Close Friendships and Mental Health of Korean American Adolescents: The Moderating Effect of Personality

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Abstract

During adolescence, the youth increasingly rely on peers for intimacy and support. Since traditional Korean values emphasize the centrality of the family, this shift in emotional attachment may be especially challenging for Korean American youth. However, it is not known whether adolescents who lack a supportive close friendship may be at greater risk for mental health problems. The aims of this study were to determine whether the quality of the adolescents’ closest friendship is associated with the mental health of Korean American adolescents, and whether specific personality traits of the youth may moderate any association between the quality of their friendships and their mental health problems. This cross-sectional study included 138 Korean American adolescents from community settings in California. A demographic questionnaire, the Relationship Quality Questionnaire, the NEO Five-Factor Inventory-3, and the Youth Self Report were completed by adolescents. Hierarchical regression analyses were used to examine the aims. Quality of the closest friendship was not a significant predictor of mental health problems for youth in general. However, the personality trait of agreeableness did predict better mental health. Agreeableness also showed a moderating effect, indicating that for youth who had less agreeable, more antagonistic personalities, a high quality relationship with their best friend was associated with fewer mental health problems. Longer residence in the U.S. was also related to better mental health. Findings suggest the need for early identification of youth who have poor relationships with close friends or a more antagonistic personality. It may be especially important to provide supportive mental health interventions for Korean American adolescents with these combined risks.
1. Introduction

Adolescents undergo a shift in their social affiliations from family to peers, becoming less emotionally dependent on their parents and building closer relationships with their friends. During this transition, the adolescent increasingly relies on peers for intimacy and social support and less on parents (Moretti & Peled, 2004). Close friends become significant attachment figures who can represent a secure base for the youth as they manage the emotional stress and challenges of adolescence (Meurling, Ray, & LoBello, 1999). Research has shown that peer relationship qualities are more strongly associated with adolescent attachment security than are parental relationship qualities, even during early and mid-adolescence (Allen & Miga, 2010). Yet the quality of an adolescent’s friends can vary, either serving as a positive source of emotional support and caring or contributing to fears of rejection and psychological insecurity. Substantial evidence has accumulated to show that unreliable or insensitive attachment figures can reduce resilience in coping with stressful life events and contribute to mental health problems (Mikulincer, Shaver, & Berant, 2013). As key attachment figures during adolescence, close friends may have a major impact on the adolescent’s mental health.

The influence of close friendships is of particular interest for Asian adolescents, including youth who are Korean American. Asian cultural values place a strong emphasis on connectedness to the family so the developmental shift in emotional attachment from parents to peers may be especially challenging for these youth (Yeh, 2003). Yet problems in achieving this developmental task could affect the quality of their peer relationships and have significant implications for their mental health (Johnson, et al., 2009; Pugh & Hart, 1999). Only one study has examined the association between close peer relationships and the mental health of Korean American adolescents. Cho & Bae (2005) found that a poor relationship with one’s friends was significantly associated with more internalizing problems (i.e. depression, anxiety, withdrawal) among Korean American adolescents. This study suggested that poor quality in the close friendships of Korean American adolescents could result in feelings of isolation or rejection that contribute to greater risk for mental health problems.

In support of the above research, many studies have shown a positive peer relationship as one of the important factor of mental health problems in diverse ethnic adolescents. Chester, Jones, Zalot, and Sterrett (2007) found that African American youth who had better quality in their peer relationships had lower levels of depressive symptoms, less aggression, and fewer delinquent behaviors. McDonald, Bowker, Rubin, Laursen, and Duchene (2010) found that a supportive
relationship with their same-sex best friend significantly predicted lower social anxiety in a group of ethnically diverse American adolescents, whereas, conflict with close friends significantly predicted higher levels of depression in a large sample of Canadian adolescents (Bosacki, Dane, & Marini, 2007). A few longitudinal studies have also found that a decline in the quality of peer relationships was a significant factor in the development of depressive symptoms (Mendle, Harden, Brooks-Gunn, & Graber, 2012), but it did not affect delinquent behaviors (Selfhout, Branje, & Meeus, 2008). Overall, these studies suggest that more positive, supportive peer relationships are an important protective factor for an adolescent’s mental health.

