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**The Effects of Humor and Gender on the Relationship between
Social Support and Psychological Well-Being**

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ABSTRACT

This study examines the gender differences in an extent to which humor and social support are associated with psychological well-being among 160 young adults in Hong Kong. Relationships between measures of social support and psychological well-being were not significantly different between men and women. The moderating effect of coping humor between perceived social support from friends/significant other and environmental mastery (one measure of psychological well-being) was significant for women only. In general, the findings manifested that coping humor might moderate the adaptive effects of social support on psychological well-being. Implications for the results are discussed, highlighting the possibly complex relationships among gender, social support, and humor to mental health.

INTRODUCTION

It has long been believed that social support has a beneficial effect on psychological well-being (Cohen & Wills, 1985). Social support refers to an extent to which “one’s perceptions

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of supportive behaviors from individuals in his or her social network” (Malecki & Demaray, 2006, p.376). An avalanche of research studies have illustrated the relationships between social support and various mental health outcomes (Brown, Prashantham, & Abbott, 2003; Gençöz & Özlale, 2004; Stice, Ragan, & Randall, 2004), across different age groups (Chou, 1999; Kahn, Hessling, & Russell, 2003; Wong, Yoo, & Stewart, 2007), and in a wide array of populations (Ferreira & Sherman, 2007; Karademas, 2006; Lipschitz-Elhawi & Itzhaky, 2005). Results of these studies suggested that individuals with higher levels of social support are more optimistic, experience fewer life stresses, report high levels of self-esteem, and develop a sense of mastery of life. Having a high level of social support from multiple sources (e.g., family, friends, significant other) might allow individuals to re-appraise the unpleasant situations, share their upsetting emotions, and seek alternatives to cope, thereby ameliorating the possibly deleterious impacts of negative events on mental health. Consequently, it is plausible to assume that social support might lead to better psychological well-being of individuals.

However, the positive relation between social support and measures of psychological well-being is not necessarily as strong as one might expect when gender and individual differences are included in analyses. For example, research indicated the positive effect of spouse support on women’s family satisfaction was significantly greater than the effect of spouse support on men’s family satisfaction (Parasuraman, Greenhaus, & Granrose, 1992). In their study of older married adults, Nagurney, Reich, and Newsom (2004) found that men who reported a higher desire for independence responded more negatively than women to receiving high levels of social support. Specifically, men with a high desire to be independent were more depressed and demonstrated lower levels of positive affect and self-esteem under conditions of high rather than low support received. Women, in general, are more likely to seek emotional support from their partner and friends in coping with stress than are men (Büyükhahin, 2009; Day &

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Livingstone, 2003; Felsten, 1998), and report greater satisfaction with this support received (Osseiran-Waines & Elmajian, 1994). Since women emphasize more on interpersonal relationships (Cross & Madson, 1997); whereas man gender socialization downplays relationality (Oyserman, Harrison, & Bybee, 2001), the impact of social support on psychological well-being is expected to be more pronounced within women than men.

Besides, there is growing evidence that that social support is related more to psychological well-being for some people with particular personality traits. According to VanderZee, Buunk, and Sanderman (1997), social support was particularly related to the psychological well-being of women with an external locus of control. Sumi (1997), in a sample of Japanese female college students, found that there was a significant interaction between optimism and social support in well-being, indicating that individuals with higher optimism and social support also rated themselves higher with respect to both physical and psychological well-being. Gallagher and Vella-Brodrick (2008) reported that emotional intelligence (EI) moderated the relationships between social support from significant other and positive affect. Specifically, people with high EI self-regulate emotion that contributes directly to positive affect, the influence of social support from significant other is thus minimized. In their study of secondary school teachers in The Netherlands, Brouwers, Evers, and Tomic (2001) provided confirmation that the relationships between perceived lack of emotional support from colleagues and principals and burnout symptoms were mediated by perceived self-efficacy. Teachers having little confidence in eliciting support from the school team and who are in need of such support are also more prone to emotional exhaustion.

