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Self-compassion and psychological well-being among adolescents in Hong Kong: Exploring gender differences

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ABSTRACT

The present study examined the relationship between self-compassion components and psychological well-being (PWB) in a group of Hong Kong adolescents (aged 12 to 16, $N = 277$). In general, girls held overall higher PWB than boys. Except for autonomy and self-acceptance, girls reported higher scores on other dimensions of PWB. In addition, girls and boys shared similar profiles of self-compassion components, with boys manifesting higher isolation than girls. More importantly, self-compassion components facilitated PWB following different pathways for boys and girls. Boys benefited maximally from mindfulness, which revealed significant positive effects on their autonomy, purpose in life, environmental mastery, and personal growth. Girls benefited most from common humanity, which had positive effects on their autonomy, environmental mastery, positive relations with others and personal growth. These findings extended our understanding of self-compassion in terms of the downstream effects of its individual components, and implicated the importance of integrating gender specificity into self-compassion intervention programs.

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1. Introduction

Recently there have been increased calls to apply positive psychology in schools and youth-oriented settings (Clonan, Chafouleas, McDougal, & Riley-Tillman, 2004). On the one hand, teaching positive psychology concepts to young people can equip them with skills and knowledge that may have a lasting positive impact on their lives. On the other hand, positive psychology has made important progress in the investigation of strengths, well-being, and happiness (Diener, Lucas, & Scollon, 2006) with adults. It is a time to extend application of such knowledge to adolescents. Especially in Hong Kong, research with adolescents showed pronounced unbalance. Vast majority of research has focused on psychopathology such as suicidal ideation (Lam et al., 2004), there lacks research on well-being and its contributory factors. Considering the absence of malfunction does not necessarily equate with psychological flourish (Keyes, 2009), our current research aimed to directly investigate adolescents' well-being from perspectives of positive psychology and throw light on the design and implementation of programs promoting adolescents' well-being in Hong Kong. To this end, we adopted Ryff's (1989) psychological well-being (PWB) and Neff's (2003a, 2003b) self-compassion, investigating how self-compassion, as character strength, contributed to different aspects of PWB.

Ryff's psychological well-being (Ryff, 1989) is a framework developed to investigate individuals' eudaimonic well-being. Following the eudaimonic tradition, psychological well-being identifies six dimensions, namely, autonomy, environmental mastery, personal growth, positive relation with others, purpose in life, and self-acceptance, to represent what it means to be psychologically flourishing at one's maximum potential. From those specific components, we can see that Ryff's framework, differing from other hedonic well-being indicators, takes personal development and self-realization as the fundamental elements in defining well-being. This framework is thus suitable for investigating adolescents' positive functioning, since one of the most important themes at this stage is personal growth. Moreover, psychological well-being has also been found to be positively related to many other facets of individual functioning such as biological health and hedonic well-being, and negatively to maladaptive functioning (Ryff & Singer, 1996). It is thus important to identify factors contributing to adolescents' psychological well-being.

However, adolescence is a stage during which specific risk factors for psychological well-being may emerge. Notably, cognitive and socio-emotional developments could promote adolescents to relate to themselves and the world in increasingly complex and sophisticated ways. This change makes them become self-conscious, especially of their successes and setbacks (e.g., Rankin, Lane, Gibbons, & Gerrard, 2004), and tend to incorporate failures into their self-appraisals, resulting in self-criticism and exaggeration of their feelings (Neff, 2009). These negative orientations may impair adolescents' well-being to a large extent. As such, contributing factors that are most predictive of psychological

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well-being may be those that can effectively help adolescents buffer against those negative tendencies. This is why we specify how self-compassion facilitated adolescents' psychological well-being in our study.

Self-compassion is defined as the ability to turn compassion inward and hold one's feelings of suffering with a sense of warmth, connection and concern (Neff, 2003a). In detail, self-compassion is comprised of self-kindness, mindfulness, and common humanity. Self-kindness refers to offering oneself warmth and nonjudgmental understanding. Common humanity refers to recognizing that imperfections and adversities are unavoidable parts of the shared human experience. Mindfulness refers to taking a balanced approach to, instead of suppressing or exaggerating, painful feelings. In developing a measurement tool, Neff (2003b) also introduced self-judgment, isolation and over-identification to assess these three components, resulting in the Self-Compassion Scale (SCS) consisting of six subscales.

