Perceived school kindness and academic engagement: The mediational roles of achievement goal orientations

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Abstract
Perceptions of kindness at school have been linked to a few positive psychological outcomes including optimism, happiness, life satisfaction, and social goals. However, limited evidence has been generated on how kindness relates to academic-related outcomes. This study explored the association of perceived school kindness with different domains of academic engagement. It also examined whether school kindness would have indirect effects on engagement outcomes via the intermediate variables – achievement goal orientations (i.e., mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals). Results showed that school kindness was positively correlated to agentic, behavioral, cognitive, and emotional engagement. Bias-corrected bootstrapping analyses demonstrated that perceived school kindness had indirect effects on behavioral engagement and cognitive engagement via the intermediate variables, approach goals. While mastery-approach goals mediated the link between perceived school kindness and emotional engagement, performance-approach goals mediated the association of perceived school kindness with agentic engagement. Theoretical and practical implications of the findings are discussed.

Keywords
academic engagement, achievement goal orientation, school kindness

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Positive school climates and social-emotional learning competencies serve as essential catalysts of optimal academic outcomes (Cohen, McCabe, Michelli, & Pickeral, 2009; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Shochet, Dadds, Ham, & Montague, 2006). Studies have shown that positive school climates were associated with mental health, improved self-concept, elevated levels of academic motivation, and reduced bullying tendencies (see Thapa, Cohen, Guffey, & Higgins-D’Alessandro, 2013 for a review). In particular, several dimensions of positive school climates such as safety (Devine & Cohen, 2007), positive teacher-student relationship (Gregory & Cornell, 2009), and school connectedness (Shochet et al., 2006), have been found to be critical for boosting academic success and social emotional development. Indeed, creating conducive school environments plays a vital role in promoting positive academic and non-academic functioning. Kindness that is shared across members of a school community has been recognized as a vital component of positive school climate (e.g., Simons-Morton & Crump, 2003).

The present study explored the association of school kindness, perceived school climate that nurtures kindness, with positive academic outcomes among students. Kindness refers to individual’s tendencies to perform favors and good actions to benefit others (Park & Peterson, 2006; Seligman, Steen, Park, & Peterson, 2005). Kindness is one of the most highly endorsed character strengths and virtues around the world (McGrath, 2015; Park, Peterson, & Seligman, 2006). Rowland (2018) has also pointed out that ‘cultivating and extending kindness is an important step in creating a kinder society’ (p. 34).

**Kindness and student outcomes**

Existing literature has highlighted the potential significance of teaching kindness in the school settings (Kaplan, deBlois, Dominguez, & Walsh, 2016). These benefits may include but are not limited to improved social-emotional functioning (Flook et al., 2015) and higher levels of well-being (Otake et al., 2006). Over the years, various school-based kindness programs like Kindness in the Classroom Program (The Random Acts of Kindness Foundation, 2015) and Kind Campus Program (Ben’s Bells Project, 2015) have been created to cultivate kindness in student populations.

There has been growing evidence suggesting that kindness is an important virtue that relates to psychological and social well-being. Research has indicated that kindness could increase not only the receiver’s but also the giver’s well-being (Cotney & Banerjee, 2019). Studies have demonstrated that performing acts of kindness was associated with increased levels of psychological well-being (Buchanan & Bardi, 2010; Dunn, Aknin, & Norton, 2008; Layous, Lee, Choi, & Lyubomirsky, 2013; Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006), higher levels of peer acceptance (Layous, Nelson, Oberle, Schonert-Reichl, & Lyubomirsky, 2012), and lower levels of social avoidance goals (Trew & Alden, 2015).
A recent systematic and meta-analytic review has also demonstrated that there was a small to medium effect size between kindness interventions and well-being outcomes (Curry, Rowland, Van Lissa, Zlotowitz, McAlaney, & Whitehouse, 2018). Even the act of simply counting acts of kindnesses has increased subjective happiness among college students (Otake et al., 2006). Documenting acts of kindness through a diary has also resulted in higher levels of connectedness to others and optimism in a clinical sample (Kerr, O’Donovan, & Pepping, 2015). In general, character strengths such as kindness and social intelligence that potentially promote connectedness to others, have positively predicted well-being in student populations (Gillham et al., 2011).

