

# The development of a model for improving student thriving at private universities in Hunan, China

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## Abstract

This research explored the influential pathways to student thriving at private universities in Hunan, China by employing a partial least squares structural equation modeling (PLS-SEM) approach, and the strategic model from the research results are expected to help improve student thriving in these institutions. The conceptual framework was proposed based on the Thriving Model and it examined how factors of university support and students' campus experiences are associated with students' thriving. Through an online survey 707 valid questionnaire responses were obtained from students at four representative private universities in Hunan, China. Findings suggested that factors related to university supports (institutional integrity, commitment to student welfare, institutional readiness, and perceived teacher support) and students' campus experiences (psychological sense of community and campus involvement) are positively associated with student thriving. We also found that students' campus experiences play the mediating role in the relationship between university supports and student thriving. The SEM model from the results for improving student thriving at private universities in Hunan, China can provide implications and recommendations for teachers and university administrators at private universities in Hunan, China, as well as private higher education policy makers and researchers in this field, to create interventions or conduct further research to enhance student thriving, either practically or theoretically.

**Keywords:** institutional integrity; institutional readiness; commitment to student welfare; perceived teacher support; psychological sense of community; campus involvement; student thriving

## Introduction

Private universities in China have expanded rapidly in the past few decades and have become an integral part of Chinese higher education (Dwivedi, 2022). Meanwhile, private universities in Hunan Province are ranked at the top in the 2023 national ranking of private universities (Zhao, 2023). However, there has been a decline in the social status of these institutions due to the poor quality of their graduates. Various reasons contribute to this, including the administrations of private institutions being more concerned with enrollment rather than students' overall development (Altbach, 2016; Liu, 2020), neglecting students' rich campus experiences (Liu, 2020), failing to match the promises made during the admissions process (Liu et al., 2021), and lacking adequate and competent full-time faculty or complete campus infrastructure (Levy, 2009).

Consequently, the impact of these universities on student development contradicts the mission of higher education, which should encompass holistic education, establishing necessary environmental supports, enriching students' college experiences, enhancing personal

achievements, and preparing them for future civic engagement (Kolb, 2014). To promote the sustainable development of private universities in Hunan, China, and to improve the quality of their graduates, this study proposes a research conceptual framework based on the Thriving Model. This model measures student success more comprehensively in three areas: interpersonal, psychological, and academic (Schreiner, 2016). Previous research has also confirmed that certain social and psychological elements contribute to student thriving in this model, such as institutional integrity, spirituality, campus involvement, student-faculty interaction, psychological sense of community, and major certainty, etc. (Schreiner, 2016).

Since academic research has seldom focused on student thriving in the context of private higher education in China, especially in Hunan province, this research aims to explore the pathways to students' thriving in private universities in Hunan, China, by adopting a PLS-SEM approach. This approach will investigate social and psychological elements apart from student thriving, including institutional integrity, commitment to student welfare, institutional readiness, perceived teacher support, campus involvement, and psychological sense of community. The strategic model for improving student thriving, derived from the research results, would be valuable in raising the awareness of institutional administrators, faculty members, and educational policymakers in the context of private universities in Hunan. It will encourage them to create relevant interventions and supports for student thriving. Moreover, it will broaden the thriving model and enrich the thriving literature for future research. The following questions guide this study: What are the current university supports, campus experiences, and student thriving at private universities in Hunan, China? And what are the pathways to thriving, considering the university supports and campus experiences at private universities in Hunan, China?

## Objective

To explore the influential pathways to student thriving at private universities in Hunan, China

## Literature Review

### Student Thriving Model

The Student Thriving Model, developed by Schreiner in 2010b, is based on Keyes' flourishing theory from 2002. It combines the psychological retention model of Eaton and Bean (1995) with Braxton and Hirschy's persistence model (2004). Representing a holistic approach, this model evaluates students' campus experiences and achievements intellectually, socially, emotionally, and psychologically (Ash and Schreiner, 2016). Schreiner (2010b) developed the Thriving Quotient to measure student thriving, assessing three aspects through five sub-constructs: engaged learning, academic determination, positive perspective, diverse citizenship, and social connectedness, all of which are adopted in this study.

Schreiner and others have identified several contributors to student thriving, such as institutional integrity, sense of community, student-faculty interaction, campus involvement, and spirituality, etc. Many of these have been found to vary in different contexts (Schreiner et al., 2013). For instance, pathways to thriving may differ across distinct student demographics and populations, including different racial groups, transfer students (McIntosh and Nelson, 2012), community college students (Romero, 2016; Dy, 2017), students from faith-based campuses (Derrico et al., 2015), and graduate students (Horne, 2017). Students' college experiences can be enhanced through external interventions or environmental improvements,

thereby enriching their university life, contributing to their thriving and future achievements (Robbins et al., 2004). While the study of thriving in the context of private higher education in China is limited, this research adopts the thriving model to study the pathways to student thriving in the private institutional context of Hunan, China.

### **Institutional Integrity, Commitment to Student Welfare and Institutional Readiness**

University supports, such as institutional integrity and commitment to student welfare, are key elements influencing student social integration in the model by Braxton and Hirschy (2004). Institutional integrity is defined as 'the degree of congruence between the espoused mission and goals of a college or university and the actions of administrators, faculty, and staff' (Braxton et al., 2014, p. 88). Braxton et al. (2014) describe institutional commitment to student welfare as 'the institution's abiding concern for the growth and development of its students... and its clear communication of the high value it places on students' (p. 22). Another element of university support, institutional readiness, refers to the adequacy of the university's infrastructure and the soundness of its various regulations.

Miller (2019) and Schreiner (2018) have indicated that support and concern from universities contribute positively to factors that promote thriving. When students perceive support from their institutions, they engage more in campus life, leading to positive psychological experiences (Braxton and Hirschy, 2004). How students view their institution has been shown to be indicative of their sense of belonging on campus (Strayhorn, 2018) and their persistence in difficult tasks (Ash and Schreiner, 2016). For example, institutional readiness, as an aspect of the higher education climate, has been validated as impacting the lives and learning experiences of university students (Rankin and Reason, 2008) and is a significant contributor to thriving (Ash and Schreiner, 2016). Positive educational experiences are enhanced through the improvement of the institutional climate and environment, which in turn improves social integration (Li et al., 2016) and a sense of belonging (Wells and Horn, 2015). Studies on student thriving have indicated that these university supports are not only key contributors to positive psychological experiences but also have an indirect association with thriving, mediated by campus experiences (Conn, 2019). Considering the important roles of students' perceptions of these supports provided by universities, this study seeks to examine how these institutional factors impact students' thriving as well as their campus experiences in the context of private universities in Hunan, China."

