Article

Sustaining Student Engagement in Chinese Higher Education: A Qualitative Study of Social Support and Motivation

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Abstract: Sustainable learning participation has emerged as a key issue in higher education, especially in situations where academic pressure and the speed of change in education are high. This paper looks at the role of social support and motivation in maintaining student engagement in the long run amongst Chinese university students. This research is designed to examine the effect of social support processes and motivation processes on maintaining long-term learning engagement in postsecondary education. The semi-structured interviews took place with 25 undergraduate and postgraduate students from Chinese public universities. NVivo-assisted thematic analysis was used in analyzing data through an interpretivist paradigm. The concept of sustainable engagement that will be used in this research is the ability of students to be able to recover and re-engage when they are disengaged, as opposed to being continuously motivated. The experience of sustainable learning is dynamic and thus cycles of disengagement and recovery, and not constant motivation. Relational support provided by family, peers, teachers, and institutions plays the role of psychological and structural infrastructure, which helps in sustaining persistence and re-engagement. Intrinsic interest, future orientation, self-efficacy, and perceived meaning are motivation factors that are very important resources that promote engagement in the long run. This research will add to the body of literature on engagement by offering a conceptualization of sustainable engagement as a process of recovery and illustrating a reciprocal interaction between social support and motivation in the formation of long-term engagement. The results serve as qualitative information to teachers and schools that would want to create enabling learning conditions that support persistence and student wellness.

Keywords: Sustainable Learning Engagement; Social Support; Intrinsic Motivation; Extrinsic Motivation; Higher Education; Chinese University Students

1. Introduction

The involvement in learning has been considered as one of the key pillars of successful education and has affected academic success, persistence, and self-development. Conventionally, engagement has been theorized as a multidimensional construct, which involves participation in learning activities behaviorally [1], emotionally, and cognitively. Though this framework has helped in the study of student learning, the recent educational discussion has moved towards a more permanent concept, sustainable learning engagement. In contrast to short and situational engagement, sustainable engagement places focus on the ability of learners to sustain valuable engagement in the learning process in the long term, despite the pressures of academic tasks, evolving learning conditions, and

personal difficulties.

This change is especially applicable in the modern education system that is being marked by an accelerated technological development, increased performance demands, and an increase in competition. In these situations, students can seem to be actively involved in the action and feel motivation fatigue or lack of emotion [2]. Thus, the problem of sustainable learning engagement is now a burning problem among the educators and policy-makers who seek to promote not only academic success but also well-being and long-term development of the learners. What are the interactions between social support structures and motivational processes in maintaining long term learning engagement amongst Chinese university students? Compared to the previous quantitative research where engagement is seen as a fixed phenomenon, the present research provides a qualitative, process-based perspective of engagement in the form of disengagement and recovery cycles and is contextualized to the socio-cultural environment of Chinese higher education.

The case study of China is an interesting scenario of sustainable involvement in learning. China's education system has undergone mass development and metamorphosis in the past few decades, but has also witnessed society strongly attaching great importance to the value of academic achievement, social advancement and national development [3]. The Chinese students tend to work in a very organized learning setting with the identification of the competitive evaluation, a high level of parental engagement, and the growing use of online learning services. Even though these conditions have led to high academic performance, they have also generated concern over the high extrinsic pressure, burnout, and the dropping intrinsic motivation. This has led to a pressing concern in knowing how learning engagement is supported, rather than coercive mechanisms of externally controlled interaction (e.g., exam-based compliance models) [4].

The research conducted to date on learning engagement in China has largely been quantitative in nature, involving measures of engagement clarity (frequency of participation, time on task, engagement self-report scale) which are all measurable. These works have offered useful information on patterns and predictors of engagement, but they tend to think of engagement as a static outcome, and as a dynamic process [5]. Furthermore, quantitative models can hide the subjective meanings that learners can give to their learning experiences and social contexts that condition their motivation and endurance over time.

On the contrary, qualitative studies will provide the possibility to examine how students themselves see and experience engagement in their daily academic lives. Qualitative inquiry can bring the complex processes involved in holding engagement steady, interrupted, or altered by foregrounding the voices of students. Although it has potential, little research on sustainable learning engagement has been conducted qualitatively, especially in the Chinese higher learning setting. The discrepancy limits our comprehension of how social relations, cultural values, and motivational mechanisms interact with each other to assist in the long-term engagement.

There has been increased qualitative and mixed-method research on the topic of student engagement, especially when it is applied to Chinese higher education. Qualitative research has emphasized the importance of social relationships, cultural expectations and institutional practices in influencing student motivation and engagement procedures [6]. Longitudinal studies have also pointed out that engagement is dynamic with time and it is affected by academic transitions, stressors and social contexts. Moreover, the research on sustainability-oriented education has also provided frameworks that conceptualize the concept of engagement as a long-term process of development instead of a fixed result. Nonetheless, the literature on qualitative studies on sustainable learning engagement is scarce, especially in the context of how social support and motivational processes interact.

Social support and motivation are two factors that are always emphasized in the literature about engagement. Social support refers to the emotional, instrumental and informational support given by family members, peers, teachers, or learning institutions. The previous research indicates that positive social contexts boost a sense of belongingness among learners, lower stress levels and increase persistence in them [7]. The collectivist culture in China entails that social support is deeply ingrained in cultural values that stress interdependence, family responsibility, and respect for authority. These cultural forces can be used to understand how support affects the experience of support and its effects in the long run on engagement in learning.

Motivation and especially future-oriented goals and intrinsic motivation is an internal process that keeps the learners working hard and committed. Although, extrinsic motivators like grades and examinations are still eminent in the Chinese education system, there is mounting evidence that intrinsic interest, perceived competence, and personal meaning are the fundamental requirements in maintaining engagement on a long-term basis. Motivation,

however, does not act in isolation. Social interactions and institutional practices tend to influence its construction, reinforcement or weakening [8].

Although the role of social support and motivation has been acknowledged, all the literature focuses on analyzing these variables individually or as independent predictors of engagement. The gap in integrated, context-sensitive interpretation of the joint contribution of the social support structures to both motivational factors and sustainable engagement in learning still exists. This is quite limiting, especially in qualitative research that aims to deconstruct the lived experiences of learners as well as interpretive systems.

Thus, the proposed research will fill this gap and discuss the role of social support and motivational factors in sustainable learning engagement among Chinese students through a qualitative research design. Instead of quantifying engagement as an abstract concept, the research explores the way students can explain their engagement patterns, the support they seek, and the reasons why they can continue to do so, over time. Placing these experiences in the wider context of Chinese higher education, i.e., in terms of socio-cultural context and institutional framework, the study aims to offer a more nuanced and grounded view of the idea of sustainable learning engagement.