Despite the continuously growing body of knowledge on how kindness may affect individual’s emotional, behavioral, and social well-being, previous studies focused more on examining the effects of dispositional kindness (Park, Peterson, & Seligman, 2006; Shimai, Otake, Park, Peterson, & Seligman, 2006) or kindness interventions at the individual level (Buchanan & Bardi, 2010; Kerr et al., 2015; Otake et al., 2006). To date, only limited research has examined how school climate that supports kindness (or school kindness), may influence students’ positive psychological functioning. Furthermore, although a study showed that individual student’s early prosocial tendencies (e.g., cooperating and consoling behavior) impacted their academic achievements five years later (Caprara et al., 2000), it remains largely unknown whether school kindness relate to positive student academic outcomes. One exception is a study by Binfet et al. (2016). It showed a positive link between school kindness and relevant criterion variables such as life satisfaction, prosocial goals, classroom supportiveness, and academic self-efficacy in a sample of grade 4 to grade 8 students (Binfet, Gadermann, & Schonert-Reichl, 2016).

**The present study**

Given that kindness has several psychological benefits in individuals and is a desired organizational virtue that promotes morale of its members and binds people together (Park & Peterson, 2003), it is important to study the effects of kindness in the organizational school context on students’ academic-related functioning. Research in positive organization reported that organizational settings such as schools provide psychological safety to its members when they foster a positive culture where kindness and acceptance become the norm (Carmeli & Gittell, 2009). Thus, it is conceivable that in kind school environments students may feel more respected, supported, and valued.

In the current study, we examined the link between students’ perception of school kindness and their academic engagement. Academic engagement pertains to the students’ overall involvement in the school settings (Fredericks, Blumenfeld, & Paris, 2004). Specifically, we used the four-factor model of academic engagement developed by Reeve and Tseng (2011). This engagement model has pinpointed four dimensions of academic engagement namely – agentic, behavioral, cognitive, and
emotional engagement. Agentic engagement refers to the students’ proactive participation to classroom lecture and discussions. Behavioral engagement pertains to students’ effortful desire to perform academic activities. Cognitive engagement refers to the students’ desire to apply cognitive and metacognitive strategies when carrying out academic tasks. Emotional engagement pertains to the extent to which students experience positive emotions (e.g., joy) when performing school-related activities. It is possible that school kindness may be linked to elevated levels of academic engagement dimensions because previous research has demonstrated that performing acts of kindness increased students’ school engagement (Ouweneel, Le Blanc, & Schaufeli, 2014).

To provide preliminary evidence on the motivational processes underpinning the hypothesized association of perceived school kindness with academic engagement, we also explored whether perceived school kindness would have indirect effects on different dimensions of academic engagement via achievement goal orientation. The achievement goal framework has pointed out that there are four categories of goals for student learning namely – mastery-approach goals, mastery-avoidance goals, performance-approach goals, and performance avoidance goals (Elliot & McGregor, 2001; Elliot & Murayama, 2008). Mastery-approach goals refer to the students’ intent to acquire and master the content of learning material. Mastery-avoidance goals pertain to the desire to avoid failure to master the content of learning material. Performance-approach goals refer to the desire to outperform other students or peers. Performance-avoidance goals pertain to the intent to avoid being outclassed by classmates or other students. Although this motivational model has considered mastery-approach goals to be the most adaptive dimension of achievement goal orientation (Elliot & McGregor, 2001; Elliot & Murayama, 2008), it is likely that performance-approach goals hold significant benefits in collectivist societies (i.e., Philippines) because studies have shown that even extrinsic motivation may be associated with positive learning outcomes in collectivist cultural contexts (Cheng & Lam, 2013; Datu, 2018).

