)	999 (40.8%)	543 (22.2%)	140 (5.7%)	683 (27.9%)		2.93 (1.01)	2451
25.	Respecting traditional culture	265 (10.8%)	580 (23.6%)	845 (34.4%)	1037 (42.2%)	461 (18.8%)	113 (4.6%)	574 (23.4%)		2.83 (1.01)	2456
Composite Score										3.07 (0.60)	2470

[a] 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

**Table 3. Differences in items and composite score of moral character between students
and their perception of Hong Kong adolescents**

Item(s)		Students	HK Adolescents	t	p	Result
		Mean (SD)[a]	Mean (SD)[a]			
1.	Justice	3.57 (0.79)	3.00 (0.83)	27.82	< 0.001	Students > HK Adol
2.	Friendliness	4.03 (0.76)	3.37 (0.87)	32.59	< 0.001	Students > HK Adol
3.	Generousness	3.63 (0.82)	3.08 (0.86)	24.83	< 0.001	Students > HK Adol
4.	Helpfulness	3.88 (0.82)	3.20 (0.91)	30.24	< 0.001	Students > HK Adol
5.	Diligence	3.12 (1.00)	3.02 (0.94)	4.09	< 0.001	Students > HK Adol
6.	Honesty	3.54 (0.87)	2.94 (0.87)	27.32	< 0.001	Students > HK Adol
7.	Kindness	3.86 (0.84)	3.22 (0.86)	30.70	< 0.001	Students > HK Adol
8.	Respecting others	3.97 (0.78)	2.94 (0.94)	45.80	< 0.001	Students > HK Adol
9.	Obeying the law	4.00 (0.87)	3.14 (0.96)	38.02	< 0.001	Students > HK Adol
10.	Dedication	3.40 (0.89)	2.91 (0.88)	22.11	< 0.001	Students > HK Adol
11.	Self-Discipline	3.39 (0.98)	2.94 (0.87)	19.12	< 0.001	Students > HK Adol
12.	Affectionateness	3.79 (0.88)	3.25 (0.88)	23.95	< 0.001	Students > HK Adol
13.	Empathy	3.98 (0.85)	3.29 (0.91)	30.31	< 0.001	Students > HK Adol
14.	Pride	4.06 (0.85)	3.77 (0.97)	12.45	< 0.001	Students > HK Adol
15.	Modesty	3.58 (0.82)	2.94 (0.89)	29.38	< 0.001	Students > HK Adol
16.	Simplicity	3.55 (0.87)	2.78 (0.93)	33.22	< 0.001	Students > HK Adol
17.	Personal cultivation	3.71 (0.83)	2.98 (0.88)	33.47	< 0.001	Students > HK Adol
18.	Sincerity	3.82 (0.84)	3.08 (0.87)	33.37	< 0.001	Students > HK Adol
19.	Politeness	3.79 (0.80)	2.94 (0.93)	39.78	< 0.001	Students > HK Adol
20.	Loyalty	3.71 (0.79)	3.08 (0.83)	31.18	< 0.001	Students > HK Adol
21.	Sense of responsibility	3.71 (0.90)	3.01 (0.91)	29.83	< 0.001	Students > HK Adol
22.	Magnanimity	3.61 (0.87)	2.97 (0.87)	29.12	< 0.001	Students > HK Adol
23.	Honor	3.54 (0.89)	3.19 (0.93)	15.91	< 0.001	Students > HK Adol
24.	Respecting the aged	3.79 (0.93)	2.93 (1.01)	34.98	< 0.001	Students > HK Adol
25.	Respecting traditional culture	3.55 (1.02)	2.83 (1.01)	29.98	< 0.001	Students > HK Adol
Composite Score		3.70 (0.53)	3.07 (0.60)	47.81	< 0.001	Students > HK Adol

[a] 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Table 4. Correlation between variables

Variable(s)	1	2	3	4	5	6	7
1.	Age	-					
2.	Grade[b]	0.72***	-				
3.	Gender[c]	0.01	0.01	-			
4.	Paternal Educational Level[d]	-0.13***	-0.08[a]	-0.01	-		
5.	Maternal Educational Level[d]	-0.13***	-0.07**	0.01	0.51***	-	
6.	Students' perception of their moral character	0.04	0.04	0.14***	0.04	0.08[a]	-
7.	Students' perception of others' moral character	0.07**	0.04*	0.14***	0.04	0.05*	0.33***