The research findings are likely to make three contributions to the literature. To begin with, they expand the study of engagement by not concentrating on short-term measures but on the long-term processes of engagement. Second, they give qualitative evidence in the Chinese context which is still underrepresented in studies of thorough engagement. Third, they provide some useful information to teachers and institutions who intend to create learning environments that not only promote performance but also sustained engagement and motivation.

Theoretical Framework

Self-Determination Theory (SDT) is an approach to human motivation and engagement that assumes that three fundamental psychological needs, which are autonomy, competence, and relatedness, motivate human action and engagement. Autonomy is the sense of volition and choice in the learning endeavours, competence is a sense of belief in personal ability to perform well, and relatedness is a sense of affiliation and belonging to another person. These constructs have been extensively applied in the explanation of student engagement and persistence in schools.

The Social Cognitive Theory (SCT) focuses on the influence of self-efficacy, which refers to the conviction of the ability of individuals to execute activities and produce the desired results. Self-efficacy affects effort, persistence and ability to recover following a setback, which makes it especially important in its contribution to the understanding of sustainable learning engagement as a dynamic process [9].

The belongingness theory also emphasizes social relationships and how one feels like they belong in supporting their engagement and psychological well-being. A feeling of belonging with peers, teachers, as well as institutions, has been found to enhance academic persistence, and discourage disengagement in higher education [10].

Relatedness and belongingness are conceptually associated with social support mechanisms and motivational factors with intrinsic interest, self-efficacy, and future orientation are aligned to competence and autonomy. This theory integration offers an interpretative framework of the interplay between social and motivational processes that maintain long-term learning engagement.

Although Self-Determination Theory, Social Cognitive Theory, and belongingness theory offer some of the best explanations of psychological needs, competence beliefs, and social relationships, they are usually implemented alone and viewed on the basis of explaining interest in engaging. These models fail to provide an adequate explanation of how the students resume engagement after engaging in disengagement. They hardly visualize engagement as a process of recovery in the long term. Besides, they downplay the contribution of socio-cultural structures including family responsibility, peer co-regulation, and institutional routines that came out as very powerful within this study. The available Chinese engagement research, which is mainly quantitative, further assumes engagement as a fixed and quantifiable outcome and not a process. Thus, a synthesized, qualitative, and context-sensitive explanation of the role of social support and motivational mechanisms in maintaining engagement in the long run has not been developed. This paper fills this gap with its conceptualization of sustainable engagement as disengagement and recovery cycles based on the lived experiences of students.

2. Materials and Methods

2.1. Research Design

The research design adopted in the study was qualitative to investigate the role of social support and motivational factors in the persistent engagement of learning among students in China. The choice of a qualitative approach was due to the fact that the goal of the research was not to determine the degree of engagement or confirm a set of hypotheses that were previously developed, but to get an idea of the lived experiences of learners, their perception, and meaning-making in the context of being engaged in the long term. The phenomenon of sustainable learning engagement is a multifaceted and context-specific one that entails subjective definitions of motivation, social relationships, and educational contexts and can hardly be measured using only the quantitative tools [11].

The paradigm that informed the study was the interpretivist paradigm, which presupposes that reality is social and that people perceive their experiences based on their interaction with their social and cultural environments. This paradigm is especially appropriate to research the learning engagement in China, where the educational practices and motivation orientations are defined by collective values, institutional norms and family expectations [12]. Through this view, the research attempted to measure the perceptions of the participants on engagement as a proactive and changing process and not an outcome of a certain behaviour.

2.2. Research Context

The study was carried out in the higher educational institutions within China. Chinese universities have a centralized system of education with standardized curricula, competition-based evaluation systems, and the growth of the integration of digital learning technologies. Simultaneously, the academic lives of students are tightly interrelated with the general social patterns, such as family participation, peer connections and social demands toward academic achievement [13].

Over the last few years, Chinese higher education has put more attention on learner-centered, innovation, and lifelong learning. Nevertheless, the reforms exist along with examination-based traditions and performance-based assessment practices. Such a duality establishes a special atmosphere where students must maintain involvement in long-term academic paths. In this context, one must consider both institutional factors and interpersonal relations that influence the process of learning by students in order to understand sustainable learning engagement [14].

2.3. Sampling Strategy and the Participants

A purposive design of the study was used in the selection of the participants and the researcher could find people who could give detailed and pertinent information on sustainable learning engagement. The sampling methodology was designed in a way that diversity of the sample in terms of academic discipline, year of study, and gender was achieved, and a variety of perspectives and engagement experiences were obtained.

The number of students who took part in the research was 25. Demographic characteristics of participants (n = 25) are shown in **Table 1**. The collection of data was done until thematic saturation was achieved, which is the ability to stop the data collection when there were no new themes or codes in the interviews. The thematic framework was found to be stable as the number of interviews done reached a saturation of about 21 interviews and four more interviews were carried out to ensure that the thematic framework was stable. The methodology is in line with qualitative research methodologies that focus on depth and thematic exhaustiveness as opposed to statistical representativeness. The students who participated in both the undergraduate and postgraduate programs in the public universities were included. The participants had at least one academic year of experience, which allowed them to consider engagement as a long-term experience instead of a period of adjustment [15]. This criterion was also significant in order to make sure that the participants were able to talk about engagement throughout time, with the periods of difficulty, development, and endurance.

The respondents were recruited using academic networks and student contacts. They were notified of the study purpose and that their participation was voluntary beforehand.

The sample was rich in students of various academic disciplines and levels of study, which gave different opinions on sustainable learning participation at various levels of university education. The level of saturation was also evaluated by the observation of code emergence throughout the repeated coding of the interviews. Interview 21 produced no new codes and, thus, the level of conceptual saturation was reached, whereas four more interviews

were carried out to ensure the integrity of the thematic framework.

Table 1. Demographic characteristics of participants (n = 25).

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	13	52%
	Female	12	48%
Degree Level	Undergraduate	15	60%
	Postgraduate	10	40%
Discipline	Social Sciences	9	36%
	Engineering	7	28%
	Business/Management	5	20%
	Natural Sciences	4	16%
Year of Study	1st–2nd year	8	32%
	3rd–4th year	10	40%
	Postgraduate Year 1–2	7	28%

2.4. Data Collection Methods

Semi-structured interviews were used to gather the data as the method offered flexibility and consistency at the same time. This approach enabled the researcher to examine presupposed themes regarding the social support, motivation and engagement as well as to permit participants to raise issues they have found personally relevant.