The hypothesized indirect effects of school kindness on academic engagement domains through the intermediate variables – achievement goal orientation dimensions are corroborated by the existing positive psychological literature. The framework of our study was based on two theoretical perspectives namely: The engine theory of well-being (Jayawickreme, Forgeard, & Seligman, 2012) and the hierarchical model of achievement motivation (Elliot, 1999).

Firstly, the engine theory of well-being (Jayawickreme et al., 2012) has posited that well-being could be categorized into input, process, and outcome variables. Input variables pertain to any external (e.g., perceived support from teachers) or internal (e.g., gratitude and kindness) variables that predict essential outcome variables. Outcome variables refer to voluntary actions that serve as indicators of individuals’ well-being like accomplishment, meaningful relationships, and engagement (e.g., academic achievement). This theory has proposed that input variables impact outcome variables via the mediating influence of process variables. Process variables refer to any internal psychological states that can shape decisions
or behaviors (e.g., self-efficacy). In this study, we operationalized school kindness as an extrinsic input variable as previous studies have shown that this construct was linked to academic self-efficacy and well-being outcomes (Binfet et al., 2016). Consistent with the classification of well-being variables proposed in previous research (Datu, Yuen, & Chen, 2018), we categorized academic engagement as an outcome variable. We also operationalized achievement goal orientation as a process variable. This approach is supported by the findings in existing literature on the mediational effects of achievement goal orientation on the link between various input variables and academic-related outcomes (Xiang, Liu, & Bai, 2017).

Secondly, the hierarchical model of achievement motivation (Elliot, 1999) can support the hypothesized indirect link of school kindness to academic engagement via the intermediate variables—achievement goal orientations. This model has pointed out that some personal and environmental factors can influence individuals’ tendencies to espouse specific achievement goals which in turn, can impact on various performance or achievement outcomes (Elliot, 1999). It is likely that school kindness may be associated with mastery-approach goals, as previous research has demonstrated a positive correlation between positive school climates that promote mutual respect, positive interaction, and emotional support between teachers and students, and mastery goals (Roeser, Midgley, & Urdan, 1996; Wang & Holcombe, 2010).

However, there were inconsistent findings between students’ perception of school climate and performance goals. As a result, we did not propose any hypothesis between school kindness and the performance-approach goal, especially given the dearth of literature showing a link between organizational-level kindness and learning outcomes in collectivist contexts.

As past literature has indicated that mastery-approach goals can be related to adaptive achievement outcomes (Elliot & McGregor, 2001; Elliot & Murayama, 2008), it is anticipated that mastery-approach goals may be linked to student engagement dimensions in the present study. Consistent with prior research on the role that performance goals play in collectivist contexts (Yu & Martin, 2014), it is possible that even performance-approach goals may be associated with higher levels of academic engagement. Lastly, as this theory has specified that achievement goal orientations can mediate the effects of personal or environmental variables on a wide range of academic outcomes (Elliot, 1999), it is anticipated that school kindness may have indirect effects on academic engagement via the intermediate-variables—mastery-approach goals and performance-approach. Given the scarcity of investigations demonstrating associations between kindness and performance-approach goals as well as kindness and avoidance goals (i.e., mastery and performance avoidance goals), we did not propose hypotheses on school kindness and such achievement goal orientations.

Therefore, the current study aimed to examine the association of school kindness with various dimensions of academic engagement among selected senior secondary school students in the Philippine context. It also explored the indirect effects of perceived school kindness on engagement domains via the intermediate
variables – achievement goal orientations. In the present study, three related ques-
tions were investigated: (a) Does perceived school kindness relate to students’
academic engagement dimensions?; (b) Do students’ achievement goal orientations
relate to academic engagement dimensions?; and (c) Which achievement goal orien-
tations mediate the association between school kindness and academic engagement
dimensions?