### **Perceived Teacher Support**

According to Ryan and Patrick (2001), perceived teacher support can be viewed as the extent to which students trust in their teachers' values and their association with them, primarily embodying four aspects: emotional, instrumental, appraisal, and informational support. Metheny et al. (2008) define perceived teacher support as the degree to which students believe their teachers are accessible resources when they need assistance. To measure perceived teacher support, Metheny et al. (2008) developed four sub-variables: invested, positive regard, expectation, and accessibility. As an educational context for students, its strong connection with students' education on campus has been widely confirmed. This includes enhancing academic motivation (Quin et al., 2018), influencing the learning process (Ricard and Pelletier, 2016), creating a supportive learning environment (Ruzek et al., 2016), assisting with academic adjustment (Wentzel et al., 2010), boosting higher degree aspirations (Kim and Sax, 2009), helping build confidence and make friends on campus (Dietrich et al., 2015), fostering a sense of community (Hausmann et al., 2009), and increasing the opportunities for success (Kuh and Hu, 2001).

### **Psychological Sense of Community**

Psychological sense of community is described as 'a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together' (McMillan and Chavis, 1986, p. 9). Schreiner (2010b) built a measurement by recognizing four perspectives in psychological sense of community: membership, relationship, ownership, and partnership. Psychological sense of community contributes significantly to student educational success and their personal development. This includes aspects such as student social connectedness and academic achievements (Schreiner, 2016; Vetter et al., 2019a), student satisfaction (Prezza et al., 2001), perceptions of the institution (Sonn, 2002), and psychological health (Ellaway et al., 2001). Research has indicated that the effects of association with psychological sense of community differ considering different student groups (Ash and Schreiner, 2016).

### **Campus Involvement**

Astin (1984) proposed the involvement theory, which emphasizes the importance of campus involvement, asserting that students experience more academic gains and personal growth when they are engaged in campus activities. Campus involvement can be understood as the amount of mental and physical energy that students invest in curricular and co-curricular activities. It is associated with nearly all desired college student outcomes, such as excellent academic performance (Wolf-Wendel et al., 2009), increased graduation and retention rates (Astin, 2005), and student thriving (Schreiner, 2016). Involvement in campus activities has also been linked to student satisfaction with faculty interactions (Nelson and Vetter, 2012). Student thriving is directly influenced by the quality of student involvement and indirectly by the quantity of involvement (Vetter, 2018). While all students benefit from campus involvement, the benefits vary among different groups (Schreiner, 2014). These studies emphasize that students' college experiences contribute to their growth and social integration. They suggest that students are satisfied with their college careers if they are engaged in academic activities, build good relationships with peers and faculty, and are actively involved in other campus activities, rather than focusing too much energy on just one area.

Based on the review of the related literature, the current study proposed the following hypotheses and Figure 1 shows the conceptual framework of this research:

H1: University supports like institutional integrity, commitment to student welfare and institutional readiness are positively related to student thriving at private universities in Hunan, China.

H1a: Institutional integrity is positively related to student thriving at private universities in Hunan, China.

H1b: Commitment to student welfare is positively related to student thriving at private universities in Hunan, China.

H1c: Institutional readiness is positively related to student thriving at private universities in Hunan, China.

H2: Perceived teacher support is positively related to student thriving at private universities in Hunan, China.

H3: Psychological sense of community is positively related to student thriving at private universities in Hunan, China.

H4: Campus involvement is positively related to student thriving at private universities in Hunan, China.

H5: Institutional integrity are positively related to psychological sense of community and campus involvement at private universities in Hunan, China.

H5a: Institutional integrity is positively related to psychological sense of community at private universities in Hunan, China.

H5b: Institutional integrity is positively related to campus involvement at private universities in Hunan, China.

H6: Commitment to student welfare is positively related to psychological sense of community and campus involvement at private universities in Hunan, China.

H6a: Commitment to student welfare is positively related to psychological sense of community at private universities in Hunan, China.

H6b: Commitment to student welfare is positively related to campus involvement at private universities in Hunan, China.

H7: Institutional readiness is positively related to psychological sense of community and campus involvement at private universities in Hunan, China.

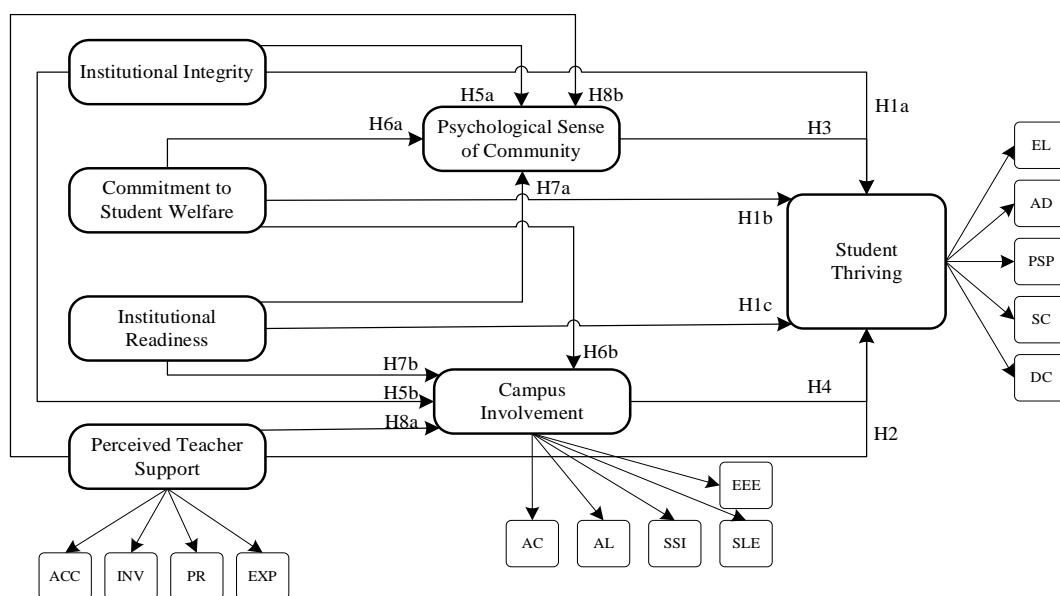
H7a: Institutional readiness is positively related to psychological sense of community in private universities at private universities in Hunan, China.

H7b: Institutional readiness is positively related to campus involvement in private universities in China.

H8: Perceived teacher support is positively related to psychological sense of community and campus involvement in private universities in China.

H8a: Perceived teacher support is positively related to psychological sense of community in private universities in China.

H8b: Perceived teacher support is positively related to campus involvement in private universities.



Notes: ACC, Accessible; INV, Invested; PR, Positive Regard; EXP, Expectation; AC, Academic Challenge; AL, Active Learning; SSI, Student-Staff Interaction; SLE, Enriching Educational Experiences; EL, Engaged Learning; AD, Academic Determination; PSP, Positive Perspective; SC, Social Connectedness; DC, Diverse Citizenship.

**Figure 1: Research Conceptual Framework**

## Research Methodology

### Participants and Procedure

The data in this research were collected through online questionnaire survey due to the advantage of the method compared with other ones, such as ensuring data integrity through the investigation process (Shiau and Luo, 2012). The research targeted students for bachelor's degree from 4 private universities in Hunan, China. After the approval from the university administration, the survey link along with research purposes were sent out to the concerned students mainly through students' social networking groups, such as Wechat and QQ groups. Students voluntarily participated in the survey from Sep.1, 2023 to September 15, 2023. After clearing the unqualified questionnaires through the software of SPSS, all together 707 valid ones were obtained, and the sample number is sufficient enough in line with the regular accepted standards of sample size (Krejcie and Morgan, 1970).