Note. *p < .05, **p < .01, ***p < .001, ap = 0.001;
[b] Junior high school students = 1, Senior high school students = 2;
[c] Male = 1, Female = 2;
[d] The 0-9 values of Father and Mother Education were recoded into three categorical values: Primary and below = 1, Secondary = 2, Above secondary = 3. The value "0" (Do not know) was recoded as missing value (999).

Table 4 shows the correlation coefficients between the background socio-demographic factors and perceived moral character traits. Results revealed that females showed more perceived positive perceived moral character traits than did males (r(1576) = 0.14, *p* < 0.001) and maternal educational level was positively related to perceived moral character traits (r(1576) = 0.08, *p* = 0.001). Similar findings revealed that gender and maternal educational level positively predicted perceived moral character attributes (Table 5). The findings provided support for Hypothesis 2 and Hypothesis 3.

Table 5. Results of multiple regression analyses

Predicator(s)	Students' perception of their moral character			
	β	*t*	*F*	R^2
Overall model		21.92***	8.860***	0.027
Age	0.03	0.93		
Grade[b]	0.02	0.54		
Gender[c]	0.14	5.42***		
Paternal Educational Level[d]	-0.01	-0.10		
Maternal Educational Level[d]	0.09	3.04**		

Note. *p < .05, **p < .01, ***p < .001, ap = 0.001;
[b]Junior high school students = 1, Senior high school students = 2;
[c]Male = 1, Female = 2;
[d]The 0-9 values of Father and Mother Education were recoded into three categorical values: Primary and below = 1, Secondary = 2, Above secondary = 3. The value "0" (Do not know) was recoded as missing value (999).

Discussion

As a pioneer study, we examined the perceptions of Hong Kong high school students on their own moral character attributes as well as those of Hong Kong adolescents based on a self-report 25-item measure of moral character. There are several unique features of this study. First, we examined self-perceived moral character traits in Chinese high school students in Hong Kong, which has not been well elucidated in previous studies. Second, the perceptions of high school students towards the general population on moral character traits were examined, which is not adequately covered in the scientific literature. Third, a large sample size was employed. Fourth, a validated measure of moral character traits was used. Finally, we examined the socio-demographic correlates of moral character traits in adolescents in Hong Kong. In view of the paucity of research findings in this area, the study is a pioneer addition to the literature.

Congruent with previous research, the high school students showed a tendency of appraising their moral traits as above the midpoint of the scale (21, 22). More than three-fourths of them agreed or strongly agreed that they have the character traits of friendliness, respect towards others, empathy, and pride. Among the measures, pride had the highest mean score, followed by friendliness and obeying the law. It is noted that the positive perceptions of their moral character are known to be a major element of selective seeking and exposure to the positive feedback that may ultimately result in self-enhancement biases. The findings showed that the favorable perception of one's moral character qualities is quite consistent across cultures.

On the other hand, the perception of moral character traits held by the high school students was less positive towards adolescents in the general population. The composite score suggested an average perception of the general population on moral character traits. The results are consistent with the empirical findings that adolescents predominately perceived others' character traits at the midpoint estimate of a scale (21, 22). Nevertheless, the adolescents rated pride and friendliness as the character traits with the highest mean score in the general population.

Based on the group scores, the current study also revealed that Chinese high school students in Hong

Kong perceived their moral character traits significantly more favorable than the general adolescent population. The large effect size of the composite scores supported the theory of universal self-enhancement effect on moral character traits, and the results reconciled with other studies on moral character traits. Brown (43) found that people would attribute more positive characteristics (e.g., responsible and bright) to themselves while more negatively (e.g., snobbish and phony) to their counterparts. Tam et al. (32) also reported self-enhancement effect was more pronounced for important personal traits among university students in Hong Kong.