The following hypotheses are tested in this study:

Hypothesis 1: Perceived school kindness will positively predict all domains of aca-
demic engagement.

Hypothesis 2: Perceived school kindness will positively predict mastery-approach
goals.

Hypothesis 3: Mastery-approach goals and performance-approach goals will posi-
tively predict all dimensions of academic engagement.

Hypothesis 4: Perceived school kindness will have indirect effects on all domains of
academic engagement via the intermediate variables – mastery-approach goals.

Methods

Participants

The sample comprised of 116 senior secondary school students from three classes in
a private high school in Makati City, Philippines. The average age of the partici-
pants was 17.39 (SD = 0.83). There were 77 female and 36 male students. Three
students did not report their gender. Before administering the survey, approval to
conduct this research was secured from the Human Research Ethics Committee of
the first author’s university. All participants signed active consent forms prior to
participating in the study.

Measures

School kindness. The five-item School Kindness Scale (Binfet, Gadermann, &
Schonert-Reichl, 2016) was used to measure the participants’ perception of kind-
ness in the school setting. Items were marked on a five-point likert scale from 1
(disagree a lot) to 5 (agree a lot). These are sample items in the scale: ‘Kindness
happens regularly in my classroom’ and ‘The adults in my school model kindness’.
Results of confirmatory factor analysis showed that scores from the unidimen-
sional model of school kindness fit the present sample as evidenced by the following
fit indices: \( \chi^2 = 9.59, \text{df} = 5 \), Goodness of fit index (GFI) = 0.97, Comparative fit
index (CFI) = 0.96, Tucker-Lewis index (TLI) = 0.95, Standardized root mean
square residual (SRMR) = 0.023, Root mean square error of approximation (RMSEA) = 0.07. The Cronbach’s alpha reliability coefficient of the scale was 0.78.

**Achievement goal orientation.** The 12-item Achievement Goal Questionnaire – Revised (Elliot & Murayama, 2008) was utilized to measure the participants’ perception of mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals. Items were rated on a seven-point Likert scale (1 = Not at all true of me; 7 = Very true of me). Sample items in the scale include: ‘My aim is to completely master the material presented in this class’ (mastery-approach; Item 1), ‘I am striving to do well compared to other students’ (performance-approach; Item 2), ‘My aim is to avoid learning less than I possibly could’ (mastery-avoidance; Item 5), and ‘My goal is to avoid performing poorly compared to others’ (performance-avoidance; Item 6). Findings of CFA demonstrated that the scores from the four-factor model of achievement goal orientation had an adequate fit: \( \chi^2 = 80.07, \text{df} = 48, \text{GFI} = 0.90, \text{CFI} = 0.93, \text{TLI} = 0.90, \text{SRMR} = 0.11, \text{RMSEA} = 0.087. \) The Cronbach’s alpha reliability coefficient of the mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals subscales were 0.74, 0.60, 0.76, and 0.76.

**Academic engagement.** The Academic Engagement Scale (Reeve & Tseng, 2011) was used to assess the participants’ perceived levels of agentic, behavioral, cognitive, and emotional engagement. Sample items in the engagement dimensions include: ‘During our class, I ask questions’ (agency engagement); ‘I try very hard in our class’ (behavioral engagement); ‘I try to make all the different ideas fit together and make sense when I study’ (cognitive engagement); ‘Class is fun’ (emotional engagement). Items were marked on a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Result of CFA showed that the scores from the four-factor model of academic engagement had an adequate fit: \( \chi^2 = 309.47, \text{df} = 203, \text{GFI} = 0.93, \text{CFI} = 0.93, \text{TLI} = 0.92, \text{SRMR} = 0.059, \text{RMSEA} = 0.068. \) In the current investigation, the Cronbach’s alpha reliability coefficients of the agentic, behavioral, cognitive, and emotional engagement dimensions were 0.87, 0.88, 0.88, and 0.86.