The present study aims at assessing the role of gender and humor in the relationship between social support and psychological well-being. Hehl and Ruch (1985) maintain that “every theory of personality that claims to be comprehensive should also have assigned a place to such

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basic human phenomena as humor and laughter” (p.703). Measured as a personality characteristic or individual difference variable (Ruch, 1994; Thorson & Powell, 1993b), humor plays an important role as a potential source of psychological well-being. For example, the relationship of humor to interpersonal satisfaction has been explored in a number of studies. In their experimental study, Fraley and Aron (2004) had participants share humorous experience in an initial encounter. Results showed this experience helped developing a sense of closeness between the pairs of strangers. Individuals who often enacted humorous messages in communication, were reported lower level of loneliness (Miczo 2004; Wanzer, Booth-Butterfield, & Booth-Butterfield, 1996). Having a good sense of humor facilitates the reduction of uncertainty and also serves to reduce social distance between persons (Graham, 1995). Individuals with a high sense of humor are seen as more socially adept (Bressler & Balshine, 2006), more attractive (Murstein & Brust, 1985), and better able to reduce tensions and conflicts in relationships, which may result in greater intimacy and trust (Hampes, 1994, 1999). As such, individuals with higher sense of humor would be capable of initiating and maintaining positive relatedness with others (Kirsh & Kuiper, 2003). Similarly, individuals who are able to use humor as a means of coping with stress find their social lives more enjoyable and more confident they feel when interacting with others (Nezlek & Derks, 2001). Other than the beneficial effects on interpersonal satisfaction, the specific effect of coping humor on mental health was also evident. In a study of British expatriates living in Singapore, the use of humor to cope with stress predicted a significant decrement in depressive symptoms (Ward & Kennedy, 2001). It has been reported that those with higher levels of coping humor display less death anxiety (Thorson & Powell, 1993a; Thorson, Powell, Sarmany-Schuller, & Hampes, 1997). More recently, Ong, Bergeman and Bisconti (2004) found that bereaved older adult widows who possessed with greater humor coping skills, as measured by the Coping Humor subscale of the Multidimensional Sense of Humor Scale

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(MSHS), were more likely to capitalize on daily positive emotions against daily depressive symptoms. Presumably, individuals who can produce humor for social uses and adopt humor to cope should enjoy better relationship satisfaction and report a more positive attitude toward life experiences. It is therefore conjectured that they are more likely to establish positive relations with others and gain mastery of environment.

Some other studies examine the role of humor plays in attenuating the impact of stress on well-being. Martin and Lefcourt's (1983) findings supported the moderating effects of different measures of humor in the relationship between stressful life events and overall mood disturbance including depression, anxiety, tension, anger, and fatigue. The stress-moderating effect for sense of humor between stress and anxiety was also evident in a study of university male students (Abel, 1998). Individuals with a greater sense of humor were generally appraised to have less stress and reported to have less current anxiety than those in the low sense of humor group (Abel, 2002). In a study of executive and business women, Fry (1995) found that humor, along with optimism and perfectionism, moderated significantly the relationship between daily hassles and self-esteem maintenance, emotional exhaustion, and physical illness. Specifically, the relationship between hassles and burnout is of higher magnitude for women with low humor scores than for women with high humor scores. The study of Nezu, Nezu, and Blissett (1988), on the other hand, illustrated that humor served as a moderator of stress for depression. By having a humorous outlook on life, stressful experiences and symptoms of depression are often alleviated. Nevertheless, a few studies do not support the proposed facilitative hypothesis for humor. Contrary to the hypothesis, Anderson and Arnoult (1989) found that university students who scored highly on coping humor reported lower levels of wellness when they had experienced much stress than when they had experienced little stress; whereas those who were low on coping humor revealed no stress and wellness relation. Nor was Porterfield (1987) able to support the