The self-perceived superiority in moral character traits marked the pervasiveness of the self-enhancement effect in Hong Kong adolescents. It is prominent that they inflated their moral judgment and perception with substantial irrationality (24). Previous studies suggested that self-esteem plays a significant role in the judgments of self and others. High self-esteem individuals tended to see themselves as more moral and intelligent than low self-esteem individuals (44, 45). The positive self-conception underscored a greater consciousness for their positive attributes instead of negative attributes, with the existence of optimistic opinions about an individuals' personality and occasional skepticism on others' attitudes and behaviors (46).

The perception of their character traits as well as those in the general population is largely influenced by various internal and external sources, such as motivational process, social comparisons, appearances, social feedback, and behavioral outcomes. Nevertheless, individuals are often less self-enhanced when the comparison involves a specific person rather than an ambiguous or aggregated representation (47). The proximity to an individual also reduced the magnitude of self-enhancement effect that weakens the boundaries between the self and others in the character trait judgment, leading to a concept of an "extended self" (30). This further connects to the judgment of information availability. In most cases, individuals make the self-assessments of character traits based on the private information that is exclusively available to them through introspection. However, the assessments of character traits about others are typically based on the available information

in public through overt behavior (48). This biased and first-person information source has increased the chance for any individuals to selectively collect information about the behaviors of others and unfairly maintain their positive self-image to an unrealistically optimistic and desirable degree. It is suggested that future studies should be conducted to examine such antecedents of self-enhancement effects in perceptions of moral character qualities.

As hypothesized, there were gender differences in high school students' perception in assessing their own moral character traits, with females tended to perceive a higher level of perception in evaluating their moral character than their male counterparts. The superiority in moral character traits in females was supported by empirical studies in adolescents (1, 4, 35) and adults (28, 31). In addition to low moral motivation in males (29), there ought to have underlying gender differences between males and females. In the face of favorable social consequences, females tended to be better than males at expressing positive interpersonal emotions (49). Meanwhile, the self-image of female adolescents was influenced by popularity, interpersonal communication, and appearance (50). Compared with males, it is possible that females were insecure in delivering their ideal self and became more self-conscious about their popularity. Hence, self-enhancement enables them to use appearance as an alternative source of self-esteem that strives to restore a global sense of self-worth through compensation (51).

In terms of parental education, higher maternal educational levels tended to have a stronger influence on high school students in perceiving themselves morally superior. As children generally first learn about social knowledge (e.g., moral values) from their most immediate circle, mothers can have a direct transmission of parental norms and values to their children's conscience of distinguishing rules and conventions. Maternal educational level is effective in imposing positive effects on children's seriousness perception, alterability of rules, and perception of moral rules (52). In particular, Chinese mothers conventionally have more frequent engagement and interactions with their children. The quality of the mother-child relationship was perceived more positively by Chinese adolescents than the father-child relationship (38). Fathers were perceived to be

harsher and less responsive by a group of Chinese adolescents (53). The gender portrayal of women in traditional Chinese culture shapes the involvement of the parents, which implicated a stronger maternal effect on how children perceive their moral character traits (39). Besides, the benefits of higher parental education extended to the personality development of children and adolescents in the way that educated parents could provide better cultural capital to their offspring. This social capital available to a family and closeness with mothers cultivates and enhances some personality traits of children and adolescents, such as openness and opportunity to new experiences (54).

Although the present paper is pioneer, some limitations of the current study should be noted. The first limitation is that it is a descriptive study. The current study was not able to examine the motives of the self-enhancement effect. Second, the current study did not cover the cultural and ethnic factors in practicing moral character. As we only examined Hong Kong adolescents in the study, we acknowledge that members of different Chinese cultural and ethnic backgrounds may vary in the degree to which they behave across conditions. The diversity within the Chinese population, such as ethnicity (e.g., Hui people) and dialects (e.g., Hakka and Min), reflects the distinct features of indigenous traditions and traits. Hence, future studies should be conducted to examine the related issues in different ethnic groups in China. Third, as the current study only lingered on the cognitive-structural level, it would be important to look at the related issues with reference to moral behaviour. Despite these limitations, in conjunction with other published works based on this project (55-57), this study enriches our understanding of perceptions of moral character attributes by high school students in Hong Kong.

Ethical compliance

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