A teacher from the school instructed students to complete measures using an online survey platform outside their regular class period. Students were ensured that the survey was anonymous and their personal identifiable information would be removed from the datasheet prior to conducting any future data analyses.

**Data analyses**

Prior to conducting descriptive and inferential statistical analyses, confirmatory factor analyses were carried out using the 23rd version of AMOS to examine the psychometric properties of the abovementioned scales. Consistent with the recommended cut-off values of Kline (2005), a Comparative fit index (CFI) higher than 0.90 as well as Standardized root mean square residual (SRMR) and Root mean
square error of approximation less than 0.08 would indicate good fit. Descriptive statistics like mean and standard deviation of all the variables were calculated. Pearson-$r$ correlational coefficients were computed to examine the association of school kindness with achievement goal orientation dimensions and engagement domains. Effect sizes between school kindness and engagement as well as achievement goal orientations were reported and interpreted based on the guidelines of Gignac and Szodorai (2016) which pointed out that correlational coefficients of 0.10, 0.20, and 0.30 can be regarded as small, typical, and relatively large. Bias-corrected bootstrapping analyses at 95% confidence interval using 1,000 bootstrapped resamples via PROCESS macro (Hayes, 2018) were used to assess whether school kindness would have indirect effects on academic engagement domains via the intermediate variables – achievement goal orientation dimensions. All these statistical analyses were conducted via the 23rd version of Statistical Package for Social Sciences (SPSS).

**Results**

Results of descriptive statistics, reliability analyses, and correlational analyses are reported in Table 1. School kindness was positively associated with mastery-approach and performance approach goals. Furthermore, school kindness was positively correlated to all dimensions of academic engagement. Based on the

<table>
<thead>
<tr>
<th>Variable</th>
<th>$r$</th>
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<th>2</th>
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<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>$\alpha$</th>
<th>$M$</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>1. School kindness</td>
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<td></td>
<td></td>
<td></td>
<td>0.78</td>
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<td>2. Mastery-approach goals</td>
<td>0.22*</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.74</td>
<td>5.88</td>
<td>0.95</td>
</tr>
<tr>
<td>3. Mastery-avoidance goals</td>
<td>0.11</td>
<td>0.42**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.60</td>
<td>5.00</td>
<td>1.20</td>
</tr>
<tr>
<td>4. Performance-approach goals</td>
<td>0.24**</td>
<td>0.58**</td>
<td>0.37**</td>
<td>–</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>0.76</td>
<td>5.21</td>
<td>1.14</td>
</tr>
<tr>
<td>5. Performance-avoidance goals</td>
<td>0.13</td>
<td>0.35**</td>
<td>0.49**</td>
<td>0.65**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.76</td>
<td>5.21</td>
<td>1.35</td>
</tr>
<tr>
<td>6. Agentic engagement</td>
<td>0.42**</td>
<td>0.19*</td>
<td>–0.01</td>
<td>0.33**</td>
<td>0.09</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td>0.87</td>
<td>3.16</td>
<td>0.92</td>
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<tr>
<td>7. Behavioral engagement</td>
<td>0.36**</td>
<td>0.65**</td>
<td>0.22*</td>
<td>0.46**</td>
<td>0.17</td>
<td>0.30**</td>
<td>–</td>
<td></td>
<td></td>
<td>0.88</td>
<td>4.04</td>
<td>0.66</td>
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<tr>
<td>8. Cognitive engagement</td>
<td>0.33**</td>
<td>0.56**</td>
<td>0.23**</td>
<td>0.48**</td>
<td>0.24*</td>
<td>0.42**</td>
<td>0.54**</td>
<td>–</td>
<td></td>
<td>0.88</td>
<td>3.97</td>
<td>0.65</td>
</tr>
<tr>
<td>9. Emotional engagement</td>
<td>0.44**</td>
<td>0.60**</td>
<td>0.19*</td>
<td>0.40**</td>
<td>0.12</td>
<td>0.41**</td>
<td>0.70**</td>
<td>0.64**</td>
<td>0.86</td>
<td>3.98</td>
<td>0.73</td>
<td></td>
</tr>
</tbody>
</table>