However, it is not known whether the quality of close friendships may be more or less important for the mental health of youth with certain personality traits. Personality traits are the unique and relatively stable characteristics of an individual’s behavior, thought, and emotions. These traits can determine an individual’s need for relationships or the value they place on close relationships. In a seminal study, Asendorpf and Wilpers (1998) found that extraversion, agreeableness and conscientiousness were associated with more positive, supportive close relationships. Lopes, Salovey, and Straus (2003) found that college students who were extraverted were more satisfied with their relationships while students with the trait of neuroticism (i.e. emotionally sensitive and moody) were less satisfied. King and Terrance (2006) reported that college students who had passive-aggressive, self-defeating, and borderline personality traits tended to view their closest friendship in more negative ways, suggesting poorer friendship quality. Lastly, Lincoln (2008) examined the mediating role of social support from relatives and friends in the relationship between personality traits and psychological distress. Investigators found that social support mediated the influence of personality traits on psychological distress differently for individuals with traits of extraversion versus neuroticism. Although none of these studies has addressed how personality traits may moderate the effect of close relationships on mental health of adolescents, research to date does implicate differences in the potential relationships of individuals who possess varied traits. It is possible that these traits may moderate the influence of close friendships on adolescents’ mental health.

Research Aims

The purpose of this study was to advance knowledge regarding the influence of close friendships on the mental health of Korean American adolescents. An additional goal was to better understand whether any effect of close friendships on mental health might differ based on personality traits of the adolescents. The specific aims were 1) to determine whether the quality of the adolescents’ closest friendship was associated with the mental health of Korean American adolescents, and 2) to determine whether specific personality traits would moderate any association between the quality of their closest friendship and mental health.
problems of these youths.

2. Methods

2.1. Participants and Setting

The sample for the current study included 138 adolescents. Participants were recruited from various Korean communities in California (Korean churches, Korean language schools, websites for the Korean community, Korean shopping malls and restaurants, and mental health centers for Asians and Pacific Islanders). Inclusion criteria were: 1) 10 - 19 years old, 2) is a Korean living in California, 3) able to communicate in English or in Korean, and 4) able to understand the purpose of this study.

2.2. Procedure

Approval was obtained from the Committee on Human Research (CHR) of the University of California-San Francisco for all aspects of this study. A packet of study materials including an informed written consent and self-report measures was sent to those who were interested in this study. Completed materials were returned back to the researcher. Participants received a $5 gift card for participation. Follow-up e-mail or letters occurred when necessary to send reminder e-mail or to gather missing information. If the participant received above the clinical range scores on mental health problems, the researcher discussed the findings with the adolescent and parent or legal guardian and gave them a list of mental health resources. This study was conducted between January 2013 and December 2014.

2.3. Measures

2.3.1. Demographic Variables

Gender, age, length of residence in the U.S., parent education, and adequacy of family income were assessed. Parent education was assessed for each parent on a 4-point scale ranging from high school diploma or below (coded as 1) to graduate school or higher (coded as 4). Family income was assessed on the degree of adequacy of family income to meet their family's needs ranging from not enough money for food and place to live (coded as 1) to more money than we need (coded as 4).

2.3.2. Close Friendship Quality

Close friendship quality was assessed using the 21-item Relationship Quality Questionnaire (RQQ) (Meurling et al., 1999), a modified version of the Friendship Quality Questionnaire (FQQ) developed by Parker and Asher (1993). Participants indicated how true certain characteristics were about their relationship with their best friend (e.g., the friend makes them feel good about their ideas, gives them advice when figuring things out, makes them feel important and special, they tell each other their problems, and they get over arguments quickly).
Response options were a 5-point Likert scale, with higher scores indicating better quality of their relationship with the close friend, suggesting that the friend serves as a greater source of emotional support and psychological security. The RQQ has not been used extensively with Asian American adolescents. However, it has good reliability ranging from .84 to .89 for the Cronbach’s alpha and established a factor structure with seven domains (Meurling et al., 1999). In this study, the scale demonstrated good internal consistency (α = .86).

2.3.3. Personality Traits
Personality traits were measured using the NEO Five-Factor Inventory-3 (NEO-FFI-3) that is widely used to assess the following five personality traits: Neuroticism (N; emotional instability, distress in response to stressors), Extraversion (E; sociability, energy, positive emotionality), Openness to Experience (O; appreciation of personal emotion, curiosity, independent judgment), Agreeableness (A; trustfulness, altruism, cooperativeness), and Conscientiousness (C; goal directed, self-control, organization) (McCrae & Costa, 2007). All five traits scores were used in this study. Each trait contains 12 items with the 4-point Likert scale. The NEO-FFI-3 has been used extensively in research on personality traits, and the scale demonstrated acceptable to good internal consistency (ranged from α = .72 for Agreeableness to α = .83 for Conscientiousness) and the five-factor structure was identified in the original testing of the scale with a sample of 500 adolescents including 8% Asian Pacific Islander (API) adolescents (McCrae & Costa, 2007). In this study, Cronbach’s alphas were .80 for Neuroticism, .75 for Extraversion, .75 for Openness, .72 for Agreeableness, and .81 for Conscientiousness.