Conceptually, self-compassionate individuals, holding health attitude toward selves, should be less likely to develop those negative orientations. Empirically, self-compassion can prevent individuals from pathological symptoms such as anxiety and depression (e.g., Pauley & McPherson, 2010). Besides, self-compassion benefited various aspects of positive functioning, serving as strong predictors of hedonic forms of well-being characterized by subjective happiness (Hollis-Walker & Colosimo, 2011; Neff, Kirkpatrick, & Rude, 2007), positive affect (Neff & Vonk, 2009) and life satisfaction (Allen & Leary, 2010). Though these findings were primarily obtained with adults, there was at least one previous study that reported positive effects of self-compassion on hedonic forms of well-being among adolescents (e.g., Neff & McGehee, 2010). Based on these evidences and the fact that psychological well-being is not completely independent of hedonic well-being (Ryan & Deci, 2000), positive association can be expected between adolescents' self-compassion and psychological well-being.

It is still less straightforward to see whether boys and girls equally benefit from being self-compassionate, since previous research obtained mixed results regarding gender differences in self-compassion. While some found females reported lower self-compassion than males (Neff, 2003a; Neff & McGehee, 2010), others did not obtain significant results (Neff, Pisitsungkagarn, & Hsieh, 2008; Yang, 2016). Because of the application of comprehensive score rather than subscale scores of Self-Compassion Scale in those studies, it is hard to locate the sources for such disparity (Yarnell et al., 2015). Yet one potential factor leading to the inconsistent findings may be gender-specific socialization, which exerts opposite effects on different dimensions of self-compassion. For example, the socialization girls experience emphasizes self-sacrifice to satisfy the needs of others over their own, which may impair girls' ability in treating themselves with self-kindness and thus result in low level of self-compassion. Meanwhile, socialization for girls places importance on development of tender qualities such as tranquilizing and smoothing (Raffaelli & Ontai, 2004), which can be readily employed by girls in experiencing sufferings and thus increase their self-compassion.

The gender issue may become more complicated under a non-western cultural context. In particular, high level of interdependent self-construal (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997) in Eastern culture may have differential implications for females and males in terms of the relationships between self-compassion components and psychological well-being. For one thing, such self-view implies great importance of human interconnectedness (Kitayama & Markus, 2000), which may encourage common humanity. Being more aware of and affected by interpersonal processes (Acitelli, 1992), females may benefit more from high level of common humanity in the social context. In addition, high interdependent self-construal may promote social conformity, requiring harsh self-regulatory strategies (Kitayama et al., 1997). Self-criticism, which enables clear awareness of one's deficits and thus facilitates self-improvement efforts (e.g., Heine, 2003), may become a more adaptive factor for males, since they are more dominant than women (Suh, Moskowitz, Fournier, & Zuroff, 2004) and may be more inclined to integrate self-criticism into their self-regulatory processes. Hence, self-judgment, rather than being negative to self-kindness, is expected to be a positive factor for males in Asia.

We brought together psychological well-being and self-compassion as a way of understanding adolescents' positive functioning. We expected high levels of common humanity and self-judgment for girls and boys respectively under the Asian cultural setting. With the notion that socio-cultural contexts influence differentially the specific facets of self-compassion, we used subscale scores, instead of merging them into one comprehensive score. Conducting separate analyses for girls and boys, we aimed to delineate gender-differentiated pathways from self-compassion to psychological well-being: while self-kindness and common humanity may be most relevant to girls, self-judgment may appear more prominent for boys.

2. Method

2.1. Participants and procedures

A total of 277 adolescents attending secondary school voluntarily participated in this study. These students were aged 12 to 16 ($M = 14.23$, $SD = 1.35$, Mode of age is 14.00). Among them, 144 (52.0%) were boys. Participants completed the questionnaires anonymously in the classroom environment. Written informed consent was obtained from all participants and their guardians prior to the assessment session.