Two sections were employed in this online survey, with section one getting the participants' demographic information, to assure controlling variables properly, which includes university, sex, age, grade, thus allowing researchers to focus on the subject and "rule out alternative plausible hypotheses" (Mayhew et al., 2016b, p612). And section two involves detailed questions to measure the constructs in the research model. A seven-point Likert scale was adopted to measure the items, and the values of each item range from "1 = Strongly disagree" to "7 = Strongly agree". The questionnaire in Chinese version was sent to students as it was conducted in China, and sufficient time was left out for them to complete the questionnaire.

The researchers adopted the partial least squares-structural equation modeling (PLS-SEM) to analyze the proposed theoretical model through Smart PLS V.3.3.9 software (Ringle et al., 2015). Different from the other methods, PLS-SEM is considered as the least restrictive method, because it focuses on the explained variance of the criterion variable (Hair, 2014; Briz-Ponce et al., 2017). Therefore, PLS-SEM is an appropriate tool to explore pathways to student thriving in this study.

## Research Findings

### Descriptive Analysis

Descriptive analysis of the participants' demographics. This survey obtained 707 valid responses of students from 4 representative private universities which belong to: the top quartile, the second quartile, the third quartile and the last quartile respectively in the ranking of private universities in China in 2022 (Zhao, 2022). Among them 26% responses were from Hunan University of International Economics, 50% were from Swan College of Central South University of Forestry and Changsha Medical University equally, and the left 24% were from Hunan University of Information Technology. 336 responses were from females and 371 ones from males, and 26.2% were from freshman group and 25.9% were sophomore, 24.9% were junior and 23.1% were senior. 71.6% of students surveyed were aged between 19-21 years old, while the rest 17.4% participants surveyed were under 18 or below and 11% were 22 years old or above. Table 2 presents the demographic characteristics of the participants surveyed.

Descriptive analysis of the surveyed constructs. The results of the current university supports (institutional integrity, institution readiness, commitment to student welfare, and perceived teacher support), individual campus experiences (sense of psychological community

and campus involvement) and student thriving at private universities in Hunan, China is shown in Figure 2. As a seven-point Likert scale was adopted to measure the items, with the values of each item ranging from “1 = Strongly disagree” to “7 = Strongly agree”, so correspondingly, the Criteria of Scale in evaluating the mean of the constructs in this study range from “1-1.5=Very Low” to “6.51-7= Very High”, with “3.51-4.5=Moderate”, with “1.51-2.5=Low, 2.51-3.5= Somewhat low” and “4.51-5.5= Somewhat high, 5.51-6.5= High”.

There are seven constructs in this survey, and the results showed that the total mean of constructs is 5.39 (SD=1.184). More specifically, all of the 7 constructs have positive results, as they got the means higher than 4.51, and lower than 7. Student thriving(M=5.58, SD=1.15), perceived teacher support(M=5.59,SD=1.064) and campus involvement(M=5.59, SD=1.12) have the high results, with the means in 5.51-6.5; and institutional integrity(M=4.99, SD=1.38), institutional readiness(M=5.37,SD=1.176), commitment to student welfare (M=5.21,SD=1.22) and psychological sense of community(M=5.4, SD=1.18) have the somewhat positive result, with the means from 4.51-5.50. However, none of the constructs had a very high mean between 6.51-7.00.

The research was conducted by employing a partial least squares structural equation modeling (PLS-SEM) approach. The outer model in this research was assessed through the following aspects: the internal consistency and the reliability of each item, convergent validity and discriminant validity of the constructs.

The internal consistency and reliability of the measurement were achieved by corresponding loading of the questions, the values of Cronbach's alpha and composite reliability of the constructs. The recommended standard value for factor loadings is higher than 0.6 (Hair, 2014), the suggested value for Cronbach's alpha is greater than 0.8 (Nunnally, 1994) and composite reliability (CR) value for each construct should be higher than 0.7 (Chin, 1998). According to Mehmood and Najmi (2017), convergent validity is the degree to which the variable measurements function as if they are assessing the underlying theoretical construct because they share the same extent of variance. Apart from assessing the values for factor loadings and the composite reliability, the index of the average variance extracted (AVE) above 0.5 is also a necessary standard for achieving convergent validity (Fornell and Larcker, 1981). Table 3 demonstrated the values of the assessment: factor loadings, Cronbach's alpha, composite reliability, and average AVE. We can see that values of factor loadings fall between 0.697 and 0.957, which are higher than the threshold value of 0.6; the Cronbach's alpha values are between 0.826 and 0.959, and all are beyond the suggested threshold value of 0.8. Besides, the CR values range between 0.885 and 0.969, exceeding the threshold value of 0.7, and the AVE values are shown between 0.569 and 0.896, being higher than the suggested threshold value of 0.5.

The discriminant validity of each construct was detected to assess the outer model of this research. Discriminant validity means the degree of discrimination between two variables tested empirically (Fornell and Larcker, 1981; Hair et al., 2017). To measure it two mainly-adopted methods were utilized: Fornell-Larcker criterion and Heterotrait-Monotrait ratio (HTMT). The assessing standard for Fornell-Larcker criterion is that the square root of AVE of every construct is more significant than its bi-variate association with other constructs, while the threshold value for HTMT should be lower than 0.90 (Gold et al., 2001). Therefore, the validity of discriminant in this research is acceptable because the values of Fornell-Larcker criterion and the HTMT values between the constructs have all met the suggested standards respectively. Thus, the discriminant validity of this study is also achieved.

The common method variance (CMV) may arise from the gathering of cognitive information of student' respondents through self-report scales, and to reduce the influence of

it, we took preventive measures in our investigation. Apart from anonymous survey, the intention for the questions of each construct were hidden deliberately in the questionnaires. And the variable results have a satisfying construct validity, indicating that the results are not greatly impacted by CMV (see Table 5). Additionally, the severity of CMV of the study was tested by adopting Harman's One-Factor Test (Podsakoff and Organ, 1986). Exploratory factor analysis for the 54 questions in this study indicated that the explanatory variance for the first factor was 42.16%, which is less than the criterion of no more than 50% and it was a non-integrated factor, indicating that there is no serious impact of CMV in this research.

### **Structural Model Assessment**

We adopted the bootstrapping procedure of 5000 re-samples and the blindfolding procedure of omission distance 12 within Smart-PLS to assess the inner model, and values of the standard beta ( $\beta$ ), t-value, coefficient of determination ( $R^2$ ) and Q-square ( $Q^2$ ) were obtained through the computing process. The results are shown in Table 6 and Figure 2 and all the hypotheses are supported. The mediating effects also tested and are presented in Table 7.