2.3.4. Mental Health Problems
Mental health problems were measured using the Youth Self Report (YSR), a self-reported questionnaire that is widely used to assess adolescents’ problematic feelings, thoughts, and behaviors during the past 6 months (Achenbach & Rescorla, 2001). The YSR has eight empirically-based syndrome scales: Anxious/Depressed, Withdrawn/Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Rule-Breaking Behavior, and Aggressive Behavior. Because our main interest was in considering the moderating effect of personality with the relationship between close friendship quality and overall mental health problems, the Total Problems score was used for our analyses. The YSR consists of 112 items using a 3-point Likert scale, with higher scores indicating more mental health problems. The YSR has demonstrated reliability and validity across various populations including Korea as well as Western countries (Ivanova et al., 2007; Rescorla et al., 2007). Excellent Cronbach’s alpha scores for the Total Problems scale (α = .93 - .95) have been established (Achenbach & Rescorla, 2001; Ebesutani et al., 2011; Ivanova et al., 2007; Rescorla et al., 2007). In this study, Cronbach’s alpha was .94 for the Total Problems scale.
2.4. Data Analysis

SPSS version 22 was used to compute all statistical procedures for this study. As preliminary analyses, descriptive statistics including frequency and percent or means and standard deviations (SDs) were used for all key variables. Bivariate correlations for continuous variables and t-tests for categorical variables were also computed. The distribution for adequacy of family income and parent education warranted creation of dichotomous groupings for these categorical variables. In order to examine specific aims of this study, hierarchical linear regression analyses were used. To examine Aim 1, length of residence in the U.S., which is the only significant demographic variable, was entered in the regression analysis at the first step to control for its effect. In the second step, the RQQ score for quality of the close friendship was entered. To examine Aim 2, five separate hierarchical regressions were computed initially to examine the unique contribution of each personality trait and its interaction to the quality of the close friendship. In these models, length of residence in the U.S. was entered at the first step, the score for quality of the friendship and one of the personality traits were entered at the second step, and the interaction between friendship quality and the trait was entered at the third step. Significance level was set at an alpha level of .05 in all analyses.

3. Results

The sample for the current study included 138 Korean American adolescents (mean age = 14.4, SD = 2.1, 59% female). The average length of residence in the U.S. was 12.4 years (ranges from less than 1 to 18, \(SD = 4.1\)). Approximately 70% of parents completed either college or graduate studies. Most participants reported that “their family had enough money but no extra,” or “they had more money than they need.”

Table 1 shows bivariate correlations for all key variables. Length of residence in the U.S. had a high correlation with age and a low but significant correlation with the RQQ score for quality of the close friendship.
with mental health problems. The personality trait of neuroticism had a high positive correlation with mental health problems. The personality trait of agreeableness had a negative moderate correlation with mental health problems. Age and the personality traits of extraversion, openness, and conscientiousness were not significantly correlated with mental health problems. In addition, no significant differences in mental health problems were present between gender, among father and mother’s educational level, or family income. Quality of the adolescents’ closest friendship was associated positively with 3 personality traits: extraversion, agreeableness and conscientiousness but it was not associated with the adolescents’ mental health problems.

Table 2 shows findings for Aim 1. In the final model for this regression (step 2), length of residence in the U.S. had a significant relationship to mental health problems ($\beta = .22, p < .05$), explaining 4.1% of the variance in mental health problems. Quality of the closest friendship was not a significant predictor ($\beta = −.11, p = .21$). The total model explained 5.3% of the variance in mental health problems ($F(2, 123) = 3.44, p < .05$).

Among the five separate hierarchical regression models, only 1 personality trait, agreeableness, showed a significant interaction with quality of the closest friendship. Table 3 shows the findings of this regression. In the final model for this regression (step 3), length of residence in the U.S. was a significant predictor of the mental health problems ($\beta = .25, p < .01$), explaining 4.6% of the variance in mental health problems. Both friendship quality ($\beta = −1.09, p < .01$) and the agreeableness trait ($\beta = −1.33, p < .01$) were significant predictors when their direct effects were examined. Together, friendship quality and agreeableness explained an additional 9.5% of the variance in mental health problems ($F$ change $= 6.54, p < .01$). Finally, the interaction between friendship quality and agreeableness accounted for an additional 4.6% of the variance in mental health problems ($F$ change $= 6.66, \beta = 1.62, p < .05$). In order to examine the interaction effect, correlations were computed between friendship quality and mental health problems for adolescents with low versus high agreeableness. Youth were split at the mean level of the trait of agreeableness to determine these groups and partial correlations were computed controlling for length of residence in the U.S.