2.2. Measures

2.2.1. Self-Compassion Scale (SCS)

Participants' self-compassion was assessed by the Self-Compassion Scale (SCS; Neff, 2003b) consisting of six subscales: Self-Kindness (5 items; e.g., "I try to be understanding and patient towards those aspects of my personality I don't like"), Self-Judgment (5 items; e.g., "I'm disapproving and judgmental about my own flaws and inadequacies"), Common Humanity (4 items; e.g., "I try to see my failings as part of the human condition"), Isolation (4 items; e.g., "When I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the world"), Mindfulness (4 items; e.g., "When something painful happens I try to take a balanced view of the situation"), and Over-Identification (4 items; e.g., "When I'm feeling down I tend to obsess and fixate on everything that's wrong"). Neff (2003b) reported sound psychometric properties of the scale (αs for six subscales from 0.75 to 0.81) and adequate fit for a six-factor model. In the current study, we referred to a Chinese version adapted to college students in Hong Kong by Wong and Mak (2013) and slightly revised the wordings to ensure the statements are comprehensible to adolescents. Our revised SCS has demonstrated good internal reliabilities in the six subscales (αs from 0.66 to 0.78; see Table 1 for details). In completing SCS, participants were required to indicate to what extent they agree with 26 statements on a 5-point scale ranging from 1 (*almost never*) to 5 (*almost always*).

2.2.2. Psychological Well-Being Scale (PWBS)

A 24-item Chinese version Psychological Well-Being Scale was applied in the current study. This brief PWBS has been found to be valid and reliable in assessing adolescents' psychological well-being in Hong Kong (Chan, Chan, & Sun, 2015). Each of the six dimensions contained 4 items, Autonomy (e.g., "My decisions are not usually influenced by what everyone else is doing"), Environmental Mastery (e.g., "In general, I feel I can manage the situation in which I live"), Personal Growth (e.g., "I think it is important to have new experiences that challenge how you think about yourself and the world"), Positive Relations with Others (e.g., "Most people see me as loving and affectionate"), Purpose in Life (e.g., "I have a sense of direction and purpose in life"), and Self-Acceptance (e.g., "When I look at the story of my life, I am pleased with how things have turned out"). Good internal reliabilities for the six subscales

Table 1
Correlations of subscales of Self-Compassion (SC) and subscales of Psychological Well-Being (PWB) ($n = 277$).

Inter-correlation between six components of SC													
	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Self-Kindness	–												
2. Self-Judgment	0.07	–											
3. Common Humanity	0.46***	0.36***	–										
4. Isolation	−0.20**	0.39***	−0.001	–									
5. Mindfulness	0.61***	0.37***	0.58***	−0.13*	–								
6. Over-Identification	−0.23***	0.48***	−0.003	0.65***	−0.15**	–							
	Correlations between SC and PWB						Inter-correlation between six dimensions of PWB						
7. Autonomy	0.30***	0.18**	0.29***	−0.15*	0.42***	−0.08	–						
8. Environmental Mastery	0.38***	0.15**	0.34***	−0.25***	0.43***	−0.19**	0.65***	–					
9. Personal Growth	0.33***	0.21**	0.38***	−0.16**	0.44***	−0.11	0.50***	0.64***	–				
10. Positive Relation with Others	0.32***	0.10	0.29***	−0.24***	0.34***	−0.18**	0.44***	0.63***	0.57***	–			
11. Purpose in Life	0.30***	0.21**	0.28***	−0.16**	0.40***	−0.08	0.55***	0.68***	0.64***	0.68***	–		
12. Self-Acceptance	0.51***	0.07	0.39***	−0.31***	0.45***	−0.24***	0.59***	0.73***	0.63***	0.62***	0.63***	–	
13. Overall PWB score	0.43***	0.19**	0.40***	0.26***	0.50***	−0.18**	0.76***	0.88***	0.79***	0.80***	0.86***	0.85***	–
α	0.78	0.66	0.66	0.78	0.70	0.66	0.74	0.84	0.75	0.72	0.85	0.75	–
M	3.26	3.00	3.43	2.74	3.50	2.85	3.72	3.85	4.30	3.78	3.94	3.91	3.92
SD	0.78	0.65	0.82	0.93	0.76	0.81	0.79	0.77	0.61	0.77	0.87	0.74	0.63

Note.
* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.

were also reported in this study (αs from 0.72 to 0.85; see Table 1 for details). In completing PWBS, participants were asked to indicate whether each of the 24 statements describes them accurately along a 5-point scale with response options ranging from 1 (*least like me*) to 5 (*most like me*).