As for the direct effects on student thriving, the results show that university supports like institutional integrity, commitment to student welfare and institutional readiness are positively related to student thriving at private universities in Hunan, China, supporting the first hypothesis of the study (H1). Among them, institutional integrity ( $\beta = 0.685$ ,  $t = 33.133$ ,  $p < 0.001$ ) is positively related to student thriving, which is consistent with H1a. Besides, commitment to student welfare ( $\beta = 0.321$ ,  $t = 6.186$ ,  $p < 0.001$ ) and institutional readiness ( $\beta = 0.148$ ,  $t = 3.887$ ,  $p < 0.001$ ) are positively related to student thriving, supporting H1b and H1c. Additionally, we can see from the results that perceived teacher support ( $\beta = 0.262$ ,  $t = 4.616$ ,  $p < 0.001$ ), psychological sense of community ( $\beta = 0.308$ ,  $t = 5.51$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.436$ ,  $t = 7.717$ ,  $p < 0.001$ ) are all positively related to student thriving, thus H2, H3 and H4 are supported.

In line with the H5, institutional integrity is positively related to psychological sense of community ( $\beta = 0.367$ ,  $t = 7.409$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.676$ ,  $t = 31.145$ ,  $p < 0.001$ ) at private universities in Hunan, China. Therefore, H5a and H5b are acceptable. Meanwhile, commitment to student welfare is positively related to psychological sense of community ( $\beta = 0.791$ ,  $t = 50.14$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.738$ ,  $t = 38.842$ ,  $p < 0.001$ ) at private universities in Hunan, China, supporting H6a and H6b. The results also show that institutional readiness is positively related to psychological sense of community ( $\beta = 0.378$ ,  $t = 7.871$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.379$ ,  $t = 38.643$ ,  $p < 0.001$ ) at private universities in Hunan, China. Thus, we can see that H7a and H7b are supported. Lastly, the results present that perceived teacher support is positively related to psychological sense of community ( $\beta = 0.224$ ,  $t = 5.603$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.893$ ,  $t = 96.464$ ,  $p < 0.001$ ) in private universities in China.

Path analysis was conducted in this study to obtain approximate p-values so as to assess the significance of the mediating effects among these constructs, which were modeled in the research framework. All of them underwent mediation effect testing and the results showed that psychological sense of community and campus involvement can provide positive mediation effects between the independent variables: institutional integrity, commitment to student welfare and perceived teacher support, and the dependent variable: student thriving (as shown in Table 7).



**Table 6** Path coefficients

Hypothesis	Relationship	Original Sample	Standard Deviation	T Statistics	P Values	Decision
H1a	INI → STT	.685	.21	33.133	***	Supported
H1b	CSW → STT	.321	.52	6.186	***	Supported
H1c	INR → STT	.148	.38	3.887	***	Supported
H2	PTS → STT	.262	.57	4.616	***	Supported
H3	PSC → STT	.38	.56	5.51	***	Supported
H4	CAI → STT	.436	.56	7.717	***	Supported
H5a	INI → PSC	.367	.5	7.49	***	Supported
H5b	INI → CAI	.676	.22	31.145	***	Supported
H6a	CSW → PSC	.791	.16	5.14	***	Supported
H6b	CSW → CAI	.738	.19	38.842	***	Supported
H7a	INR → PSC	.378	.48	7.871	***	Supported
H7b	INR → CAI	.739	.19	38.643	***	Supported
H8a	PTS → PSC	.224	.4	5.63	***	Supported
H8b	PTS → CAI	.893	.9	96.464	***	Supported

*Notes.* STT, Student Thriving; PSC, Psychological Sense of Community; PTS, Perceived Teacher Support; INI, Institutional Integrity; CSW, Commitment to Student Welfare; CAI, Campus Involvement; INR, Institutional Readiness; \*\*\* $P < .1$ .

**Table 7** Mediation effects testing/Specific indirect effects

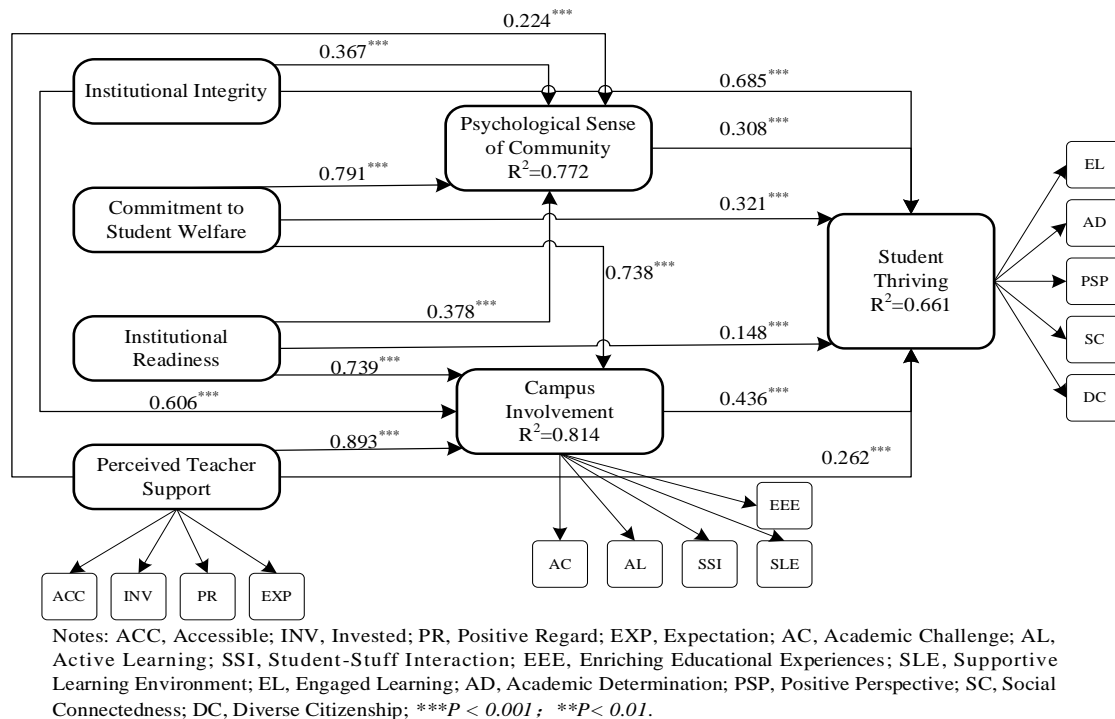
Relationship	Original Sample	Standard Deviation	T Statistics	P Values
INI→PSC→STT	.546	.23	23.539	***
INI→CAI→STT	.527	.23	22.572	***
CSW→PSC→STT	.537	.24	22.14	***
CSW→CAI→STT	.575	.22	25.992	***
INR→PSC→STT	.559	.24	23.362	***
INR→CAI→STT	.576	.23	25.345	***
PTS→PSC→STT	.58	.29	17.489	***
PTS→CAI→STT	.696	.19	35.941	***

*Notes.* STT, Student Thriving; PSC, Psychological Sense of Community; PTS, Perceived Teacher Support; INI, Institutional Integrity; CSW, Commitment to Student Welfare; CAI, Campus Involvement; INR, Institutional Readiness; \*\*\* $P < .1$ .