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claim that humor moderated the impact of negative life events on either depression or physical illness in a sample of university students. However, those students equipping greater humor did show reduced levels of depression, suggesting a direct rather than buffering effect of humor on psychological well-being. In a later experimental study, Lefcourt, Davidson, Prkachin, and Mills (1997) also failed to find a conclusive support for the stress-moderator effects of humor on blood pressure among five stressful tasks, though there was a main effect of coping humor among women in lowering blood pressure. With the exception of Lefcourt et al.'s (1997) study, none of the aforementioned studies incorporated gender as a variable in further moderation analyses. The relative neglect of possible gender differences in the moderating role of humor might play worths further investigation (Lefcourt, 2001b).

While the “buffering” effects of humor are well explored, its “enhancing” effects (Cohen, Cohen, West, & Aiken, 2003, p.285) on psychological well-being have almost never been examined. That is, how humor interacts with social support in producing a stronger than additive impact upon psychological well-being would be of research interest. In the present study, we focused on how gender and humor interact in the relationship between social support and psychological well-being. Given the theoretical assumptions and existence of research findings, the first objective of this study was to explore if there was gender difference in the relationships between social support and psychological well-being. The second objective of this study was to examine if males and females differ in the degree to which the moderating role humor plays in the relationship between social support and psychological well-being.

METHOD

Participants and Procedure

Participants were 160 young adults (76 men and 84 women) enrolled in a part-time

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education program at a local university in Hong Kong. The mean age of the sample was 26.40 years, ($SD = 4.16$), with a range of 20 to 44. All questionnaires were distributed in class. For informed consent, the purpose of this study was announced before they filled in the questionnaires. They were assured that the information provided would be used solely for research purposes. The actual return rate of valid responses was 84.21% (160 out of 190).

Instruments

Social Support. A 12-item Chinese version of the Multidimensional Scale of Perceived Social Support (MSPSS-C) (Chou, 2000), which measures three sources of support received, namely, *family*, *friends*, and *significant other*, was administered. Responses were anchored with a 7-point scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The principal components factor analysis revealed that items of *friends* and *significant other* were collapsed into a distinct factor from this sample. In terms of internal reliability, alpha coefficients of .87 and .95 for the scores of *family* (FA: 4-item), and *friends/significant other* (FRSO: 8-item) were observed. Higher scores yielded a higher satisfaction with perceived social support from *family*, and *friends/significant other*, respectively.

Humor. *Humor production* (HP: 11-item) and *coping humor* (CH: 7-item) were measured by using the subscales of the Chinese Multidimensional Sense of Humor Scale (CMSHS) (Ho, Chik, & Thorson, 2008). Participants were asked the degree of agreement (0 = strongly disagree; 4 = strongly agree) to statements on a 5-point Likert scale. HP assesses the extent to which individuals are able to produce humor for social uses. A high score in CH is associated with a person having a better ability to employ humor for mastering in response to a difficult or stressful situation. Cronbach's alpha in this sample was .91 for the HP subscale and .67 for the CH subscale.

Psychological Well-being. Two subscales, namely *positive relations with others* (FRWO;

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an interpersonal aspect of psychological well-being) and *environmental mastery* (EM; an intrapersonal aspect of psychological well-being) of a 4-item-per-construct Chinese version of the Scales of Psychological Well-being (PWB) were given to the participants (Cheng & Chan, 2005). A high score on PRWO indicates individuals having warm, satisfying, and trusting relationships with others, and *vice versa*. Individuals with high scores on EM have a sense of mastery and competence in managing the environment, are more able to control complex array of external activities, and make effective use of surrounding opportunities. Respondents rate statements on a scale of 1 to 6, with 1 indicating strong disagreement and 6 indicating strong agreement. Cronbach's alpha for PRWO subscale was .78. The reversed scoring item (I often feel overwhelmed by my responsibilities) from the EM subscale was deleted for subsequent analyses because removing this item increased the α co-efficient dramatically from .63 to .69.