2.3. Overview of analyses

We first conducted confirmatory factor analyses (CFA) to ensure factorial validity of SCS and PWBS. Then, descriptive analyses and *t*-tests were carried out to examine gender differences in different components of self-compassion and psychological well-being. Finally, we conducted separate simple regressions for girls and boys. Six self-compassion components were included simultaneously as predictors and one dimension of psychological well-being was included as the outcome.

3. Results

3.1. Factorial validity of self-compassion and psychological well-being

To begin with, we validated the factorial structures of self-compassion and psychological well-being. All CFA analyses were conducted on *Mplus 6.1* (Muthén & Muthén, 2010). To determine model fit, we followed the recommendation by Kline (2011) and included the chi-square test, the *CFI* (comparative fit index), the *RMSEA* (root mean square error of approximation) paired with its 90% CI (confidence interval), and the *SRMR* (standardized root mean square residual). Models were considered to attain acceptable fit to the data at values of ≤0.08 for the *SRMR* and the *RMSEA* (Browne & Cudeck, 1993).

A six-factor model of self-compassion received acceptable model fit, $\chi^2 = 751.63, df = 284, p < .001, CFI = .80, RMSEA = .08$, 90% CI [0.07; 0.08], $SRMR = 0.08$. For comparison, we also tested three alternative models that were mentioned in previous studies (e.g. Neff, 2003b, Wong & Mak, 2013), each of which obtained inadequate fit. PWBS corresponded to six-factor model: $\chi^2 = 601.54, df = 237, p < .001, CFI = .89, RMSEA = .08$, 90% CI [0.07; 0.08], $SRMR = 0.05$. Detailed results are summarized in Table 2.

3.2. Gender differences in self-compassion and psychological well-being

From results summarized in Table 3, boys ($M = 2.86, SD = 0.91$) reported higher isolation than girls ($M = 2.60, SD = 0.93$), $t = 2.403$, $p = 0.017$. Boys and girls responded similarly to other self-compassion components. There were significant gender variations in overall psychological well-being. Specific to individual psychological well-being components, except for autonomy and self-acceptance, girls scored consistently higher than boys on all other facets of psychological well-being. Compared to boys, girls demonstrated higher endorsements for environmental mastery, $M_{boy} = 3.75, SD_{boy} = 0.81, M_{girl} = 3.95, SD_{girl} = 0.72$, $t = -2.174$, $p = 0.031$, personal growth, $M_{boy} = 4.22, SD_{boy} = 0.67, M_{girl} = 4.38, SD_{girl} = 0.52$, $t = -2.099$, $p = 0.037$, positive relations with others, $M_{boy} = 3.61, SD_{boy} = 0.82, M_{girl} = 3.96, SD_{girl} = 0.68$, $t = -3.928$, $p < 0.001$, and purpose in life $M_{boy} = 3.77, SD_{boy} = 0.94, M_{girl} = 4.12, SD_{girl} = 0.75$, $t = -3.402$, $p = 0.001$.

Table 2
Fit indices of confirmatory factor analysis for Self-Compassion Scale and Psychological Well-Being Scale.