The interview guide was created in accordance with research objectives and literature. The main points that were covered during the interviews were:

○ The knowledge about the learning engagement and sustainability among the participants;
○ Histories of holding onto or losing interest as time goes by;
○ Social support sources and forms of academic life;
○ Both motivational drivers and obstacles [16];
○ Conceptualizations of engagement as a result of institutional and cultural factors.

The interviews were carried out using Mandarin, the native language of the participants, to help them express themselves and to reduce language and related limitations. The duration of every interview was between 45 and 60 min. The audio recording of the interviews was used with the consent of the participants to guarantee the correct recording of the data and further transcribing it word-to-word, which could be analysed.

The interview plan was designed in accordance with the developed theoretical frameworks and, in particular, with the Self-Determination Theory and Social Cognitive Theory, as well as based on the previous research on student engagement and motivation. The questions were formulated to examine the experiences of the students in terms of social support, motivational process and engagement in the long run. The interview guide was pilot tested on two undergraduate students and one postgraduate student to make it clear and to minimize the possibility of bias and make necessary amendments to the wording to prevent leading and ambiguous questions.

2.5. Data Analysis Procedure

Thematic analysis was the qualitative technique used to analyse the collected data, which is a common quantitative technique in identifying and interpreting the patterns in the textual data. It was done in a systematic and repeated analysis [17].

To begin with, the interview transcripts were read several times to gain familiarity with the data. Primary impressions and repeat thoughts were recorded at this stage. Second, open coding was performed in order to identify meaningful units in terms of engagement, social support and motivation. Segmentation of the text containing relevant concepts or experiences was done and assigned codes.

Third, the related codes were categorized into broad themes and they were narrowed down into themes that showed common patterns among participants. These themes were checked and rewritten so that they can be internally coherent and have a clear division of categories. During the analysis, both convergent and divergent viewpoints have been considered so that the research could include the diversity in the experiences of the participants [18].

The coding decisions were reviewed several times in order to improve analytical rigor, and refinement of themes to bring them closer to research questions occurred. The ultimate thematic framework was used to present

the results.

Coding Procedure and Validation

NVivo software was applied in coding interview transcripts. The initial step was the use of open coding that was used to identify meaningful units, followed by the application of axial coding, which was used to cluster related concepts into themes and categories. In order to increase reliability, the coding of 20 percent of the transcripts was conducted by a second researcher. Cohen's Kappa (k = 0.82) was used to determine the inter-coder reliability which shows a high level of agreement. Five participants were member checked to make sure that the themes were interpreted. Triangulation was attained by comparing quotes, demographic variation as well as inter-interview repetition of codes.

2.6. Credibility of the Research

A number of measures were taken to make the qualitative results more credible. Support of credibility was achieved by long interaction with the data and paying much attention to what the participants said themselves in the course of the analysis. The description of the research setting, subjects, and methods was detailed in order to increase transferability [19].

To ensure dependability, an account of the research process was very clear and transparent, with decisions on sampling procedures, interviews and analysis. The reflexive consideration of the role of the researcher and a cautious interpretation based on the data helped to support confirmability.

2.7. Ethical Considerations

Good ethics were highly applied during the study. The process of participation was voluntary and informed consent was obtained from all participants before the collection of data. The subjects were guaranteed confidentiality and anonymity and transcripts and reports were deprived of identifying information [20].

The research was of low risk to the research participants since it involved reflections based on experiences in academic life, as opposed to personal issues that are sensitive. The data were safely stored and could only be accessed in order to carry out their research.

3. Result

The semi-structured interviews conducted (n = 25) yielded a thematic analysis with three distinct clusters of results, namely: (1) social support mechanisms, which level the learning routines and emotional endurance, (2) motivational factors, which maintain the efforts and sense of purpose over time, and (3) interaction between the support and the motivation, which transforms short-term engagement into long-term engagement. Participants consistently described sustainable learning engagement not as a constant "high" but as a cycle of dips and recoveries, where social relationships and motivation determine whether students re-engage or slowly detach.

3.1. Overview of Themes

Appendix A, **Table A1** summarizes the final thematic structure. Themes are presented with their subthemes and a concise description of what each captures in **Table 2**.

Table 2. Final thematic structure and operational meanings (n = 25).

Theme	Subtheme	What It Captured in Participants' Accounts
Social support mechanisms	Family support and expectations Peer networks and collaborative learning Teacher encouragement and feedback Institutional learning environment	Emotional security, pressure-management, resource stability, obligation framing Shared accountability, study co-regulation, normalization of struggle Meaningful recognition, instructional clarity, emotional reassurance Access, fairness, structure, opportunity, support services, culture
Motivational factors	Intrinsic interest and enjoyment Future orientation and goal clarity Self-efficacy and competence beliefs Autonomy and perceived meaning	Curiosity, personal relevance, enjoyment as "energy" for persistence Career anchors, upward mobility logic, long-horizon endurance Confidence in handling difficulty, rebound after failure Feeling of choice, ownership, identity alignment
Support–motivation interaction	Support shaping motivation Motivation sustaining support use	How relationships translate into belief, interest, confidence How motivated students seek help, use feedback, join peers
Sustainability pattern	Engagement cycles and recovery	Fluctuation as normal; what enables return after disengagement

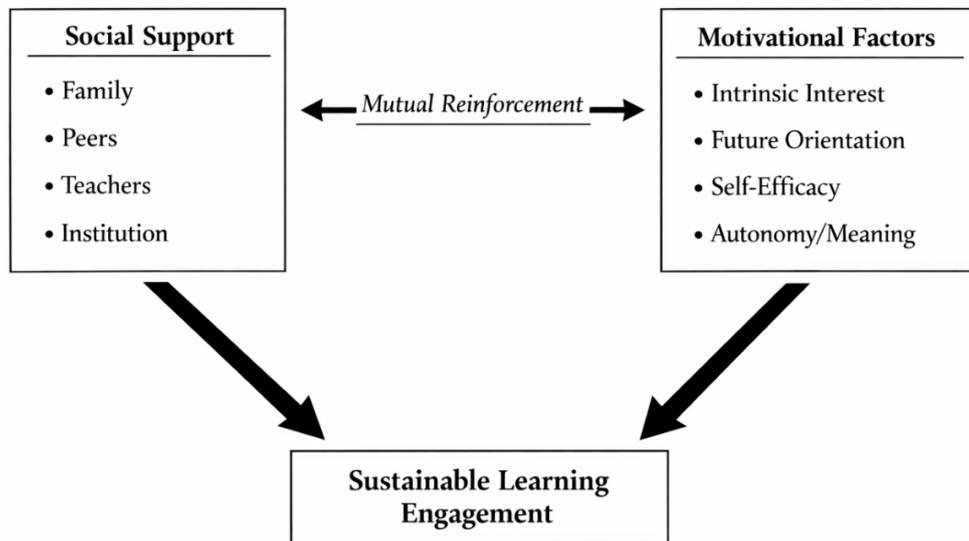To visually summarize how themes relate, **Figure 1** provides a conceptual synthesis of the results.