RESULTS

Correlation Analyses

The zero-order correlations among the continuous variables are shown in Table 1, separately for males and females. Regarding the correlations between measures of perceived social support and humor, only FRSO related positively to HP for males ($r = .34, p < .05$). For females, CH was slightly correlated with FA ($r = .22, p < .05$) and modestly correlated with FRSO ($r = .29, p < .01$). HP was also related positively to FRSO ($r = .33, p < .01$), but not FA ($r = .09, ns$), indicating that females in this sample who can produce humor and use humor to cope are also more likely to received better social support.

For relationships between measures of humor and psychological well-being, no relationship was found between two measures of humor and EM. HP was modestly correlated with PRWO in males ($r = .35, p < .01$) and females ($r = .30, p < .01$), respectively. It supports the findings from literature that those who can produce humor for social uses enjoy better

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interpersonal relationships with others. CH was positively related to PRWO for males ($r = .35$, $p < .01$), suggesting that males in this sample might rely more on coping humor to establish positive relations with others.

Concerning the relationships between measures of perceived social support and psychological well-being, FA and FRSO were significantly positively correlated with PRWO and EM, irrespective of gender. The correlations ranged from .25 to .59. Since our first research objective was to test whether these relationships are the same for males and females, four Fisher's Z transformations were done. Results showed that Zs ranged from .07 to .34, $ps > .05$ (two-tailed), leading to a conclusion that the relationships between measures of perceived social support and psychological well-being did not differ significantly between males and females.

Table 1. Intercorrelations among Variables Concerned ($N = 160$)

Variable	1	2	3	4	5	6
1. FA	–	.49**	.20	.07	.39**	.25*
2. FRSO	.45**	–	.34*	.19	.58**	.27*
3. HP	.09	.33**	–	.45**	.35**	.19
4. CH	.22*	.29**	.41**	–	.35**	.05
5. PRWO	.36**	.59**	.30**	.21	–	.18
6. EM	.30**	.31**	.17	.08	.14	–

* $p < .05$ (two-tailed); ** $p < .01$ (two-tailed)

Note: The intercorrelations for males are presented above the diagonal; whilst the intercorrelations for females are presented below the diagonal. FA – Perceived Social Support (Family); FRSO – Perceived Social Support (Friends/Significant Other); HP – Humor Production; CH – Coping Humor; PRWO – Positive Relations with Others; EM – Environmental Mastery.

Regression Analyses

Rather than analyzing the interaction effects among gender, social support, and humor in predicting psychological well-being for all possible relationships, we focused only on (1) the interactions of gender and HP in the relationships between FRSO and PRWO; and (2) the interactions of gender and CH in the relationships between FRSO and EM. The exclusion of FA

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in the moderation analyses is based on the rationale that it is less likely to be affected by one's sense of humor, as only a mild positive correlation between FA and CH ($r = .22, p < .05$) was observed for females in this study. Heller and Swindler (1983) called family as an "ascribed" network, that is, membership is determined by birth. As such, though the relations between FA and psychological well-being measures were evident (see Table 1), these relationships are expected not different between individuals with high or low sense of humor. Previous Z test has shown that there was no gender difference in these relationships as well. Hence, FA was entered as a covariate in the following analyses. Additionally, it was anticipated that FRSO would be more predictive of PRWO for individuals with high levels of HP. It posits that the ability to create and use humor is a fundamental aspect of relating, and PRWO has been characterized by positive affect between interactants (i.e., the extent to which close relationships were maintained). By the same token, it was postulated that FRSO could be promotive to EM particularly for individuals with high levels of CH, as using humor to cope implies control (Marziali, McDonald, & Donahue, 2008). To avoid the problem of multicollinearity, the predictor variables were "centered" by subtracting the sample mean from all individuals' scores. Two fourth-step hierarchical moderated regression analyses were conducted (Aiken & West, 1991; see Table 2). Specifically, for each analysis, FA was entered as a control variable in the first step. In the second step, FRSO, gender, and humor measures were entered to test if they explain a significant percentage of variance in psychological well-being measures while controlling for FA. In the third step, three two-way interactions terms (i.e., FRSO x gender, humor measures x gender, FRSO x humor measures) were entered. In the final step, the three-way interaction term (FRSO x gender x humor measures) was entered.