Model	χ^2	*df*	*RMSEA* [90% CI]	*CFI*	*SRMR*	$\Delta\chi^2$	Δdf	*p*
Model comparison for self-compassion								
Model 1a (1-factor)	1703.708	299	0.130 [0.124, 0.136]	0.408	0.155	–	–	–
Model 1b (3-factor)	1578.851	296	0.125 [0.119, 0.131]	0.459	0.163	124.857	3	<0.001
Model 1c (with one 2nd-order factor)	1099.912	293	0.100 [0.093, 0.106]	0.660	0.142	478.939	3	< 0.001
Model 1d (6-factor)	751.631	284	0.077 [0.070, 0.084]	0.803	0.077	296.143	6	< 0.001
Model fit for psychological well-being								
Model 2 (6-factor)	601.540	237	0.075 [0.067, 0.082]	0.886	0.052			

Note. Model 1a: 26 items loaded on 1 factor; Model 1b: 26 items (regardless of negatively or positively worded) loaded to self-kindness, common humanity, and mindfulness, respectively; Model 1c: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification as 1st-order factors and self-compassion as the 2nd-order factor; Model 1d: 26 items loaded to six interrelated factors: self-kindness, self-judgment, common humanity, isolation, mindfulness and over-identification. Model 2: 24 items loaded to six correlated factors: autonomy, environmental mastery, positive relations with other, personal growth, purpose in life, and self-acceptance.

Table 3
Gender differences in different dimensions of self-compassion and psychological well-being (boys: $n = 144$, girls: $n = 133$).

		Mean	*SD*	*Diff.*	*t*	*SE*
Self-Compassion Scale (SCS)						
Self-Kindness	Boys	3.33	0.75	0.132	1.413	0.093
	Girls	3.20	0.81			
Self-Judgment	Boys	3.07	0.66	0.140	1.815	0.077
	Girls	2.93	0.62			
Common Humanity	Boys	3.48	0.82	0.099	1.000	0.099
	Girls	3.38	0.83			
Isolation	Boys	2.86	0.91	0.266	2.403*	0.111
	Girls	2.60	0.93			
Mindfulness	Boys	3.51	0.73	0.018	0.192	0.092
	Girls	3.49	0.80			
Over-Identification	Boys	2.92	0.79	0.159	1.633	0.098
	Girls	2.76	0.83			
Psychological Well-Being (PWB)						
Autonomy	Boys	3.69	0.84	−0.059	−0.581	0.095
	Girls	3.75	0.74			
Environmental Mastery	Boys	3.75	0.81	−0.200	−2.174*	0.092
	Girls	3.95	0.72			
Personal Growth	Boys	4.22	0.67	−0.152	−2.099*	0.072
	Girls	4.38	0.52			
Positive Relations with Others	Boys	3.61	0.82	−0.357	−3.928***	0.091
	Girls	3.96	0.68			
Purpose in Life	Boys	3.77	0.94	−0.350	−3.402**	0.103
	Girls	4.12	0.75			
Self-Acceptance	Boys	3.89	0.77	−0.041	−0.461	0.089
	Girls	3.93	0.71			

Note. Diff. represents the difference in mean between boys and girls.
* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.

3.3. Gender differences in the relationship between self-compassion and psychological well-being

Results from simple regression analyses summarized in Table 4 indicated that pathways from self-compassion to psychological well-being were different for boys and girls. Mindfulness was most adaptive for boys, increasing their autonomy ($B = 0.44$, $se = 0.13$, $p = 0.001$), purpose in life ($B = 0.35$, $se = 0.14$, $p = 0.015$), environmental mastery ($B = 0.32$, $se = 0.12$, $p = 0.008$), and personal growth ($B = 0.29$, $se = 0.10$, $p = 0.005$). Common humanity demonstrated extensive effects on girls' psychological well-being, improving their autonomy ($B = 0.20$, $se = 0.09$, $p = 0.023$), environmental mastery ($B = 0.20$, $se = 0.08$, $p = 0.015$), positive relations with others ($B = 0.17$, $se = 0.08$, $p = 0.026$), and personal growth ($B = 0.15$, $se = 0.06$, $p = 0.009$). While isolation reduced boys' purpose in life ($B = -0.21$, $se = 0.10$, $p = 0.039$), self-acceptance ($B = -0.21$, $se = 0.08$, $p = 0.010$) and environmental mastery ($B = -0.18$, $se = 0.09$, $p = 0.033$), it only decreased girls' self-acceptance ($B = -0.16$, $se = 0.07$, $p = 0.034$). Self-kindness, though merely showing effect on boys' self-acceptance ($B = 0.29$, $se = 09$, $p = 0.003$), increased girls' self-acceptance ($B = 0.32$, $se = 09$, $p < 0.001$), positive relations with others ($B = 0.26$, $se = 0.18$, $p = 0.005$), and environmental mastery ($B = 0.19$, $se = 0.10$, $p = 0.046$). On the contrary, self-judgment predicted boys' purpose in life ($B = 0.33$, $se = 0.14$, $p = 0.023$) and environmental mastery ($B = 0.24$, $se = 0.12$, $p = 0.045$), yet it had no significant effect on girls' psychological well-being. Taken together, mindfulness and isolation served as predictors of overall psychological well-being for boys while self-kindness and common humanity contributed to girls' psychological well-being (see Table 4 for details).