Figure 1. The thematic framework indicating social support and motivation for enduring engagement in learning.

3.2. Social Support Mechanisms That Sustain Engagement

Social support has been defined by the participants as not just help. It served as psychological scaffolding: it lowered the expenses of learning emotionally, and made people more resilient after failures, and instituted accountability mechanisms that prevented students from falling off track.

3.2.1. Family Support and Expectations

Family support operated in two directions: supportive encouragement and pressure-based responsibility. Many participants did not separate the two. For several, family expectations created stress, but also offered a structure that prevented withdrawal during difficult periods.

A common pattern was "pressure-with-care": students felt obligated to perform, yet also felt emotionally protected and materially supported.

"When I feel tired, I don't want to study, but I think of my parents' effort. It becomes like, I must keep going." (P6)

"They don't always understand my major, but they support my living costs and that gives me stability." (P12)

Students also reported that family support mattered most during engagement dips (poor grades, overload, uncertainty), functioning as a recovery resource.

Two main types of social support were described by the participants. Emotional support involved encouragement, empathy and a sense of belonging by family members, peers, and teachers. Instrumental support was practical support which included academic guidance, tutoring, financial support and access to learning materials. Whereas the emotional support assisted students to overcome stress and be psychologically tough, instrumental support assisted them to finish the tasks and perform academically. The two forms were cited to be essential in maintaining engagement especially at the time of academic challenges.

3.2.2. Peer Networks and Collaborative Learning

Peer relationships were described as the most immediate driver of sustained engagement because peers shape daily routines. Participants frequently reported that sustainable engagement was easier when learning was socially organized, such as through study groups, accountability partners, or shared goals.

"If I study alone, I delay. When my classmates are learning, I do the same. It is as though the environment drives you. (P3)

Peers also helped in being sustainable by:

- ◦ Co-regulation (creating schedules of planning studies).
- ◦ Normalization (shrinking the shame of having trouble struggling).
- ◦ Mutual accountability (is seen as one who keeps up).

When all the people are stressed, you are not so lonely. We complain but still do it." (P9)

This peer sustainability was especially evident during exam heavy times, when, in addition to learning, shared study was something like a survival mechanism psychologically speaking.

3.2.3. Feedback and Encouragement by Teachers

Sustainable engagement was affected by teacher support in the following ways: Clarity, recognition, and fairness. The participants stressed that motivation was most important when it was related to tangible feedback and ways of improvement, rather than empty compliments.

When the teacher just says good it makes no sense. When they explain to me the way to get any better, then I feel like I am able to carry on. (P15)

Based on teacher support as reported by students, three types of support were sustained to maintain engagement:

- • Clarity (enabling comprehension and minimizing effort) in the instruction.
- • Motivating feedback (converting failure into a learning indicator).
- • Relational respect (taken seriously).

The behaviour of the teachers also influenced the perception of the students whether they felt safe in asking questions or not, which affected persistence and re-engagement in the wake of failure.

3.2.4. Institutional Learning Environment

Institutional support was described less emotionally and more structurally: access to resources, fairness of assessment, and consistency of learning systems. Students linked sustainable engagement to whether the institution created an environment where effort "makes sense."

"If grading feels random, you lose motivation. You think, why try?" (P20)

Institutional conditions that supported sustainability included:

- • Predictable assessment criteria.
- • Learning spaces and digital access.
- • Academic advising and mental health supports.
- • Opportunities for internships or applied learning (which strengthened purpose).

Students also discussed that institutional culture in China often normalizes a heavy workload, which can sustain performance but also risks burnout if support is weak.

This theme proves the relatedness with regard to SDT in that students are more likely to re-engage after difficulty has ensued when the institutional clarity is high. It also depicts competence beliefs that are core in SCT. All these trends indicate how relatedness functions as a recovery resource when engagement reduces.

3.3. Motivational Factors That Sustain Engagement

Motivation was not described as a stable trait. Participants talked about motivation as something that must be re-generated, often through meaning, competence, and future direction.

3.3.1. Intrinsic Interest and Enjoyment

Intrinsic interest functioned as an "energy source" that reduced the emotional cost of studying.

Students who perceived some meaning in the content or pleasure in the learning processes said that they are more persistent and do not depend on external forces.

There is no time to lose when I like what I am reading. I do not feel intimidated, although it may be difficult. (P2)

But intrinsic interest has been defined as weak when learning was characterized by workload or repetitive evaluation.

3.3.2. Future Orientation and Goal Clarity

The best motivational anchor during the interviews was the future orientation. Students often put engagement in rational long-term terms, particularly in a competitive labor market.

"I do not always like to study, but I am aware of the fact that it relates to my job. That keeps me disciplined." (P8)

Future orientation-maintained involvement in two aspects:

◦ Goal clarity (an understanding of what results they were achieving).
◦ Making meaning (creating something out of everyday work).

This was very much relevant in China where education is highly associated with social mobility expectations.

3.3.3. Self-Efficacy and Competence Beliefs

One of the biggest differences between the students who were able to rebound and the students who gradually disengaged was self-efficacy. Students who had stronger self-efficacy interpreted a difficulty as something that could be managed whereas the other students interpreted it as a personal inadequacy.

In case I fail a quiz, I believe that I can correct it. I just need a better method. (P11)
There are times when I believe that I am not good enough. Then I do not study, as that will cause me nervousness. (P17)

The quality of feedback, as well as peer comparison, frequently influenced self-efficacy. There were also competence beliefs that determined whether the students would utilize support resources or not.

3.3.4. Autonomy and Perceived Meaning

In structured learning settings, the participants have noted that autonomy is crucial to sustainability. Autonomy did not always imply absolute freedom; it tended to imply a degree of choice, ownership or correspondence between studies and self.

