

College Sense of Belongingness and Adjustment of Undergraduate Students in Covid-19

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ABSTRACT

Sense of belongingness refers to how one identifies with and feels that they belong to their surroundings and community. Individuals feel themselves to be an integral part of the system or place. A sense of belongingness is a fundamental need of human beings, enabling them to form attachments and social support. The covid-19 pandemic challenged this need for belonging greatly. With the lockdown in place, students could not attend colleges on campus and had to switch to an online mode of learning. Leading to a significant shift in their daily routine and functioning. This was not without causing significant mental health issues, stress, and uncertainty in the students' life. Psychological adjustment refers to one's subjective sense of distress and ability to function in daily life. It was challenging to adjust to the lockdown routine, wherein students struggled to get to grips with the online modality of teaching and to get acquainted with their new universities. It missed a sense of familiarity, belonging and comfort. The current study aimed at understanding the impact of college sense of belongingness of undergraduate students on their psychological adjustment. There were two objectives of the study, first was to explore whether college sense of belongingness predicted adjustment. The second objective pertained to understanding whether significant differences existed between students in the online and offline learning modality with regards to their college sense of belongingness and psychological adjustment. A sample of 116 students were taken out of which 62 respondents were from online modality of learning and 54 from offline. Linear regression, t testing and correlation were used for data analysis. Findings suggest that college sense of belongingness predicts psychological adjustment in undergraduate students. Furthermore, there was a significant difference between online and offline modality groups for their sense of belongingness. Significant differences also existed between male and female students for their college sense of belongingness.

Keywords: *College Sense, Belongingness, Adjustment, Undergraduate Students, Covid-19*

There were around 1.4 billion individuals in school when the Coronavirus Pandemic started in 2020 (UNESCO, 2020). It is perhaps a foregone statement that the closing of the school and the *exclusion* of the student from its physical space had a myriad of impacts upon their mental health. This involved in no less amount an increased vulnerability

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to anxiety and depression, both internationally (Guessoum et al., 2020; Lee, 2020; Loades et al., 2020) and in India (Chaudhary et. al., 2021). This study bases itself on this very premise, and sets out to pose questions and find answers to them on the basis of these very facts.

When the first lockdown was announced on the 24th of March, 2020 with a 4 hour notice, India had a student population of about 315 million, one of the largest in the world (UNESCO, 2020). This led to a transition from a face-to-face mode of education to online education, despite the lack of training amongst faculty and the lack of infrastructure available to universities (Dill, et. al., 2020). The initiation of online education, which is now finally coming to an end in universities throughout the country, is directly related to the problems mentioned above.

The coming of the Pandemic and the loss of access to the physical space of the school has impacted the sense of belongingness of the student towards the institution they are studying in. The pandemic, to this present study, thus becomes a confounding variable, where one is not going out, thus blocking out the access from one of the contexts apart from the family within which primal interaction happens for an individual in young adulthood — college.

Sense of Belonging

Sense of belonging, as we understand it, is ‘the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of the system of environment’ (Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier, 1992 p. 173). Our study is concerned more specifically with the sense of belongingness amongst Young Adults, which is a very important time of great career and social change. Problems in Young Adulthood can lead to psychological health challenges and low flourishing later on in life. On the other hand, a student’s sense of belongingness can lead to potential success, well-being and engagement in college (National Academies of Sciences, Engineering, and Medicine [NAS], 2017).

A review of the educational literature on sense of belonging highlights a range of definitions and measures. Widely agreed to be important, the construct of belonging is dynamic and multi-faceted. For example, Hurtado and Carter (1997) define ‘sense of belonging to campus’ as “the individual’s view of whether he or she feels included in the college community” (p. 327). Maestas, Vaquera, and Zehr (2007) define sense of belonging as “students’ subjective feelings of connectedness or cohesion to the institution” (p. 239), and Hoffman, Richmond, Morrow, and Salomone (2003) write, “Sense of belonging is theorised to reflect students’ integration into the college system”.

The construct has always been dynamic in its interpretation and heavily context driven. Commonly understood, sense of belongingness (SOB) can be defined as the need to be affiliated or accepted by a group. Throughout history, researchers have argued that sense of belonging is a basic human need that encourages and bolsters favourable mental and physical outcomes. Maslow’s (1954) psychological hierarchy places the need for belonging below basic needs like food and safety but above the needs for knowledge, understanding, and esteem. Baumeister and Leary (1995) later reconfirm through their extensive review of literature that “existing evidence supports the hypothesis that the need to belong is a powerful, fundamental, and extremely pervasive motivation” and “the human being is naturally driven toward establishing and sustaining belongingness.”