4. Discussion

The current study added to the stream of research focusing on well-being of adolescents and is the first attempt to extend the positive effect of self-compassion to eudaimonic well-being of adolescents. On the whole, adolescents in our study demonstrated favorable well-being. They all showed strong endorsement for dimensions of psychological well-being. More importantly, self-compassion components were contributive to adolescents' psychological well-being, through gender-differentiated pathways.

Collectively, self-kindness and common humanity facilitated girls' psychological well-being whereas boys benefited from mindfulness and suffered from isolation. In a society that values human interactions, it is not surprising that common humanity yields significant effects, varying in its manifestation with girls and boys: alleviating isolation appeared more critical for boys, for they experienced isolation more frequently. In addition, heightening common humanity emerged more salutary for girls, owning to the fact that the strong connections to others can especially shape girls' self-concepts and personal identity

Table 4
Simple regressions with dimensions of psychological well-being as outcome and components of self-compassion as predictors ($n = 277$).

Predictors	Dependent variables													
	Autonomy		Environmental Mastery		Personal Growth		Positive Relation with Others		Purpose in Life		Self-Acceptance		Overall Psychological Well-Being	
	B	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*
Boys														
Self-Kindness	0.11	0.11	0.20	0.10	0.02	0.09	0.14	0.11	0.14	0.12	0.29**	0.09	0.15	0.08
Self-Judgment	0.12	0.13	0.24*	0.12	0.13	0.10	0.21	0.13	0.33*	0.14	0.08	0.11	0.19	0.10
Common Humanity	−0.11	0.11	0.02	0.10	0.12	0.08	0.08	0.10	0.01	0.12	0.14	0.09	0.04	0.08
Isolation	−0.15	0.09	−0.18*	0.09	−0.08	0.07	−0.17	0.09	−0.21*	0.10	−0.21*	0.08	−0.17*	0.07
Mindfulness	0.44**	0.13	0.32**	0.12	0.29**	0.10	0.22	0.13	0.35*	0.14	0.15	0.11	0.30**	0.10
Over-Identification	0.11	0.12	0.01	0.10	−0.03	0.09	−0.03	0.11	0.03	0.12	−0.04	0.10	0.01	0.08
Girls														
Self-Kindness	0.08	0.10	0.19*	0.10	0.13	0.07	0.26**	0.18	0.18	0.11	0.32***	0.09	0.19**	0.07
Self-Judgment	0.15	0.13	0.11	0.10	0.08	0.09	0.09	0.12	0.12	0.14	0.06	0.12	0.10	0.09
Common Humanity	0.20*	0.09	0.20*	0.08	0.15**	0.06	0.17*	0.08	0.10	0.09	0.14	0.07	0.16**	0.06
Isolation	−0.09	0.08	−0.13	0.08	−0.08	0.06	−0.11	0.08	−0.07	0.09	−0.16*	0.07	−0.11	0.06
Mindfulness	0.14	0.12	−0.03	0.11	0.05	0.08	−0.11	0.11	0.12	0.13	0.07	0.10	0.04	0.08
Over-Identification	−0.08	0.11	−0.17	0.10	−0.04	0.07	−0.12	0.10	−0.01	0.11	−0.03	0.09	−0.07	0.07

Due to the limited space, we omitted coefficients for intercept and age.
Note.
* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.

to a greater extent (Hall-Lande, Eisenberg, Christenson, & Neumark-Sztainer, 2007).