I could take the pressure off in case I feel that the major is mine. When it is only selected by other people, I feel vacuity. (P5)

Perceived meaning turned labor into something that is psychologically acceptable in the long run. Where there was no meaning, attention was at compliance level and fluctuated.

These descriptions indicate that autonomy lessens the psychological cost of persistence, a concept that fits the SDT, and that confidence in task management indicates the concept of self-efficacy of the SCT. These motivation patterns demonstrate how competence beliefs have positive effects on rebound or withdrawal patterns by students in case of setbacks.

3.4. Social Support and Motivation Interaction

The most important conclusion was the fact that social support and motivation are not two lanes. They work as a feedback mechanism.

Table 3 provides an overview of the relationship between the given sources of support and the motivational outcomes and sustainability effects.

Table 3. Support–motivation pathways reported by participants (synthesis).

Theme	Subtheme	Typical Form of Support/Motivation	Effect on Motivation	Effect on Sustainable Engagement
Social support mechanisms	Family support and expectations Peer networks and collaborative learning Teacher encouragement and feedback Institutional learning environment	Emotional reassurance, financial support, responsibility framing Study groups, accountability partners, shared struggle Instructional clarity, recognition, feedback Fair assessment, resources, advising, opportunities	Duty-based persistence, emotional stability Belonging, normalization, momentum Competence beliefs, confidence building Meaning and goal clarity	Prevents withdrawal during academic difficulty Maintains learning routines and re-engagement Transforms setbacks into manageable learning Reduces cynicism, sustains long-term effort
Motivational factors	Intrinsic interest and enjoyment Future orientation and goal clarity Self-efficacy and competence beliefs Autonomy and perceived meaning	Curiosity, enjoyment, relevance Career goals, social mobility aspirations Confidence in ability to succeed Ownership, identity alignment	Internal energy for persistence Long-term commitment, discipline Persistence after failure Internalization of learning goals	Reduces emotional cost of learning Anchors engagement over time Facilitates recovery from disengagement Sustains engagement despite external pressure
Support–motivation interaction	Support shaping motivation Motivation sustaining support use	Social support enhances confidence and meaning Motivated students seek feedback and peer help	Strengthened intrinsic and extrinsic motivation Active utilization of support resources	Encourages sustained engagement Reinforces engagement cycles
Sustainability pattern	Engagement cycles and recovery	Fluctuation, disengagement, re-engagement	Adaptive coping and persistence	Defines sustainable engagement as recovery process

Others were also reported to go in reverse direction: motivation was reported to boost the chances that students actively made use of social support (asked questions, joined groups, and sought feedback). Students who had more well-defined objectives were more active in organizing support.

These results build on belongingness theory by explaining that social relationships do not exist as mechanisms of connection but they are mechanisms of re-engagement following disengagement. They also support the beliefs of SCT that persistence is maintained through the support-competence feedback loop of belief.

These results build on the belongingness theory by showing that social affiliations serve the purpose of recovery following disengagement.

3.5. Sustainability as Circles of Engagement and Recovery

One qualitative finding is that sustainable engagement does not necessarily mean continuous engagement. According to students, sustainability is the capacity to resume following periods of disengagement. Workload spikes, poor outcomes, family stress, or emotional exhaustion were the causes of these dips.

Sustainable engagement was characterized by the fact that it had a recovery mechanism, which was usually backed by:

- Peers restoring routine.
- Teachers regaining confidence by giving feedback.
- Family healing emotional strength.
- Purposes to come back meaningfully.

This implies that sustainable engagement should be implemented in interventions that focus on recovery capacity, rather than incorporate an increase in engagement.

As a display of the number of the key drivers identified in the participants (n = 25), **Figure 2** demonstrates the number of mentions by participants within the key subthemes (a descriptive qualitative measure, not a statistical inference).

Figure 2 shows a descriptive visualization of the frequency with which the themes are mentioned and does not presuppose any statistical inference and quantitative generalization.
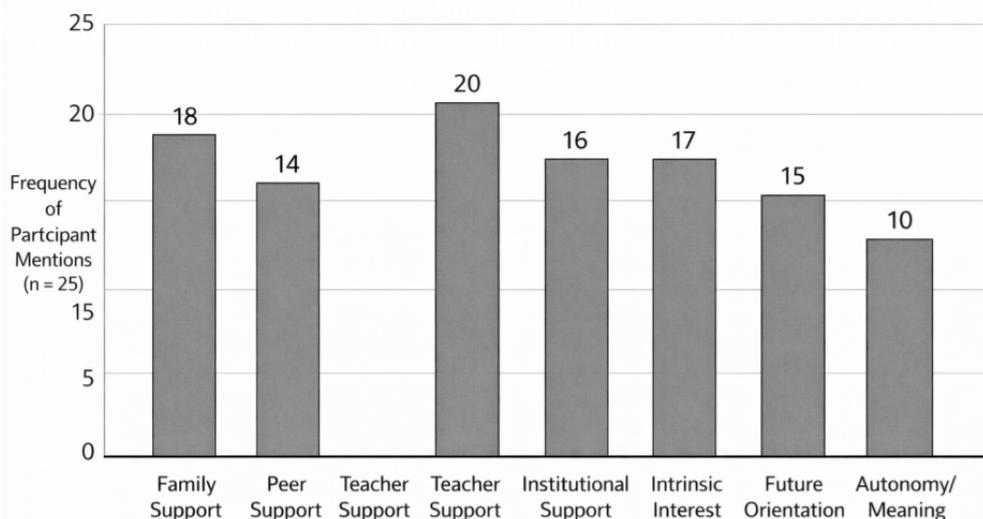
Figure 2. Participant mentions of key drivers of sustainable learning engagement (n = 25).

Note: Counts reflect qualitative mention frequency and are intended for descriptive illustration, not statisticalinference.

4. Discussion

This paper has discussed the role of social support and motivational variables to enhance sustainable learning engagement among Chinese students through qualitative interviews and thematic analysis. The results indicate that sustainable interaction is not a fixed state where the students are continuously being kept motivated. It should be considered to be more of a process of eddy flow, rise and fall, in that the learners periodically lose momentum, and then either re-engage or slowly lose interest. The reason the difference between sustainability and collapse is as follows: (a) the support networks are available and usable; (b) the motivational resources (meaning, future goals, competence beliefs) are not diminished [21].