As we can see the ( $R^2$ ) results from Figure 2, institutional integrity, commitment to student welfare, institutional readiness and perceived teacher support explain 77.2% of the variance in psychological sense of community. Besides, institutional integrity, commitment to student welfare, institutional readiness and perceived teacher support explains 81.4% of the variance in campus involvement. Furthermore, institutional integrity, commitment to student welfare, institutional readiness, perceived teacher support, psychological sense of community and campus involvement together explain 66.1% of the variance in student thriving. According to the values of ( $R^2$ ) suggested by Chin (1998), the ( $R^2$ ) values obtained in this study are acceptable. The values of  $Q^2$  are all greater than the standard of zero, including student thriving ( $Q^2 = 0.314$ ), psychological sense of community ( $Q^2 = 0.606$ ), campus involvement ( $Q^2 = 0.489$ ), accessible ( $Q^2 = 0.727$ ), expectation ( $Q^2 = 0.0758$ ), positive regard ( $Q^2 = 0.743$ ) and invested ( $Q^2 = 0.683$ ), which establishes that the proposed model has sufficient predictive power (Claes Fornell, 1994). To evaluate the quality of the proposed model, the Goodness of Fit (GoF) was also computed (Tenenhaus et al., 2005). The GoF is calculated as:

$$\text{GoF} = \sqrt{\text{AVE}} \times \sqrt{\text{R}^2} = \sqrt{0.733} \times \sqrt{0.795} = 0.681$$

The result shows that the GoF of the model is 0.681, above the threshold criterion of 0.36 for a large effect size (Wetzels et al., 2009). This indicates that the Goodness of Fit is acceptable.



**Figure 2: Results of Structural Model**

## Discussion

The findings of this survey are consistent with previous studies by scholars, and the results have also validated the proposed hypotheses of the research.

First of all, based on the survey (n=707), the total mean of constructs surveyed is 5.39 (SD=1.184), which falls in the somewhat high category, but not in the high or very high section. Specifically, the current student thriving obtained an overall mean score of 5.582 (SD=1.15), perceived teacher support (M=5.59, SD=1.064), campus involvement (M=5.59, SD=1.12), institutional integrity (M=4.99, SD=1.38), institutional readiness (M=5.37, SD=1.176), commitment to student welfare (M=5.21, SD=1.22) and psychological sense of community (M=5.4, SD=1.18). However, of all the constructs surveyed, none of them had a very high mean between 6.51-7.00. Due to kinds of reasons, the administrations of private institutions are likely to be more concerned with enrollment rather than students' overall development (Altbach, 2016; Liu, 2020), ignoring students' rich campus experience (Liu, 2020), even not matching the promises made during the admissions process (Liu et al., 2021), lacking adequate and competent full-time faculty or complete campus infrastructure (Levy, 2009). It can be seen from the survey results that student thriving, university support and student campus experience could be improved.

As for the effects of university supports and campus experiences on student thriving at private universities in Hunan, China, the results showed that institutional integrity ( $\beta = 0.685$ ,  $t = 33.133$ ,  $p < 0.001$ ), commitment to student welfare ( $\beta = 0.321$ ,  $t = 6.186$ ,  $p < 0.001$ ) and institutional readiness ( $\beta = 0.148$ ,  $t = 3.887$ ,  $p < 0.001$ ) are positively related to student thriving at private universities in Hunan, China, supporting the first hypothesis of the study (H1). Previous research has indicated that fulfilling institutional promises is important to all students and has a positive effect on student persistence (Ash and Schreiner, 2016), as well as acting as a predictor of thriving (Schreiner, 2016). When students perceive the integrity of the institution, they are more likely to be integrated into the university, achieving expected development (Braxton and Hirschy, 2004). Besides, commitment to student welfare is expressed in institutional policies and practices that convey “an abiding concern for the growth and development of its students... and clearly communicate the high value it places on students” (Braxton and Hirschy, 2004, p22). Such policies and practices that promote student growth and development, as well as the caring attitude of faculty, staff and administrators toward students, make students feel valued, promote student integration at the university, which in turn may significantly affect their academic persistence and development (Braxton and Hirschy, 2004). Institutional readiness has also long been validated that it has impact on the lives and learning experiences of university students (Rankin and Reason, 2008). These fundamental conditions provide by universities can ensure positive environments for student learning, as well as for interpersonal relations between university students (Wells and Horn, 2015), and is crucial to ensure their socialization (Rankin and Reason, 2008). Additionally, we can see from the results that university support like perceived teacher support ( $\beta = 0.262$ ,  $t = 4.616$ ,  $p < 0.001$ ), as well as campus experiences like psychological sense of community ( $\beta = 0.308$ ,  $t = 5.51$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.436$ ,  $t = 7.717$ ,  $p < 0.001$ ) are all positively related to student thriving, thus H2, H3 and H4 are supported. Previous research has indicated that psychological sense of community is a vital component of student persistence for different student groups (Hausmann et al., 2009) and is the most significant contributor to student thriving (Schreiner, 2014). Previous research has explained the value of it, as it can ease students’ transitions and improve retention rates and overall student success (Strayhorn, 2018). Research has also reported that psychological sense of community was important for individuals as influences the relationships with others and with the institution (Jason et al., 2015). Campus involvement of college students is a large predictor of student thriving (Schreiner, 2016), and some studies points to direct pathways exist between campus involvement and thriving (Seppelt, 2016). It is associated with almost all desired college student achievements, such as excellent academic performance, increased graduation and retention rates, etc (Astin, 2005; Wolf-Wendel et al., 2009). High-quality student involvement has a direct impact on overall student thriving (Vetter et al., 2019b).

And as for the effects of university supports on campus experiences at private universities in Hunan, China, research results confirmed that institutional integrity is positively related to psychological sense of community ( $\beta = 0.367$ ,  $t = 7.409$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.676$ ,  $t = 31.145$ ,  $p < 0.001$ ), commitment to student welfare is positively related to psychological sense of community ( $\beta = 0.791$ ,  $t = 50.14$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.738$ ,  $t = 38.842$ ,  $p < 0.001$ ) and institutional readiness is positively related to psychological sense of community ( $\beta = 0.378$ ,  $t = 7.871$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.379$ ,  $t = 38.643$ ,  $p < 0.001$ ). Therefore, H5, H6 and H7 are acceptable. Institutional integrity can have an impact on psychological sense of community (Schreiner et al., 2020). Meanwhile, when students perceive the integrity of the institution, they are more likely to be integrated into the university and get involved in campus activities. Thus

universities can fulfill their mission by setting policies and meeting student expectations fairly so that students experience more academic gains and personal growth when they are engaged in campus activities (Braxton and Hirschy, 2004). Also, commitment to student welfare can promote student integration at the university and influence students' sense of belonging and their persistence (Braxton and Hirschy, 2004). It is expressed in institutional policies and practices that convey "an abiding concern for the growth and development of its students... and clearly communicate the high value it places on students" (Braxton and Hirschy, 2004, p22). Such policies and practices that promote student growth and development, as well as the caring attitude of faculty, staff and administrators toward students, make students feel valued (Braxton and Mundy, 2001), which may significantly affect their psychological sense of community. Besides, as an institutional climate under the context of higher education, institutional readiness has long been validated that it has impact on the campus lives and psychological experiences of university students (Rankin and Reason, 2008). It is crucial to ensuring the socialization of students and thus enhancing their sense of belonging on campus (Rankin and Reason, 2008). Some positive educational experiences are enhanced through the improvement of institutional readiness of the organization, such as well-being (McEvoy and Welker, 2000), social integration (Li et al., 2016) and a sense of belonging (Wells and Horn, 2015).