Note: *$p < 0.05$; **$p < 0.001$. 
recommended cut-off values of Gignac and Szodorai (2016), the effect sizes between school kindness and approach goal orientations (both mastery-approach and performance-approach goals) are considered typical. The correlational coefficients between school kindness and engagement outcomes are considered relatively large because they exceeded 0.30 ($r$ coefficients range from 0.33–0.44).

For the main analyses, the bias-corrected bootstrap test was used due to the relatively small sample size. This method is reported to be powerful, yet requires a smaller sample size than other tests (Fritz & MacKinnon, 2007). The findings of bias-corrected bootstrapping analyses at 95% confidence interval using 1,000 bootstrapped resamples are described on Table 2. Supporting Hypothesis 1, school kindness positively predicted agentic, behavioral, cognitive, and emotional engagement. Hypothesis 2 was confirmed because school kindness positively predicted mastery-approach goals. Interestingly, school kindness also positively predicted performance-approach goals. Hypothesis 3 was partially supported as mixed evidence could be found regarding the link of mastery and performance goals to different dimensions of academic engagement. For instance, only performance-approach goals positively predicted all dimensions of engagement. Mastery-approach goals positively predicted behavioral, cognitive, and emotional, but not agentic, domains of academic engagement. School kindness did not predict mastery-avoidance and performance-avoidance goals.

Most of the findings on mediation analyses corroborated Hypothesis 4 as school kindness had indirect effects on behavioral, cognitive, and emotional engagement via the intermediate variables – mastery-approach and performance-approach goals. School kindness had indirect influence on agentic engagement via the intermediate variable – performance goals. Table 3 summarizes the results showing the significance of each hypothesized indirect effects.

**Discussion**

The growing body of knowledge on kindness has shown that fostering this positive personal quality may lead to well-being and optimal psychological functioning in student populations (Buchanan & Bardi, 2010; Layous et al., 2013; Otake et al., 2016). Despite the burgeoning literature on how kindness may predict various student outcomes, little is known about how perceptions of kindness at the school level may be linked to academic-related outcomes. The current study addresses this gap by offering preliminary evidence of the association of school level kindness with motivational and engagement outcomes in selected Filipino senior secondary school students.

First, school kindness positively predicted agentic, behavioral, cognitive, and emotional engagement which is consistent with the findings of Ouweneel et al. (2014) on the link between kindness and engagement. It is possible that kindness may relate to increased engagement as research has demonstrated that kindness was associated with elevated levels of confidence in doing academic-related tasks.
Furthermore, it is likely that school kindness may be linked to student engagement as previous literature has indicated that promoting opportunities to show kindness could optimize higher levels of relationship satisfaction with classmates which in turn, may enhance engagement in academic tasks (Binfet et al., 2016). Our study is significant in that it uniquely contributes to existent literature by further providing preliminary evidence of