4.1. Sustainable Learning Engagement as Recovery and Not Full Intensity

One of the contributions that this research could make is the observation that sustainable engagement can best be defined as being in the system even though there are inevitable dips. Respondents always spoke about stages of overload, exhaustion, or discouragement, which were then followed by either recovery or avoidance. This is in line with a process perspective of engagement where persistence is a factor of how learners perceive these failures and whether the surroundings will provide the resources that will make the psychological cost of persisting less [22].

This restructures the interventions of engagement. Should the institutions merely seek to raise engagement by giving workload; by spying or by pressure to perform, they can generate observable performance that is not sustainable. Conversely, the current results indicate the sustainability of recovery processes: peer co-regulation, teacher feedback which reinstates competence, family reassurance and clear future anchors that ensure the future makes the effort worthwhile. Put simply: students do not require continued motivation; they require means of returning when they lose their motivation.

4.2. Psychological Infrastructure of Social Support

The findings stress that social support is not really a one or two occasions type but a type of infrastructure that holds the engagement intact. A system of four supports was established which influenced sustainability and they included, family, peers, teachers and institutions.

Family support was used in two ways; emotional reassurance and responsibility pressure. Obligation-based motivation is not always felt as negative in the socio-cultural environment of China. Several respondents reported family expectations to be stressful but stabilizing especially when the level of engagement was low. This is to indicate that the support of the family cannot be defined in binary terms as support and pressure. Rather, it can serve as an integrated motivational climate, care and duty co-exist [23].

The peer support had become one of the key mechanisms of sustained engagement in terms of co-regulating and normalizing. The participants indicated that learning was contagious socially: studying together with people, working in groups, and discussing struggles facilitated the ease of maintaining the learning process. This is reminiscent of more general literature on belonging and relatedness needs in learning, though the current study introduces a sustainability dimension: peers played an important role in terms of performance, as well as avoiding disengagement drift.

Engagement was maintained by teacher support which was specific to competence building, and not generic encouragement. The participants identified praise and feedback several times as a channel of improvement. This supports the notion that teacher support works when it decreases uncertainty, and builds competence beliefs as well as converting failure into actionable learning information [24].

Lastly, institutional support was also important with perceived fairness, organization, and access. Students when they believed that assessment and academic systems were unpredictable or arbitrary then engagement was brittle as effort ceased to make sense. This observation underscores the fact that the institutions maintain engagement not merely due to the resources at their disposal but due to legibility: articulate criteria, uniformity of policies and plausible connections between effort and result.

4.3. Motivation: A Renewable Resource Constructed by Situation

Motivation in this research was not considered as a trait (some students are motivated). Rather, the participants explained that motivation can be described as increasing and decreasing with meaning, competence, and future direction.

Intrinsic interest promoted persistence since it reduced the emotional cost of that persistence. Students who sincerely enjoyed or personally identified with their material in the field named the subject had a higher degree of resilience during times of strain. Intrinsic motivation, however, was also discussed as being susceptible in cases of repetitive workload or even routines that are exam-driven. This implies that institutions which exclusively rely on external pressure might unwillingly undermine the intrinsic motivation and make them less sustainable in the long term [25].

The best and most prevalent anchor was future orientation. Students have defined learning as investment, and often, they associate engagement with employability, upward mobility, and self-growth. Future orientation serves as an influential sustaining discourse in an intensely competitive labour market and high-stakes system of learning: students remain interested in their long-term objectives even in cases where daily learning is exhausting.

The difference between recovery and withdrawal was self-efficacy. When the competence beliefs were stronger, the setbacks were perceived as solvable by the participants (I need a better method), and with lower self-efficacy participants noted that they avoided the setbacks due to anxiety and self-doubt. This contributes to a social-cognitive interpretation of sustainable interaction: persistence relies greatly on the fact that the students think that effort is going to work and are able to do something better [26].

Even in structured systems, autonomy and perceived meaning turned out to be necessary. Students did not need unlimited freedom; on the contrary they needed to have a sense of ownership and congruence between studies and identity. In a situation where the students perceive the major or learning pathway as a choice of others, they indicated that it was hollow and unstable. That is to say, there must be some level of personal approval, even in the environments concerning culturally salient duty.

4.4. The Support-Motivation Feedback Loop

Among the lessons that have been learned is the fact that social support and motivation are not independent but they are reinforcing. Social support was not merely soothing, but also active when it came to driving up motivation processes:

- Family reassurance could hold the dips and reinstate the responsibility-based persistence among the students.
- Peer co-learning led to a feeling of momentum, belonging and normalized challenge.
- The power of competence beliefs and decreased helplessness were related to teacher feedback.
- Institutional fairness was maintained, meaning cynicism was reduced.

Meanwhile, the motivation also affected the successful application of the support among the students. More

clear goals and strong self-efficacy of students increased their chances of seeking feedback, participating in study groups, and using institutional resources. This means that the interventions directed towards a sustainability approach must not consider support and motivation as independent programs. Sustainable engagement means one needs an ecosystem: a support that enhances motivation and motivation that facilitates support-seeking behaviors.

4.5. China-Specific Interpretation Too, Minus Stereotyping It to Death

The Chinese context here is important but not shortcuts of the cartoonish collectivist society. The results indicate a certain order:

◦ High performance norms produce effective external structure in terms of engagement, but can burn out when there is poor meaning plus competence support.
◦ Family responsibility framing has the power to maintain persistence, yet can also raise emotional strain of emotion when faced with a loss.
◦ The peer-based coping and co-study is a very important strategy when one is under pressure from academic routines.
◦ In particular, institutional fairness and clarity matter as students are already dedicating much effort to it; under the impression that the systems are arbitrary and haphazard, it makes sense to disengage [27].

Sustainable engagement in this context does not just mean making pressure (China does not lack pressure). It is concerned with maintaining a balance between pressure and the support that does not affect competence, meaning and healing ability.

4.6. Comparison with Chinese and East Asian Studies

Most of the past Chinese literature on student engagement has been based on quantitative surveys of the levels of participation, time on task, and engagement measures. These studies have good predictors but fail to show how students view engagement in the long run. The current results are an extension of this literature, with an explanation of engagement in terms of recovery instead of constant intensity as a process. The peer co-regulation and family responsibility roles evident in this case are an extension of the collectivist learning cultures in East Asia, but this paper demonstrates how the two social constructs act as recovery mechanisms and not as motivation forces. This qualitative description is a complement to the existing quantitative results, and it offers a culturally-based explanation of sustainable engagement.