Furthermore, the results present that perceived teacher support is positively related to psychological sense of community ( $\beta = 0.224$ ,  $t = 5.603$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.893$ ,  $t = 96.464$ ,  $p < 0.001$ ) in private universities in China, supporting H8. Teachers' support, which functions as an educational context for students, its strong connection with students' education on campus has been widely confirmed (Mayhew et al., 2016a). McIntosh and Nelson (2012) claimed that factors of teachers explained 36.1% of the variance in psychological sense of community for students in his investigation. Similarly, in another survey of 2,889 students from several different higher institutions by Schreiner et al. (2013), teacher's factors explained 22% of the variance in psychological sense of community. Teachers' support is also related to a range of behavioral experiences they have on campus, such as academic involvement (Quin et al., 2018), learning process (Ricard and Pelletier, 2016), academic adjustment and making friends on campus (Wentzel et al., 2010; Dietrich et al., 2015).

Lastly, from the results we found that institutional integrity has positive effect on student thriving through the mediate roles of psychological sense of community ( $\beta = 0.546$ ,  $t = 23.539$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.0527$ ,  $t = 22.572$ ,  $p < 0.001$ ) respectively. And the results show that commitment to student welfare influences student thriving through the mediating effects of psychological sense of community ( $\beta = 0.537$ ,  $t = 22.014$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.575$ ,  $t = 25.992$ ,  $p < 0.001$ ) respectively. Meanwhile, psychological sense of community ( $\beta = 0.559$ ,  $t = 22.362$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.576$ ,  $t = 25.345$ ,  $p < 0.001$ ) positively play mediating roles of the relationship of between institutional readiness and student thriving respectively. It is also found that perceived teacher support has positive impact on student thriving through the mediating roles of psychological sense of community ( $\beta = 0.508$ ,  $t = 17.489$ ,  $p < 0.001$ ) and campus involvement ( $\beta = 0.696$ ,  $t = 35.941$ ,  $p < 0.001$ ) respectively. Previous research has confirmed that if students can enjoy rich educational experiences on campus, then those from well-conditioned organizations can achieve more positive educational development (McEvoy and Welker, 2000; Li et al., 2016). For example, a survey of 2,889 students from several different higher institutions by Schreiner et al. (2013), teacher's factors explained 22% of the variance in psychological sense of community, which explained 32% of the variance in thriving, and thus it is indicated that effect

of teachers factors to thriving is both direct, and indirect through psychological sense of community.

In summary, the strategic model for improving student thriving at private universities in Hunan, China, which is derived from the research results, is expected to help improve student thriving in these institutions. From the levels of university support and student campus experience, it can provide implications and recommendations for teachers and university administrators at private universities in Hunan, China, as well as private higher education policy makers and researchers in this field, to create interventions or conduct further research to enhance student thriving, either practically or theoretically.

## Conclusion

This research was conducted based on the Thriving Model by adopting a PLS-SEM approach, and the findings validated the impact of university supports and campus experiences on thriving at private universities in China. The results would make some contributions to the research of student thriving, and the strategic model from university support and campus experiences for improving student thriving also brings practical implications in the relevant field. The results appeal the educators, policy makers or even researchers to put more emphasis on students' college experiences, especially for those under the similar contexts of private universities in China. After assessing students' experiences and considering their unique needs, some positive institutional intervenes and supports should be created and built, assisting them to experience meaningful college life and achieve grand personal development, thus improving their overall thriving on campus.

## Reference

- Altbach, P.G. (2016). *Global perspectives on higher education*. Johns Hopkins University Press Baltimore.
- Ash, A.N., and Schreiner, L.A. (2016). Pathways to success for students of color in Christian colleges: The role of institutional integrity and sense of community. *Christ. high. educ.* 15(1-2), 38-61.  
<https://doi.org/10.1080/15363759.2015.1106356>
- Astin, A.W. (1984). Student involvement: A developmental theory for higher education. *J. Coll. Student Pers.* 25(4), 297-308.
- Astin, A.W. (2005). How college affects students. Volume 2: A third decade of research. *Rev. High. Educ.* 29(1), 120-122.
- Braxton, J.M., Doyle, W.R., Hartley III, H.V., Hirschy, A.S., Jones, W.A., and McLendon, M.K. (2014). *Rethinking college student retention*. New York: John Wiley & Sons.
- Braxton, J.M., and Hirschy, A.S. (2004). "Reconceptualizing antecedents of social integration in student departure," in *Retention and student success in higher education*, eds. M. Yorke & B. Longden. (UK: McGraw-Hill Education), 89-102.
- Braxton, J.M., Jones, W.A., Hirschy, A.S., and Hartley III, H.V. (2008). The role of active learning in college student persistence. *New directions for teaching and learning* 2008(115), 71-83. <https://doi.org/10.1002/tl.326>
- Braxton, J.M., and Mundy, M.E. (2001). Powerful institutional levers to reduce college student departure. *Journal of College Student Retention: Research, Theory & Practice* 3(1), 91-118.  
<https://doi.org/https://doi.org/10.2190/M127-V05B-5E5J-F9>
- Briz-Ponce, L., Pereira, A., Carvalho, L., Juanes-Méndez, J.A., and García-Peñalvo, F.J. (2017). Learning with mobile technologies – Students' behavior. *Comput. Hum. Behav.* 72, 612-620.  
<https://doi.org/10.1016/j.chb.2016.05.027>
- Chin, W.W. (1998). "The partial least squares approach to structural equation modeling," in *Modern methods for business research*, ed. G.A. Marcoulides. (England: Psychology Press), 295-336.
- Claes Fornell, J.C. (1994). "Partial least squares," in *Advanced Marketing Research*, ed. R. Bagozzi. (Cambridge: Blackwell Publishing), 52-78.