<table>
<thead>
<tr>
<th>Types of paths</th>
<th>Standardized estimates</th>
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<tr>
<td><strong>Paths</strong></td>
<td>β</td>
</tr>
<tr>
<td>Direct effects</td>
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<tr>
<td>Kindness → agentic engagement</td>
<td>0.54</td>
</tr>
<tr>
<td>Kindness → behavioral engagement</td>
<td>0.23</td>
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<tr>
<td>Kindness → cognitive engagement</td>
<td>0.20</td>
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<tr>
<td>Kindness → emotional engagement</td>
<td>0.37</td>
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<td>Kindness predicting mediators</td>
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<tr>
<td>Kindness → mastery-approach goals</td>
<td>0.33</td>
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<td>Kindness → mastery-avoidance goals</td>
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<tr>
<td>Kindness → performance-approach goals</td>
<td>0.22</td>
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<td>Kindness → performance-avoidance goals</td>
<td>0.27</td>
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<tr>
<td>Mediators predicting outcomes</td>
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<tr>
<td>Mastery-approach goals → agentic engagement</td>
<td>−0.01</td>
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<td>Mastery-avoidance goals → agentic engagement</td>
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<tr>
<td>Performance-approach goals → agentic engagement</td>
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<td>Performance-avoidance goals → agentic engagement</td>
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<tr>
<td>Mastery-approach goals → behavioral engagement</td>
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<td>Mastery-avoidance goals → behavioral engagement</td>
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<td>Performance-approach goals → behavioral engagement</td>
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<td>Performance-avoidance goals → behavioral engagement</td>
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<td>Mastery-approach goals → cognitive engagement</td>
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<td>Mastery-avoidance goals → cognitive engagement</td>
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<td>Performance-avoidance goals → cognitive engagement</td>
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<td>Mastery-approach goals → emotional engagement</td>
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<td>Mastery-avoidance goals → emotional engagement</td>
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<td>Performance-approach goals → emotional engagement</td>
<td>0.45</td>
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<tr>
<td>Performance-avoidance goals → emotional engagement</td>
<td>0.27</td>
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</tbody>
</table>

Note: *p < 0.05; **p < 0.01; ***p < 0.001.
Table 3. Results of indirect effects of kindness on academic engagement domains via achievement goal orientations.

<table>
<thead>
<tr>
<th>Engagement Outcomes</th>
<th>Agentic engagement</th>
<th>Behavioral engagement</th>
<th>Cognitive engagement</th>
<th>Emotional engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indirect effects</td>
<td>BCa 95% CI</td>
<td>Indirect effects</td>
<td>BCa 95% CI</td>
</tr>
<tr>
<td>Mastery-approach goals</td>
<td>−0.003</td>
<td>−0.023, 0.238</td>
<td>0.157*</td>
<td>0.030, 0.300</td>
</tr>
<tr>
<td>Mastery-avoidance goals</td>
<td>−0.02</td>
<td>−0.107, 0.016</td>
<td>−0.049</td>
<td>−0.049, 0.013</td>
</tr>
<tr>
<td>Performance-approach goals</td>
<td>0.014*</td>
<td>0.026, 0.083</td>
<td>0.053*</td>
<td>0.004, 0.137</td>
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<tr>
<td>Performance-avoidance goals</td>
<td>−0.027</td>
<td>−0.162, 0.013</td>
<td>−0.02</td>
<td>−0.091, 0.003</td>
</tr>
</tbody>
</table>

*p < 0.05.
how school kindness may differentially predict various domains of academic engagement.

Second, school kindness positively predicted both mastery-approach and performance-approach goals. These results indicate that students’ perceived level of school kindness was associated with higher levels of motivation to master the content of learning material and to outperform other students. Previous research has shown that school kindness was linked to higher levels of confidence in performing academic tasks (Binfet et al., 2016). It is possible that school kindness may predict mastery-approach goals via this association with confidence in performing academic tasks. Previous research may provide some support on the association between school kindness and performance-approach goals. Although extrinsic motivation such as performance goals has been recognized as maladaptive in Western individualist contexts, studies demonstrated that extrinsic motivational orientations link to adaptive psychological functioning in collectivist contexts (Cheng & Lam, 2013; Datu, 2018). The establishment and maintenance of harmonious social ties are considered important cultural tasks for collectivists (Markus & Kitayama, 1991). Given that kindness has been linked to adaptive social outcomes like elevated levels of peer acceptance (Layous et al., 2012), and reduced social avoidance goals (Trew & Alden, 2015), it is also likely that school kindness may be associated with more adaptive forms of academic motivation in collectivist societies.