4.7. Practical Implications

In case of universities and departments:

◦ Establish transparent and consistent systems of building assessment. When effort is a sure measure of results, students maintain their attention.
◦ Establish support systems that are observable and can be accessed easily, especially when there is a high workload.
◦ Facilitate the use of learning communities, peer mentoring and the formation of structured study groups to aid in co-regulation [28].

For instructors:

◦ Substitute general compliments with comments that give a specific way of improvement.
◦ Make struggle a normal practice and make failures a process of learning.
◦ Strengthen meaning by using teaching methods which help students to be autonomous (choosing topics, having flexible paths, using authentic tasks, etc.).

In the case of student support services:

◦ Pay attention to the re-engagement programming: time management, coping strategies, planning the academic recovery in the case of failure, and confidence rebuilding [29].
◦ Detect inattentiveness early by offering supportive check-ins as opposed to punishment surveillance [30].

4.8. Limitations and Future Research

There are various limitations associated with this study. To start with, the interviews were done in Mandarin and translated into English and may have created some slight interpretation bias even with a close translation. Second, the subjectivity of the research and the interpretivist research paradigm are based on the construction of meanings subjectively, which can be impacted by culture-related interpretations of the stories of the participants. Third, the positionality of the interviewer could have influenced the expression of the experiences of the participants, despite the attempts to be neutral and reflexive when collecting the data [31].

The participants were restricted to students of Chinese public universities, which could limit the applicability of the results in other education settings. Although the study is rich and contextually rich in terms of understanding sustainable engagement, the findings cannot be taken to be generally, but are context-specific findings. Also, research mainly involved face to face and immediate social support systems like family, peers, teachers and institutional settings. The use of digital peer learning spaces and platform interactions was not delved into. The digital peer learning environments like WeChat groups that are beyond the confines of this study can be subject to further study in the future.

5. Conclusions

This paper explored the notion of sustainable learning engagement in China by qualitatively examining social support and motivational issues in students. Going beyond momentary or shallow ideas of engagement, the results show that the concept of sustainability in learning is not characterized by active intensity and continuous motivation. Rather, sustainable engagement becomes a dynamic process of fluctuation, recovery and persistence that is conditioned by the interaction of social environments of learners and motivational resources.

The results indicate that social support is a stabilizing infrastructure that will help the learners to be engaged in the long-term. Emotional security and responsibility framing is offered by family support, co-regulation and normalizing struggle is offered by the peer networks, competence enhancement and clarity enhancement are offered by the teacher, and perceptions of meaning and worthiness in effort are shaped by the institutional environments. These support systems do not work alone; on the contrary, they keep on interacting with motivational orientations of the learners.

Intrinsic interest, future orientation, self-efficacy and meaning were identified as critical motivational factors that promoted engagement over time through periods of academic difficulty. In this research motivation was never felt to be a fixed quality but a renewable source which is increased or diminished in the process of social interaction and learning conditions. Students whose future goals were more specific and believed in their competence showed better resilience in in the face of a setback and over time engagement.

One of the key contributions of the study is the establishment of the social support and motivation reciprocity. Support mechanisms reinforce motivation and support and facilitate meaning, competence and belonging and support enables learners to actively seek and interpret and use the available support. This interdependence suggests that, in the execution of interventions that are intended to enhance sustainable learning engagement, there should be a shift to a process that is interdependent rather than an individual process that focuses on the creation of supportive educational environments.

In the Chinese context of higher education, the results map out the constraints of the pressure-based engagement. Although performance can be sustained with high expectations and organized systems, long-term engagement needs the addition of complementary supports that safeguard the well-being of learners, promote their independence and tenacity of motivation. The policies and practices applied in education that overlook these aspects would be vulnerable to creating compliance by not being sustainable.

In general, this research work adds to engagement research by providing a process and context-driven insight into sustainable engagement in learning and by prefiguring the lived experiences of the students. The observations made herein offer a basis for future studies on the topic and the potential work-plans to help learners not just to participate, but to stay involved in the long run, as well.

Author Contributions

Conceptualization, S.Z. and A.A.; Methodology, S.Z. and J.A.; Investigation, S.Z.; Data curation, S.Z.; Formal analysis, S.Z.; Validation, S.Z., A.A., and J.A.; Writing—original draft, S.Z.; Writing—review and editing, A.A. and J.A.; Supervision, A.A. and J.A. All authors have read and agreed to the published version of the manuscript.

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Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

The data presented in this study are available from the corresponding author upon reasonable request, subject to ethical and confidentiality considerations.

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Conflicts of Interest

The authors declare no conflict of interest.

Appendix A. Summary Quote Matrix

Table A1. Selected quotes of the main themes by the representatives.

Theme	Subtheme	Participant Code	Representative Quote
Social Support	Family Support	P03	"My parents always remind me why education matters, especially when I feel tired or lose motivation."
Social Support	Peer Support	P11	"Studying with classmates keeps me accountable. When others work hard, I feel pressure to keep up."
Social Support	Teacher Support	P19	"My supervisor's feedback makes me confident that I am improving, which motivates me to continue."
Motivation	Intrinsic Motivation	P07	"I enjoy learning new things, so even when courses are difficult, I still want to understand them."
Motivation	Future Orientation	P15	"I think about my career, and that keeps me engaged even when I feel exhausted."
Motivation	Self-Efficacy	P22	"When I succeed in one assignment, I believe I can handle the next challenge."
Engagement Sustainability	Recovery After Disengagement	P05	"Sometimes I lose focus, but I usually come back when I remember my goals and get support from friends."
Negative Social Dynamics	Peer Pressure	P14	"Seeing others get high grades makes me anxious and sometimes stressed about my own performance."