- Conn, S. (2019). *College Students' Perceptions of Tuition as a Worthwhile Investment: The Role of Institutional Integrity and Finances*. (Dissertation). Azusa, CA: Azusa Pacific University.
- Derrico, C.M., Tharp, J.L., and Schreiner, L.A. (2015). Called to Make a Difference: The Experiences of Students Who Thrive on Faith-Based Campuses. *Christ. high. educ.* 14(5), 298-321. <https://doi.org/10.1080/15363759.2015.1079750>
- Dietrich, J., Dicke, A.-L., Kracke, B., and Noack, P. (2015). Teacher support and its influence on students' intrinsic value and effort: Dimensional comparison effects across subjects. *Learn. Instr.* 39, 45-54. <https://doi.org/10.1016/j.learninstruc.2015.05.007>
- Dwivedi, R.K. (2022). Analysing The Quality Of Public And Private Higher Educational Institution In China. *Journal of Pharmaceutical Negative Results*, 4840-4851. <https://doi.org/10.47750/pnr.2022.13.S09.602>
- Dy, H. (2017). *Agents of support: Faculty, family, and peer advocates who contribute to thriving in community college students*. (Dissertation). Azusa, CA: Azusa Pacific University.
- Eaton, S.B., and Bean, J.P. (1995). An approach/avoidance behavioral model of college student attrition. *Res. High. Educ.* 36(6), 617-645. <https://doi.org/10.1007/BF02208248>
- Ellaway, A., Macintyre, S., and Kearns, A. (2001). Perceptions of place and health in socially contrasting neighbourhoods. *Urban studies* 38(12), 2299-2316. <https://doi.org/10.1080/00420980120087>
- Fornell, C., and Larcker, D.F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *J. Marketing Res.* 18(3), 382-388. <https://doi.org/10.1177/002224378101800313>
- Gold, A.H., Malhotra, A., and Segars, A.H. (2001). Knowledge management: An organizational capabilities perspective. *J. Manage. Inform. Syst.* 18(1), 185-214. <https://doi.org/10.1080/07421222.2001.11045669>
- Hair, J., Hollingsworth, C.L., Randolph, A.B., and Chong, A.Y.L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Ind. Manage. Data Syst.* 117(3), 442-458. <https://doi.org/10.1108/imds-04-2016-0130>
- Hair, J.F., Hult, G. T. M., Ringle, C., and Sarstedt, M. (2014). "Partial Least Squares Structural Equation Modeling," in *Handbook of Market Research Homburg*, ed. K.a.M. C., Vomberg, A. Cham. (UK: Springer), 1-40.
- Hausmann, L.R., Ye, F., Schofield, J.W., and Woods, R.L. (2009). Sense of belonging and persistence in White and African American first-year students. *Res. High. Educ.* 50(7), 649-669. <https://doi.org/https://doi.org/10.1007/s11162-009-9137-8>
- Horne, D.M. (2017). *Emotional intelligence as a predictor of student success in first-year Master of Social Work students*. (Dissertation). Azusa, CA: Azusa Pacific University.
- Jason, L.A., Stevens, E., and Ram, D. (2015). Development of a Three-Factor Psychological Sense of Community Scale. *J. Community Psychol.* 43(8), 973-985. <https://doi.org/10.1002/jcop.21726>
- Keyes, C.L. (2002). The mental health continuum: From languishing to flourishing in life. *J. Health Soc. Behav.*, 207-222. <https://doi.org/10.2307/3090197>
- Kim, Y.K., and Sax, L.J. (2009). Student-Faculty Interaction in Research Universities: Differences by Student Gender, Race, Social Class, and First-Generation Status. *Res. High. Educ.* 50(5), 437-459. <https://doi.org/10.1007/s11162-009-9127-x>
- Kolb, D.A. (2014). *Experiential learning: Experience as the source of learning and development*. New Jersey: FT Press.
- Krejcie, R.V., and Morgan, D.W. (1970). Determining sample size for research activities. *Educ. Psychol. Meas.* 30(3), 607-610.
- Kuh, G.D. (2003). What we're learning about student engagement from NSSE: Benchmarks for effective educational practices. *Change: The magazine of higher learning* 35(2), 24-32. <https://doi.org/https://doi.org/10.1080/00091380309604090>
- Kuh, G.D., and Hu, S. (2001). The effects of student-faculty interaction in the 1990s. *Rev. High. Educ.* 24(3), 309-332. <https://doi.org/10.1353/rhe.2001.0005>
- Levy, D. (2009). For-profit versus nonprofit private higher education. *International higher education* (54). <https://doi.org/10.6017/ihe.2009.54.8414>
- Li, D., Bao, Z., Li, X., and Wang, Y. (2016). Perceived school climate and Chinese adolescents' suicidal ideation and suicide attempts: The mediating role of sleep quality. *Journal of school health*, 86(2), 75-83. <https://doi.org/https://doi.org/10.1111/josh.12354>
- Liu, X. (2020). Institutional governance in the development of private universities in China. *Higher Education*, 79(2), 275-290. <https://doi.org/10.1007/s10734-019-00409-0>

- Liu, X., Zhou, H., Hunt, S., and Zhang, Y. (2021). For-Profit or Not-for-Profit: What Has Affected the Implementation of the Policy for Private Universities in China? *High. Educ. Policy*.  
<https://doi.org/10.1057/s41307-021-00254-w>
- Mayhew, M., Rockenbach, A.N., Bowman, N.A., Seifert, T.A., and Wolniak, G.C. (2016a). *How college affects students: Volume 3, 21st century evidence that higher education works*. San Francisco, CA: Jossey-Bass.
- Mayhew, M.J., Rockenbach, A.N., Bowman, N.A., Seifert, T.A., and Wolniak, G.C. (2016b). *How college affects students: 21st century evidence that higher education works*. San Francisco, CA: Jossey-Bass.
- McEvoy, A., and Welker, R. (2000). Antisocial behavior, academic failure, and school climate: A critical review. *Journal of Emotional and Behavioral disorders* 8(3), 130-140.  
<https://doi.org/https://doi.org/10.1177/106342660000800>
- McIntosh, E.J., and Nelson, D.D. (2012). "Transfer students: Thriving in a new institution," in *Thriving in transitions: A research-based approach to college student success*, eds. D.D. Nelson, L.A. Schreiner & M.C. Louis. Columbia, SC: National Resource Center for The First-Year Experience and Students in Transition, 137-166.
- McMillan, D.W., and Chavis, D.M. (1986). Sense of community: A definition and theory. *J. Community Psychol.* 14(1), 6-23. [https://doi.org/10.1002/1520-6629\(198601\)14:1<6::AID-JCOP2290140103>3.0.CO;2-I](https://doi.org/10.1002/1520-6629(198601)14:1<6::AID-JCOP2290140103>3.0.CO;2-I)
- Mehmood, S.M., and Najmi, A. (2017). Understanding the impact of service convenience on customer satisfaction in home delivery: evidence from Pakistan. *Int. J. Electron. Cust. Relatsh. Manag.* 11(1).  
<https://doi.org/10.1504/ijecrm.2017.086752>
- Metheny, J., McWhirter, E.H., and O'Neil, M.E. (2008). Measuring perceived teacher support and its influence on adolescent career development. *J. Career Assessment* 16(2), 218-237.  
<https://doi.org/10.1177/1069072707313198>
- Miller, A.E. (2019). *College student thriving: A comparison of innovative extension sites to the traditional college campus*. (Dissertation). Azusa, CA: Azusa Pacific University.
- Nelson, D.D., and Vetter, D. (2012). "Thriving in the first year," in *Thriving in transitions: A research-based approach to college student success*, eds. D.D. Nelson, L.A. Schreiner & M.C. Louis. (Columbia, SC: National Resource Center for The First-Year Experience and Students in Transition), 41-63.
- Nunnally, J.C. (1994). *Psychometric theory 3E*. New York: Tata McGraw-hill education.
- Podsakoff, P.M., and Organ, D.W. (1986). Self-reports in organizational research: Problems and prospects. *J. Manag.* 12(4), 531-544. <https://doi.org/10.1177/014920638601200408>
- Prezza, M., Amici, M., Roberti, T., and Tedeschi, G. (2001). Sense of community referred to the whole town: Its relations with neighboring, loneliness, life satisfaction, and area of residence. *J. Community Psychol.* 29(1), 29-52. [https://doi.org/10.1002/1520-6629\(200101\)29:1<29::AID-JCOP3>3.0.CO;2-C](https://doi.org/10.1002/1520-6629(200101)29:1<29::AID-JCOP3>3.0.CO;2-C)
- Quin, D., Heerde, J.A., and Toumbourou, J.W. (2018). Teacher support within an ecological model of adolescent development: Predictors of school engagement. *J Sch Psychol* 69, 1-15.  
<https://doi.org/10.1016/j.jsp.2018.04.003>
- Rankin, S., and Reason, R. (2008). Transformational Tapestry Model: A comprehensive approach to transforming campus climate. *Journal of Diversity in Higher Education* 1(4), 262.
- Ricard, N.C., and Pelletier, L.G. (2016). Dropping out of high school: The role of parent and teacher self-determination support, reciprocal friendships and academic motivation. *Contemp. Educ. Psychol.* 44-45, 32-40. <https://doi.org/10.1016/j.cedpsych.2015.12.003>
- Ringle, C.M., Wende, S., and Becker, J.-M. (2015). SmartPLS 3. SmartPLS GmbH, Boenningstedt. *J. Serv. Sci. Manag.* 10(3), 32-49.
- Robbins, S.B., Lauver, K., Le, H., Davis, D., Langley, R., and Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychol. Bull.* 130(2), 261.  
<https://doi.org/10.1037/0033-2909.130.2.261>
- Romero, E. (2016). *Thriving in community college students of low socioeconomic status*. (Dissertation). Azusa, CA: Azusa Pacific University.
- Ruzek, E.A., Hafen, C.A., Allen, J.P., Gregory, A., Mikami, A.Y., and Pianta, R.C. (2016). How teacher emotional support motivates students: The mediating roles of perceived peer relatedness, autonomy support, and competence. *Learn. Instr.* 42, 95-103. <https://doi.org/10.1016/j.learninstruc.2016.01.004>
- Ryan, A.M., and Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *Am. Educ. Res. J.* 38(2), 437-460.  
<https://doi.org/10.3102/00028312038002437>
- Schreiner, L.A. (2010a). Thriving in community. *About Campus* 15(4), 2-11.  
<https://doi.org/https://doi.org/10.1002/abc.20029>