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Table 2. Summary of Hierarchical Multiple Regression Analysis Predicting Positive Relations with Others and Environmental Mastery from Perceived Social Support (Friends/Significant Other), Gender, and Humor Production/Coping Humor

	PRWO			EM		
	β	R^2	ΔR^2	β	R^2	ΔR^2
Step 1						
FA	.37***	.13	–	.27***	.08	–
Step 2						
FA	.13	.38	.25***	.18*	.13	.06*
FRSO	.48***			.21*		
G	.07			–.19*		
HP/	.15*			–		
CH	–			–.01		
Step 3						
FRSO x G	.03	.40	.02	.00	.13	.00
G x HP/	–.09			–		
G x CH	–			–.01		
FRSO x HP/	.13			–		
FRSO x CH	–			–.02		
Step 4						
FRSO x G x HP/	.03	.40	.00	–		
FRSO x G x CH	–			.29*	.17	.04*

β = standardized beta. * $p < .05$; ** $p < .01$; *** $p < .001$

FA – Perceived Social Support (Family); FRSO – Perceived Social Support (Friends/Significant Other); G – Gender; HP – Humor Production; CH: Coping Humor; PRWO – Positive Relations with Others; EM – Environmental Mastery.

Humor Production and Positive Relations with Others. When predicting PRWO, only main effects of FRSO and HP were emerged as significant (β s = .48 & .15, p s < .001 & .05, respectively)(step 2). The model explained 38.2% of the variance of PRWO, $F(4, 155) = 23.94$, $p < .001$. Neither two way ($\beta = .13$, $p > .05$; $\Delta R^2 = .02$, ns) nor three-way interaction effect ($\beta = .03$, $p > .05$; $\Delta R^2 = .00$, ns) was observed (steps 3 & 4).

Coping Humor and Environmental Mastery. There were main effects of FRSO and gender in predicting EM, (β s = .21 & –.19, p s < .05, respectively)(step 2). No main effect was found for CH. The model explained 13.4% of the variance of PRWO, $F(4, 155) = 5.98$, $p < .001$. No any single two-way interaction was observed in the third step. However, three-way

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interactions between FRSO, gender, and CH emerged ($\beta = .29, p < .05$) in the final step. The model explained 17% of the variance of EM, $F(8, 151) = 3.88, p < .001, \Delta R^2 = .04, p < .05$. A post-hoc probing of significant 3-way interaction effects was conducted by using an online program (Dawson & Richter, 2006). As depicted in Figure 1, males scored slightly higher ($M = 11.29, SD = 2.28$) in EM than did females ($M = 10.57, SD = 2.16$), $t(158) = 2.21$, Cohen's $d = 0.35, p < .05$. For females, high FRSO had a stronger association with EM at high levels of CH ($M + 1 SD$), and individuals with low levels of CH ($M - 1 SD$) reported similar levels of EM at both low and high levels of FRSO; the slope difference was significant, $t(151) = 2.21, p < .05$. A different and opposite pattern of results emerged for males. It seemed that FRSO had a stronger association with EM at low levels of CH ($M - 1 SD$), and individuals reported similar levels of EM with high levels of CH ($M + 1 SD$), irrespective of their levels of FRSO. However, there was only a near significant difference between the slopes, $t(151) = -1.90, p = .06$. Thus, coping humor had an “enhancing” effect on females participated in this study, in particular it exacerbated the positive impact of FRSO on EM.