Table 2. Hierarchical regression analysis for effects of demographics and close friendship quality on mental health problems.

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of residence in the U.S.</td>
<td>1.21</td>
<td>.53</td>
<td>.20*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of residence in the U.S.</td>
<td>1.30</td>
<td>.53</td>
<td>.22*</td>
</tr>
<tr>
<td>Close friendship quality</td>
<td>−.18</td>
<td>.15</td>
<td>−.11</td>
</tr>
</tbody>
</table>

Note: $R^2 = .04$ for Step 1; $R^2$ change = .01 for Step 2 ($p = .21$). *$p < .05$. 

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Table 3. Effects of close friendship quality, agreeableness, and their interaction on mental health problems.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of residence in the U.S.</td>
<td>1.28</td>
<td>.53</td>
<td>.22*</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Length of residence in the U.S.</td>
<td>1.51</td>
<td>.52</td>
<td>.25**</td>
</tr>
<tr>
<td>Close friendship quality</td>
<td>−.10</td>
<td>.14</td>
<td>−.06</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>−1.19</td>
<td>.35</td>
<td>−2.94**</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of residence in the U.S.</td>
<td>1.52</td>
<td>.50</td>
<td>.25**</td>
</tr>
<tr>
<td>Close friendship quality</td>
<td>−1.78</td>
<td>.67</td>
<td>−1.09**</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>−5.37</td>
<td>1.66</td>
<td>−1.33**</td>
</tr>
<tr>
<td>Close friendship quality × Agreeableness</td>
<td>.05</td>
<td>.02</td>
<td>1.62*</td>
</tr>
</tbody>
</table>

Note: $R^2 = .05$ for Step 1; $R^2$ change = .10 for Step 2 ($p < .01$); $R^2$ change = .05 for Step 3 ($p < .05$). *$p < .05$, **$p < .01$.

Correlations indicated that for youth who were low in agreeableness, better quality of the relationship with their best friend was associated with fewer mental health problems ($r = −.33$, $p < .05$). However, for youth who were high in agreeableness, there was no significant relationship between friendship quality and mental health problems ($r = .11$, $p = .36$). The overall model was significant, with all variables explaining 18.8% of the variance in mental health problems of the Korean American adolescents ($F(4, 117) = 6.76$, $p < .001$).

4. Discussion

This study examined the association between the quality of Korean American adolescents’ relationships with their closest friends and their mental health problems as well as the ways in which their personality traits might moderate any effect of the close friendship on their mental health. Findings related to Aim 1 indicate that quality of the friendship did not predict mental health problems for these youths overall, but length of residence in the U.S. did predict more problems. However, one personality trait (agreeableness) did moderate the relationship between friendship quality and adolescent mental health, indicating the importance of this relationship for a specific group of youth (Aim 2). Adolescents who had less agreeable personalities were at greater risk for mental health problems by virtue of their personality trait. However, the quality of the relationship with their best friend served as a protective factor, reducing their mental health risk. In contrast, the quality of their closest friendship did not influence the mental health problems of adolescents who had more agreeable personalities in any way. For this group, their trait of agreeableness itself reduced their risk for mental health problems. The four other personality traits studied did not demonstrate a significant moderating effect between close friendships and
4.1. Friendship Quality and Mental Health

Our findings regarding the lack of any influence of close peer relationships on mental health problems for our entire sample are in conflict with results from a number of studies that showed a significant relationship between poor quality of peer relationships and depression, social anxiety, and internalizing problems (Bosacki et al., 2007; Chester et al., 2007; Cho & Bae, 2005; McDonald et al., 2010; Mandle et al., 2012). However, our findings are consistent with results from 2 studies showing that the quality of close friendships was not a significant factor in delinquency (Selphout et al., 2008) or in the development of overall mental health problems (Okello, Nakimuli-Mpungu, Musisi, Broekaert, & Derluyn, 2014). It is possible that the quality of close friendships plays a greater role in predicting internalizing problems such as depression and anxiety than for externalizing problems. Because we looked at the total mental health problems of the adolescents, this differential effect may have been missed.