- Schreiner, L.A. (2010b). The "Thriving Quotient". *About Campus: Enrich. Student Learn. Exp.* 15(2), 2-10. <https://doi.org/10.1002/abc.20016>
- Schreiner, L.A. (2012). "From surviving to thriving during transitions," in *Thriving in transitions: A research-based approach to college student success*, eds. L.A. Schreiner, M.C. Louis & D.D. Nelson. 2nd ed (South Carolina: National Resource Center for The First-Year Experience & Students in Transition), 17-32.
- Schreiner, L.A. (2014). Different Pathways to Thriving among Students of Color: An Untapped Opportunity for Success. *About Campus: Enrich. Student Learn. Exp.* 19(5), 10-19. <https://doi.org/10.1002/abc.21169>
- Schreiner, L.A. (2016). "Thriving: Expanding the goal of higher education," in *Well-being and higher education: A strategy for change and the realization of education's greater purpose*, ed. D.W. Harward. New York: American Association of Colleges and Universities).
- Schreiner, L.A. (2018). Thriving in the second year of college: Pathways to success. *New. Dir. High. Educ.* 2018(183), 9-21. <https://doi.org/10.1002/he.20289>
- Schreiner, L.A., Martinez, T.K., Drumm, J., and Keetch, C. (2020). "The role of faculty in college student thriving," in *Thriving in transitions: A research-based approach to college student success*, eds. L.A. Schreiner, M.C. Louis & D.D. Nelson. (South Carolina: National Resource Center for The First-Year Experience & Students in Transition), 193-209.
- Schreiner, L.A., McIntosh, E., Kalinkewicz, L., and Cuevas, A. (2013). "Measuring the malleable: Expanding the assessment of student success", in: *Association for the Study of Higher Education*. (St. Louis, MO, United States).
- Schreiner, L.A., Nelson, D.D., and Louis, M.C. (2012). *Thriving in transitions: A research-based approach to college student success*. South Carolina: The National Resource Center for The First-Year Experience.
- Seppelt, T. (2016). *Thriving on campus: The role of on-campus residency and campus involvement in sophomore students* (Doctoral Dissertation) Azusa Pacific University.
- Shiau, W.-L., and Luo, M.M. (2012). Factors affecting online group buying intention and satisfaction: A social exchange theory perspective. *Comput. Hum. Behav.* 28(6), 2431-2444. <https://doi.org/10.1016/j.chb.2012.07.030>
- Sonn, C.C. (2002). "Immigrant adaptation," in *Psychological sense of community*, eds. A. Fisher, C. Sonn & B. Bishop. (Boston: Springer), 205-222.
- Souza, S.B.d., Veiga Simão, A.M., and Ferreira, P.d.C. (2019). Campus climate: The role of teacher support and cultural issues. *Journal of Further and Higher Education* 43(9), 1196-1211. <https://doi.org/https://doi.org/10.1080/0309877X.2018.1467387>
- Strayhorn, T.L. (2018). *College students' sense of belonging: A key to educational success for all students*. London: Routledge.
- Tenenhaus, M., Vinzi, V., Chatelin, Y., and Lauro, C. (2005). PLS path modeling. *Comput. Stat. Data Anal.* 48(1), 159-205. <https://doi.org/10.1016/j.csda.2004.03.005>
- Vetter, M., Schreiner, L., and Jaworski, B. (2019a). Faculty attitudes and behaviors that contribute to thriving in first-year students of color. *J. First-Year Exp. Students Transit.* 31(1), 9-28.
- Vetter, M.K. (2018). *Quality and quantity of co-curricular involvement as predictors of college student thriving*. (Dissertation). Azusa, CA: Azusa Pacific University.
- Vetter, M.K., Schreiner, L.A., McIntosh, E.J., and Dugan, J. (2019b). Leveraging the quantity and quality of co-curricular involvement experiences to promote student thriving. *The Journal of Campus Activities Practice and Scholarship* 1(1), 39-51.
- Wells, A.V., and Horn, C. (2015). The Asian American college experience at a diverse institution: Campus climate as a predictor of sense of belonging. *Journal of Student Affairs Research and Practice* 52(2), 149-163. <https://doi.org/https://doi.org/10.1080/19496591.2015.1041867>
- Wentzel, K.R., Battle, A., Russell, S.L., and Looney, L.B. (2010). Social supports from teachers and peers as predictors of academic and social motivation. *Contemp. Educ. Psychol.* 35(3), 193-202. <https://doi.org/10.1016/j.cedpsych.2010.03.002>
- Wetzels, M., Odekerken-Schröder, G., and Van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quart.*, 177-195. <https://doi.org/10.2307/20650284>
- Wolf-Wendel, L., Ward, K., and Kinzie, J. (2009). A tangled web of terms: The overlap and unique contribution of involvement, engagement, and integration to understanding college student success. *J. Coll. Student Dev.* 50(4), 407-428. <https://doi.org/doi:10.1353/csd.0.0077>
- Zhao, D. (2022). *Ranking of Universities in China in 2022*. Beijing: Science Publishing House.