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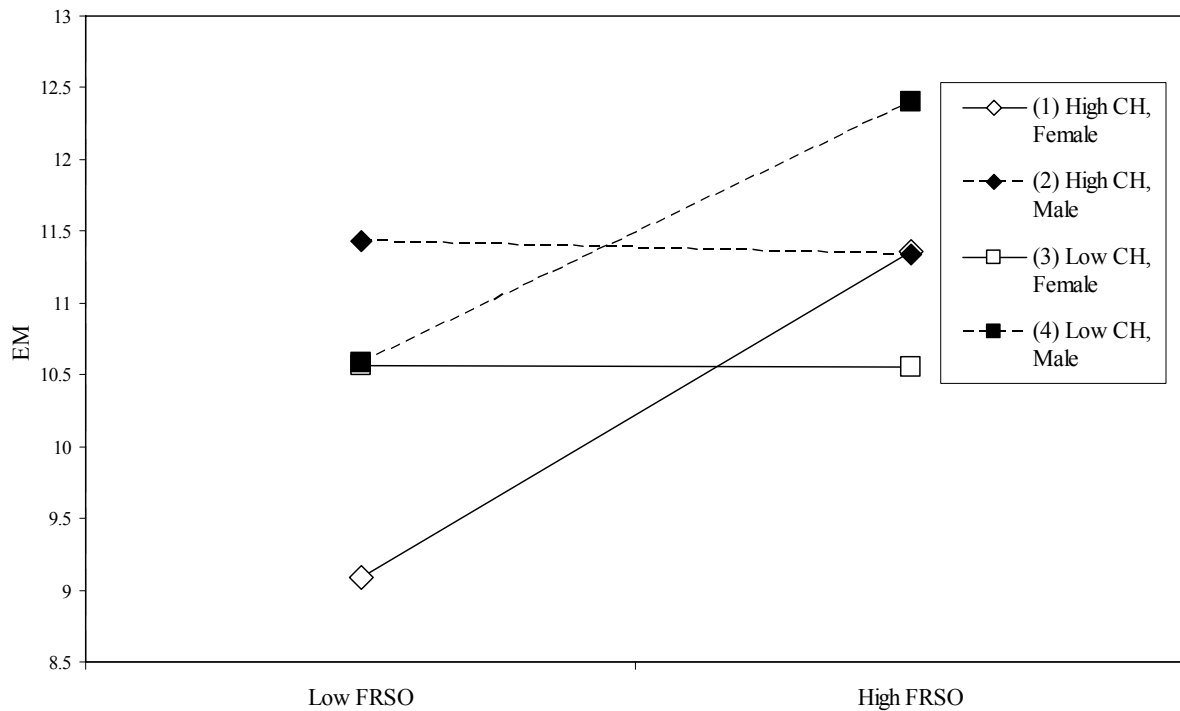


Figure 1. Three-way Interaction among Perceived Social Support (Friends/Significant Other)(FRSO), Gender, and Coping Humor (CH) in Predicting Environmental Mastery (EM)

DISCUSSION

This study examines the gender differences in the association between social support and psychological well-being. Moreover, it explores the relationships among social support, humor and psychological well-being measures. Specifically, it studies the moderation role humor plays in the relationships between social support and psychological well-being. As an exploratory study on the relationships among these variables, this study sheds light on some interesting findings which should be further elaborated.

The positive relationships obtained in the current study between measures of social support and psychological well-being for both men and women are consistent with a plethora of aforementioned studies. While these relationships are consistent with literature, no gender difference is found. Social support presumably plays a greater role in psychological well-being

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for women than for men. One of the plausible explanations is that women concern *both* the needs of themselves and others, leading to a greater dependence upon emotional involvement in interpersonal relationships for psychological well-being (Flaherty & Richman, 1989). This is particularly true for Chinese people who emphasize on *renqing* (relationship orientation), that is, the extent to which one feel the needs of reciprocating after receiving help or benefit from others (Yeung, Fung, & Lang, 2007). Since our measure of perceived social support (MSPSS-C) does not include items on the giving aspect of social support, the potential benefits of it to women's psychological well-being might have been blurred. What is more complicated is that having high levels of both giving and receiving social support does not necessarily contribute to better psychological well-being; on the contrary, it may be detrimental. For example, receiving too much support is linked to feelings of dependence and guilt (Lu & Argyle, 1992). Providing too much support may lead to stress and depression, as there is a tendency that women take on others' problems and make them their own (Stambor, 2005). Hence, future research should explore these uncertain relationships by focusing on both the receiving and giving aspects of social support.