Third, our research also showed that school kindness was not related to mastery-avoidance and performance-avoidance goals. This is consistent with previous research showing that school kindness was associated with approach types of goals (i.e., prosocial goals; Binfet et al., 2016). Perhaps, in the positive school environment, students feel psychological safety, so that they are more active and willing to challenge themselves and learn new things instead of worrying about failures or how they are compared to other people.

Fourth, our research found that school kindness had indirect effects on academic engagement dimensions via the intermediate variables – mastery-approach and performance-approach goals. These findings suggest that approach-types of achievement goal orientation can serve as motivational processes underpinning the link between school kindness and academic engagement. This is the first study to demonstrate the indirect influence of school kindness on engagement via the mediating effects of achievement goal orientation.

Overall, the current results are consistent with existing literature on the positive role of school kindness on students’ academic life. However, this study advances research by demonstrating an important mechanism of achievement orientation goals through which more kind school cultures have an impact on students’ academic engagement. Furthermore, theoretically, our research provides support for the engine theory of well-being (Jayawickreme et al., 2012) by demonstrating that school kindness can operate as an extrinsic input variable which may be linked to elevated levels of engagement. Importantly, both mastery-approach and performance-approach goals may function as process variables that can help elucidate
why perception of kindness in schools may be associated with higher levels of involvement in academic-related activities.

**Limitations and future directions**

Although the current study contributes to understanding the relationship between school kindness and academic engagement and motivation, it has limitations that need to be considered for the interpretation of the results and future research considerations. First, the cross-sectional design of this investigation prevents us from drawing causal inferences between school kindness and academic-related outcomes. Future longitudinal research approach or experimental and intervention studies could provide more valid evidence about the effects of school kindness on learning processes and engagement. Second, this study relies solely on student self-reports, which may be vulnerable to the common method bias and social desirability bias. In particular, future research should include measures of school kindness from different informants such as teachers, parents, peers, and school staff and utilize diverse data collection methods including interviews, observation and other objective measures such as school records. Third, although this study did not measure these, there could be other psychological, social or emotional factors that may mediate the effects of perceived school kindness on academic engagement. For example, a sense of connectedness has long been recognized as an important motivating factor for academic achievement (Walton, Cohen, Cwir, & Spencer, 2012). Further studies on possible mediators are necessary to better understand the pathway between school kindness and achievement outcomes. Fourth, this study used a small sample of senior Filipino secondary school students from one school, which limits the generalizability of our findings. Future studies with larger sample sizes from varied cultural contexts and educational systems would be useful to validate the current findings and provide more comprehensive insight into the role of school kindness to predict academic engagement and the motivational process in various contexts.

**Practical implications**

Our research findings have significant implications for educators, administrators, parents, and policy makers. That is, when students see the school as a kind place, they are more motivated and interested in learning. The findings of the current study point to the significance of creating positive school climates and fostering social-emotional learning skills to boost academic success in student populations (Domitrovich, Durlak, Staley, & Weissberg, 2017; Weissberg, Durlak, Domitrovich, & Gullotta, 2015). Building and sustaining positive school culture requires the commitment of the entire community. Administrators, staff, teachers, parents, and school mental health professionals should work collaboratively to create school environments that aim to promote kindness. At the individual level, teachers can play an important role in fostering students’ sense of kindness
as previous research have demonstrated that teachers serve as primary adult model of kindness in school (Binfet & Passmore, 2017) and some children tend to characterize teaching as an act of kindness (Binfet, 2016). Parenting practices are also important for building positive school culture. Students’ character and attitudes are often reflections of their family life. Parents are encouraged to use social reinforcement techniques that have been found to be influential in cultivating children’s kindness such as showing approval of students’ kind acts, praising children’s character when kind acts are performed, and showing how they love their children (Bower & Casas, 2016). Equally important, efforts are needed for setting or changing the cultural norms of schools to be more kind and caring to sustain a positive school culture (Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007).

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