References

1. Adlington, R.; O'Neill, K.; Volpe, C.R.; et al. Promoting a sense of belonging in university online learning: How and why initial teacher education students experience an increased sense of belonging. *Australas. J. Educ. Technol.* **2024**, *40*, 84–100. [CrossRef]

2.　Almulla, M.O.; Alismail, A.M.; Daraghmeh, H. Exploring academic motivation across university years: A mixed-methods study at King Faisal University. *BMC Psychol.* **2025**, *13*, 1113. [CrossRef]

3.　Bandura, A. Toward a psychology of human agency. *Perspect. Psychol. Sci.* **2006**, *1*, 164–180. [CrossRef]

4.　Chen, C.; Bian, F.; Zhu, Y. The relationship between social support and academic engagement among university students: The chain mediating effects of life satisfaction and academic motivation. *BMC Public Health* **2023**, *23*, 2368. [CrossRef]

5.　Wang, M.; Wang, C. Exploring Pathways to Academic Engagement: A SEM Analysis of Self-Compassion, Social Support, and Stress Management among Chinese University Students. *BMC Psychol.* **2025**, *13*, 1207. [CrossRef]

6.　Chen, C.; Zhu, Y.; Xiao, F.; et al. Academic Motivation and Social Support: Mediating and Moderating the Life Satisfaction and Learning Burnout Link. *Psychol. Res. Behav. Manag.* **2023**, *16*, 4583–4598. [CrossRef]

7.　Chiu, T.K.F. Applying the self-determination theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *J. Res. Technol. Educ.* **2022**, *54*, S14–S30. [CrossRef]

8.　Diseth, Å. Motivation and learning strategies among students in upper secondary education: Grade level differences and academic outcomes. *Front. Educ.* **2025**, *10*, 1679954. [CrossRef]

9.　Furlong, M.J.; Rebelez-Ernst, J. School/Student Engagement. In *Encyclopedia of Quality of Life and Well-Being Research*; Michalos, A.C., Ed.; Springer: Dordrecht, The Netherlands, 2014; pp. 5681–5685. [CrossRef]

10.　Fredricks, J.A.; Blumenfeld, P.C.; Paris, A.H. School Engagement: Potential of the Concept, State of the Evidence. *Rev. Educ. Res.* **2004**, *74*, 59–109. [CrossRef]

11.　Guo, Z.; Chen, C.; Guo, R. The impact of parental involvement, social support, and peer relationships on L2 learning motivation: A mixed-methods study of Chinese university EFL students. *Acta Psychol.* **2025**, *254*, 104804. [CrossRef]

12.　Kahu, E.R.; Nelson, K. Student engagement in the educational interface: understanding the mechanisms of student success. *High. Educ. Res. Dev.* **2018**, *37*, 58–71. [CrossRef]

13.　Salto, D.J. Do Academic Disciplines Matter? An Analysis of Organizational Responses to the Accreditation of Graduate Programs by Field of Study and Sector. *High Educ.* **2022**, *84*, 569–587. [CrossRef]

14.　Ma, J.; Sun, C.; Wang, Y. The Mediating Role of Learning Engagement on Learning Gains of International Students in Chinese Higher Education Institutions—Based on a Multi-Cohort Analysis. *Sustainability* **2022**, *14*, 14052. [CrossRef]

15.　Kumar, A.; Jibril, A.B. Exploring the Landscape of Influencer Marketing Research: A Systematic Review and Bibliometric Analysis. *SAGE Open* **2025**, *15*, 1–19. [CrossRef]

16.　Minohara, S.M.; Musni, R.V. Impact of Motivation and Social Support in Online Distance Learning among Freshmen. *Int. J. Res. Innov. Soc. Sci.* **2025**, *8*, 3294–3302. [CrossRef]

17.　Núñez, M.E.; Siddiqui, M.K.; Abbas, A. Motivation, attitude, knowledge, and engagement towards the development of sustainability competencies among students of higher education: a predictive study. *Discov. Sustain.* **2024**, *5*, 335. [CrossRef]

18.　Reeve, J. A self-determination theory perspective on student engagement. In *Handbook of Research on Student Engagement*; Springer: Boston, MA, USA, 2012; pp. 149–172. [CrossRef]

19.　Ryan, R.M.; Deci, E.L. Intrinsic and Extrinsic Motivation from a Self-Determination Theory Perspective: Definitions, Theory, Practices, and Future Directions. *Contemp. Educ. Psychol.* **2020**, *61*, 101860. [CrossRef]

20.　Sundermann, A.; Weiser, A.; Barth, M. Meaning-making in higher education for sustainable development: Undergraduates' long-term processes of experiencing and learning. *Environ. Educ. Res.* **2022**, *28*, 1616–1634. [CrossRef]

21.　Tinto, V. Through the eyes of students. *J. Coll. Stud. Retent.* **2017**, *19*, 254–269. [CrossRef]

22.　Estévez, I.; Rodríguez-Llorente, C.; Piñeiro, I.; et al. School Engagement, Academic Achievement, and Self-Regulated Learning. *Sustainability* **2021**, *13*, 3011. [CrossRef]

23.　Liu, C.; Shi, Y.; Wang, Y. Self-Determination Theory in Education: The Relationship between Motivation and Academic Performance of Primary School, High School, and College Students. In Proceedings of the 2022 3rd International Conference on Mental Health, Education and Human Development (MHEHD 2022), Dalian, China, 27–29 May 2022. [CrossRef]

24.　Wang, Y.; Wang, L.; Yang, L.; et al. Influence of perceived social support and academic self-efficacy on teacher-student relationships and learning engagement for enhanced didactical outcomes. *Sci. Rep.* **2024**, *14*, 28396. [CrossRef]

25.　Kumar, B.; Singh, C.K.S. An Investigation of Parental Involvement Influencing Academic Success and Emotional Development. *Int. J. Res. Technol.* **2026**, *14*, 126–135.

26. Lobczowski, N.G.; Lyons, K.; Greene, J.A. Socioemotional regulation strategies in a project-based learning environment. *Contemp. Educ. Psychol.* **2021**, *65*, 101968. [CrossRef]

27. Yang, Y.; Chen, J.; Zhuang, X. Self-determination theory and the influence of social support, self-regulated learning, and flow experience on student learning engagement in self-directed e-learning. *Front. Psychol.* **2025**, *16*, 1545980. [CrossRef]

28. Yadav, D.K. Student Engagement at Higher Education Institutions: A Study of International Student Engagement and Motivational Challenges at Chinese Universities. *Int. J. Educ. Reform* **2021**, *30*, 237–254. [CrossRef]

29. Zamorano-Veragua, M.; Orellana-Castillo, D.; Monsalves-Beltrán, A. Link between Academic Engagement and Sense of Belonging in First-Year University Students. *Glocality* **2025**, *8*. [CrossRef]

30. Zhang, C.H.; Li, G.; Fan, Z.; et al. Mobile Phone Addiction Mediates the Relationship between Alexithymia and Learning Burnout in Chinese Medical Students: A Structural Equation Model Analysis. *Psychol. Res. Behav. Manag.* **2021**, *14*, 455–465. [CrossRef]

31. Zhou, L.; Xie, L. Exploring the Relationships between Perceived Social Support, Social Engagement, Mindfulness, and Psychological Well-Being among Chinese University Students: A Mixed-Methods Study. *SAGE Open* **2025**, *15*. [CrossRef]

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