No moderating effects were found for gender and humor production in the relationships between social support (friends/significant other) and positive relations with others. However, main effects were observed for social support (friends/significant other) and humor production in the prediction of positive relations with others. According to Erikson (1963), the major issue of young adulthood is to solve the crisis of "intimacy" versus "isolation". Thus, establishing intimate relationships is of cardinal significance in this period. Not surprisingly, participants in this study who have received higher levels of support from friends/significant other also report higher levels of positive relations with others. As expected, humor production also relates to relationship satisfaction. This result is consistent with our expectation, showing that individuals

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having high levels of social support and humor production are more likely to establish positive relationships with others.

Gender difference is evident in the moderating effects of coping humor on environmental mastery. A high level of coping humor and social support are related to better environmental mastery, but for women only. Why do women having a higher level of coping humor benefit more from social support to environmental mastery? Answering this question requires considering the possible gender differences in using humor to cope. Women, in general, are more likely to engage in self-deprecating humor in coping with adversities and absurdities (Lefcourt, 2001a), so as to enhance support within a group (Carnes, 2001). Conceivably, females who tend to laugh at themselves, are more likely to receive support from friends/significant other. In turn, they are able to choose or create contexts suitable to their personal needs and values, which implies a sense of environmental mastery. Interestingly, men with low coping humor seem to benefit more from social support than do their counterparts with high coping humor. A possible explanation would be that men high in coping humor rely more on intrapersonal resources (i.e., employ humor as a means of coping) to control their environment, which makes them less likely turn to support from friends or significant other. On the other hand, for those individuals with low coping humor, it is reasonable that they are more inclined toward interpersonal/relational resources (i.e., support from friends/significant other) to gain control of their life. As a result, the relationships between social support and environmental mastery would be stronger for men with low coping humor than for men with high coping humor who can rely on their own for mastery of environment. These potential gender differences on coping humor may elucidate why coping humor would serve a “facilitator” in the relationship between social support and environmental mastery among females but not among males. Indeed, gender stereotypes embedded in traditional culture have long emphasized on the independency of males and social connectedness of females.

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This exploratory study marks the first attempt to assess complexity between the relationships of humor and social support to psychological well-being. It also demonstrates the extent to which the moderator role gender and humor might play, albeit these effects dependent on the combined effects of types of humor, gender and social support. The major strength of the current study is to incorporate gender in the moderation analyses, which most research is neglect of it. Only by doing so can humor, in the relationship between social support and psychological well-being, be unraveled for men and women separately. Particularly noteworthy is the finding that the pattern of coping humor in the relationship between social support and environmental mastery is in the opposite way between males and females.

One of the limitations of this study is that all data are obtained from self-report measures, which is subjected to inflated biases probably due to the effects of social desirability. Another limitation is that our correlational research design renders causal inferences from the relationships among the variables concerned impossible. It is therefore recommended that longitudinal and experimental designs can be adopted in future studies so as to better capture the objective responses from and the directionality of effects among these variables. Furthermore, since our sample only consists of mainly young adults of similar ages, the generalizability of present results to other age groups is limited. Further research investigating how sense of humor interacts with social support and copes with adversities or facilitates better well-being may be conducted in diversified samples. To ascertain the universality of sense of humor as a moderator and its specific cultural characteristics, cross-cultural research is also needed. What is more, our measures of well-being only cover psychological aspects without considering the aspects of physical health. Future research focusing on measures of both physiological and psychological responses would seem promising.

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