Besides, while girls benefited from the soothing qualities of self-kindness, self-judgment was advantageous to boys. Such disparity may be consistent with traditional social norms requiring man to be tough (Eisenberg & Lennon, 1983). Similar deep-rooted notions may be extended to socialization on boys and promote them to develop the tendency to be self-critical rather than self-compassionate.

Mindfulness, though found to promote psychological well-being for both gender groups in an intervention study (Brown & Ryan, 2003), only revealed its adaptiveness for boys in our study. One possibility is that the balanced consciousness can prevent boys from suppressing vulnerable emotions during times of hardship as required by masculine norms (Eisenberg & Lennon, 1983). As there are methodological differences between survey and intervention studies, our finding needs further cross-validation.

There are several notable limitations to our study. Adolescents may not be able to perceive accurately how self-compassionate they are, thus making self-reports problematic. In addition, cross-sectional investigation is restricted in inferring causal relationships. Our research cannot exclude the possibility that adolescents' psychological well-being in turn affect their development of self-compassion. The issues of directional ambiguity need to be solved by cross-lagged or longitudinal design. Moreover, it is necessary to examine whether the gender specific pathways linking self-compassion components to psychological well-being persist till adulthood, when dispositions and psychological well-being become more stable.

Self-compassion has been minimally studied in adolescents (MacBeth & Gumley, 2012). The present study enriches our understanding of self-compassion by highlighting the adaptive effects of its individual components to different gender groups in a non-western cultural context. Though boys and girls did not reveal notable differences in self-compassion components, consequential effects on psychological well-being of those components varied across gender. Such gender specificity may be particularly informed for designing and implementing intervention programs. Interventions targeting at promoting adolescents' psychological well-being should be modeled to maximize their relevance to specific gender groups. While promoting girls' self-kindness and common humanity are most fruitful, fostering mindfulness and mitigating social isolation may be more rewarding to boys.

References

Acitelli, L. (1992). Gender differences in relationship awareness and marital satisfaction among young married couples. *Personality and Social Psychology Bulletin*, *18*(1), 102–110. http://dx.doi.org/10.1177/0146167292181015.

Allen, A. B., & Leary, M. R. (2010). Self-compassion, stress, and coping. *Social and Personality Psychology Compass*, *4*(2), 107–118. http://dx.doi.org/10.1111/j.1751-9004.2009.00246.x.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822–848. http://dx.doi.org/10.1037/0022-3514.84.4.822-848.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen, & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Beverly Hills, CA: Sage.

Chan, D.W., Chan, L.K., & Sun, X. Y. (2015). Assessing psychological well-being among Chinese adolescents in Hong Kong. Unpublished study.

Clonan, S. M., Chafouleas, S. M., McDougal, J. L., & Riley-Tillman, T. C. (2004). Positive psychology goes to school: Are we there yet? *Psychology in the Schools*, *41*(1), 101–110. http://dx.doi.org/10.1002/pits.10142.

Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: Revising the adaptation theory of well-being. *American Psychologist*, *61*(4), 305–314. http://dx.doi.org/10.1037/0003-066X.61.4.305.

Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. *Psychological Bulletin*, *94*(1), 100–131. http://dx.doi.org/10.1037/0033-2909.94.1.100.

Hall-Lande, J. A., Eisenberg, M. E., Christenson, S. L., & Neumark-Sztainer, D. (2007). Social isolation, psychological health, and protective factors in adolescence. *Adolescence*, *42*(166), 265–286 (Retrieved from http://search.proquest.com/docview/195943213?accountid=10371).

Heine, S. J. (2003). Making sense of East Asian self-enhancement. *Journal of Cross-Cultural Psychology*, *34*(5), 596–602. http://dx.doi.org/10.1177/0022022103256481.

Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination. *Personality and Individual Differences*, *50*(2), 222–227. http://dx.doi.org/10.1016/j.paid.2010.09.033.

Keyes, C. L. (2009). The Black–White paradox in health: Flourishing in the face of social inequality and discrimination. *Journal of Personality*, *77*(6), 1677–1706. http://dx.doi.org/10.1111/j.1467-6494.2009.00597.x.