4.2. Agreeableness and Mental Health

To our knowledge, our finding regarding the potential impact of agreeableness as a predictor and moderator of Korean American adolescents’ mental health has never been reported. However, there is a body of literature indicating that agreeableness is associated with greater psychological resilience in adolescents (Fayombo, 2010), better mental health outcomes among college students (Shirazi et al., 2012), and subjective well-being (Haslam et al., 2009). A longitudinal study found that 8 year old boys and girls who scored higher on agreeableness had fewer behavior problems and lower levels of substance abuse and depression 25 years later (Laursen et al., 2002). In contrast, individuals low on agreeableness are typically described as antagonistic, impulsive, and irritable, resulting in a greater vulnerability to social rejection (Bierman, 2003). Research indicates that adolescents who are rejected by their peers are more likely to be lonely, and to have lower self-esteem and more internalizing problems (Smetana, Campione-Barr, & Metzger, 2006). For less agreeable individuals, having a close friend who can enhance their sense of belonging, provide emotional security or buffer their less socially acceptable behavior with others may be especially important for their ability to cope successfully and manage ongoing challenges in their lives. Adolescents who describe feeling better about the quality of their close friendships have shown greater feelings of belongingness and decreased loneliness in previous research (Chen, 2009). This type of supportive close relationship may be less important for the mental health of adolescents whose agreeable personality naturally increases their likelihood of being well-received by others and achieving social success.

These findings may have particular salience for Asian American adolescents who experience strong expectations within their culture to embrace Asian family values of interpersonal harmony, interdependence, and conformity to family and social norms (Greenfield et al., 2003; Kim et al., 2001). Korean American youth
whose less agreeable personalities do not comply with these values may experience unique psychological conflicts that erode their mental health. Because of this increased vulnerability, emotional support and caring from a close friend may act as more essential mental health resource.

4.3. Limitations and Future Research

Limitations of the study include its cross-sectional design. The association between quality of close friendships and adolescent mental health may look different over time. Longitudinal studies are needed to determine whether the quality of close friendships measured early in life predict the development of mental health problems as a child develops. In addition, our measure of the quality of peer relationships only examined the adolescents’ closest friendship. Measures that assess other peer relationships may improve the understanding of peer effects on mental health. For example, whether their best friend is a Korean American or an American may be one of the important factors associated with mental health, in that having a best friend with same race/ethnicity may provide their sense of belonging and emotional security, leading to better mental health, especially in Korean American adolescents who are expected to embrace collectivism. Because our measure of the quality of peer relationships has not been extensively studied in Korean American adolescents, it needs more psychometric testing among this population. Also, the use of a structured clinical interview that does not solely depend on self-report would strengthen the reliability of the assessment of adolescent mental health problems. Lastly, findings from our convenience sample may not be generalizable to the larger Korean American population in the U.S. or to other cultural groups, including other Asian American adolescents.

Findings of this study have a number of implications for future research. Emotional support and shared intimacy with a close friend may influence some mental health problems more than others. Therefore, it will be important to examine how the quality of a close friendship is related to specific problems, especially whether it has a greater impact on internalizing behavior problems such as depression and anxiety or externalizing behavior problems such as aggression and rule-breaking behaviors. Research with a larger sample is also needed to more carefully examine the moderating effects of agreeableness. A larger sample size will help to find potential significant moderating effects of other personality traits as well. Because length of residence in the U.S. predicted more mental health problems for the youth, future research should examine in detail how it may be influencing these problems.

4.4. Clinical Implications

Findings have implications for identification of Korean American youth at greater risk for mental health problems, specifically adolescents who show evidence of more antagonistic and irritable approaches with their peers or families
and who have few close friends whom they can turn to for support and caring. Although this study did not find a significant relationship between the quality of an adolescent’s closest friendship and mental health problems overall, friendship quality was a protective factor for the mental health of adolescents who had less agreeable personalities. Education about relationships among overall mental health problems, close friendships, and personality traits can be provided for health care professionals. Assessment of these risk factors can be included in pediatric clinics or in counseling service programs. Also, as a part of community-based prevention strategies, mental health awareness education based on findings from this study can be provided targeted for family members, school teachers, and community leaders, such as pastors and youth community program leaders. Support groups may be an effective approach to working with these youths to improve their mental health. For example, development and evaluation of mood/anxiety mobile tracker program utilizing peer support may be one of the innovative strategies, reflecting mobile generation and current trend of research and clinical interventions using mobile health and technology.

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References