Kitayama, S., & Markus, H. R. (2000). The pursuit of happiness and the realization of sympathy: Cultural patterns of self, social relations, and well-being. In E. Diener, & E. Suh (Eds.), *Subjective well-being across cultures* (pp. 113–161). Cambridge, MA: MIT Press.

Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology*, *72*(6), 1245–1267. http://dx.doi.org/10.1037/0022-3514.72.6.1245.

Kline, R. B. (2011). *Principle and practice of structural equation modeling*. New York: The Guilford Press.

Lam, T. H., et al. (2004). Suicidality and cultural values among Hong Kong adolescents. *Social Science & Medicine*, *58*(3), 487–498. http://dx.doi.org/10.1016/S0277-9536(03)00242-9.

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, *32*(6), 545–552. http://dx.doi.org/10.1016/j.cpr.2012.06.003.

Muthén, L. K., & Muthén, B. O. (2010). *Mplus: Statistical analysis with latent variables*. Los Angeles: Muthén & Muthén.

Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*(2), 85–101. http://dx.doi.org/10.1080/15298860309032.

Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*(3), 223–250. http://dx.doi.org/10.1080/15298860390209035.

Neff, K. D. (2009). The role of self-compassion in development: A healthier way to relate to oneself. *Human Development*, *52*(4), 211–214. http://dx.doi.org/10.1159/000215071.

Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity*, *9*(3), 225–240. http://dx.doi.org/10.1080/15298860902979307.

Neff, K. D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality*, *77*(1), 23–50. http://dx.doi.org/10.1111/j.1467-6494.2008.00537.x.

Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, *41*(1), 139–154. http://dx.doi.org/10.1016/j.jrp.2006.03.004.

Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y. P. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology*, *39*(3), 267–285. http://dx.doi.org/10.1177/0022022108314544.

Pauley, G., & McPherson, S. (2010). The experience and meaning of compassion and self-compassion for individuals with depression or anxiety. *Psychology and Psychotherapy: Theory, Research and Practice*, *83*(2), 129–143. http://dx.doi.org/10.1348/147608309X471000.

Raffaelli, M., & Ontai, L. L. (2004). Gender socialization in Latino families: Results from two retrospective studies. *Sex Roles*, *50*(5–6), 287–299. http://dx.doi.org/10.1023/B:SERS.0000018886.58945.06.

Rankin, J. L., Lane, D. J., Gibbons, F. X., & Gerrard, M. (2004). Adolescent self-consciousness: Longitudinal age changes and gender differences in two cohorts. *Journal of Research on Adolescence*, *14*(1), 1–21. http://dx.doi.org/10.1111/j.1532-7795.2004.01401001.x.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78. http://dx.doi.org/10.1037/0003-066X.55.1.68.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069–1081. http://dx.doi.org/10.1037/0022-3514.57.6.1069.

Ryff, C. D., & Singer, B. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics*, *65*(1), 14–23. http://dx.doi.org/10.1159/000289026.

Suh, E. J., Moskowitz, D. S., Fournier, M. A., & Zuroff, D. C. (2004). Gender and relationships: Influences on agentic and communal behaviors. *Personal Relationships*, *11*(1), 41–60. http://dx.doi.org/10.1111/j.1475-6811.2004.00070.x.

Wong, C. C., & Mak, W. W. (2013). Differentiating the role of three self-compassion components in buffering cognitive-personality vulnerability to depression among Chinese in Hong Kong. *Journal of Counseling Psychology*, *60*(1), 162–169. http://dx.doi.org/10.1037/a0030451.

Yang, X. (2016). Self-compassion, relationship harmony, versus self-enhancement: Different ways of relating to well-being in Hong Kong Chinese. *Personality and Individual Differences*, *89*, 24–27. http://dx.doi.org/10.1016/j.paid.2015.09.006.

Yarnell, L. M., Stafford, R. E., Neff, K. D., Reilly, E. D., Knox, M. C., & Mullarkey, M. (2015). Meta-analysis of gender differences in self-compassion. *Self and Identity*, *14*(5), 1–22. http://dx.doi.org/10.1080/15298868.2015.1029966.