Sense of belonging revolves around the need to be affiliated and accepted by a group. This subjective sense of affiliation and identification with the university community is known as sense of belonging (Marybeth et. al, 2002). Theoretically, students' sense of belonging reflects their integration into the collegiate system. Overall, the more a student's "feeling of belonging" to a university, the greater his or her commitment to that institution (happiness with the university), and the more likely he or she will stay in college. "Sense of belonging" is defined as a type of interpersonal connection that is distinct from loneliness and closely linked to social support (Hagerty et al., 1996; Russell, Cutrona, Rose, & Yurdo, 1984). Loneliness is seen to be the result of a failure to connect with others (Hagerty & Patusky, 1995), whereas support is thought to be the result of beliefs that one is structurally integrated into a social network and has appropriate resources available (Cohen & Wills, 1985).

Factors Affecting Sense of Belongingness

A sense of belongingness can be to a spatial group defined by a geographical location (e.g., a local social network, living in a country) or a group with no spatial limit (e.g., a football team, cultural club, or social networking site). Spatial closeness (Raman, 2010) or social proximity produced and supported by many variables of modern life, including modern communications and the advent of social media (Cummings, Butler, & Kraut, 2002; Ellison, Steinfield, & Lampe, 2007) enhance the formation of social relationships in these groups. People acquire a sense of belongingness to a place or space through the establishment of social networks, social contact, and active or passive participation in neighbourhoods (Leach, 2005; Riger & Lavrakas, 1981). The user's psychological and physical awareness of neighbourhoods, as well as their interpretation of neighbourhoods, go into the building of a sense of belongingness to a neighbourhood. Environment, emotional attachment, engagement, involvement, sense of safety, nature of social interactions, housing condition, and physical design are all variables that influence them (Young, Russell, & Powers, 2004). Individuals' perceptions of the neighbourhood and its residents (Forrest & Kearns, 2001, p. 2140) might differ depending on socio demographic criteria such as gender, age, and the nature and kind of community, all of which can influence a sense of belonging. Rural places, for example, are said to have a stronger sense of community and belonging than metropolitan areas (Pretty & Paul, 2003).

In non-geographic communities/groups, however, it is social network proximity, not spatial proximity, that can establish community membership and develop a sense of belonging through shared values and aspirations (Brown, Crabbe, & Mellor, 2008). However, even with non-geographic communities and groups like Facebook and fan clubs, key aspects that establish a sense of community and belonging such as common aims or shared ideas, social interaction, social network, and support remain consistent.

Theories about Sense of Belongingness

A very important intervention in this theoretical genealogy comes in the form of the Belongingness Theory, first espoused by Roy Baumeister and Mark Leary in 1995. Challenging 'cultural materialist' ideas which determine economic reasons as primary motivators of human behaviour, it posits that the human being is naturally driven towards establishing and sustaining belongingness, which is one of the primary motivators of human behaviour, rather than aggression or sexual desire, as had been argued by Freud (1930). They posited that the need to belong had two main features: People, first and foremost, require frequent personal contacts or interactions with the other individual. Second, people must believe that there is an interpersonal tie or relationship that is stable, effective, and likely to continue in the near future. This component gives one's interactions with the other

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person a relational context, and so the impression of the bond is critical for satisfying the urge to belong. A merely behavioural record may indicate nothing unusual or gratifying about these relationships when contrasted to virtually identical interactions with others with whom one is not connected. An interaction with a person in the context of a long-term relationship, on the other hand, is subjectively distinct from and frequently more satisfying than an engagement with a stranger or casual acquaintance.

The belongingness hypothesis predicts that social relationships should establish relatively simply and without the need for particular circumstances. Such data would not only confirm the existence and power of the need to belong, but it would also imply that the need is distinct from other needs (insofar as it is not limited to circumstances that meet other requirements or follow from other events). People should be as hesitant to dissolve social ties as they should be to form them in the first place, according to the belongingness idea. A slew of trends support the notion that individuals prefer to keep their relationships alive rather than end them. In fact, Hazan and Shaver (1994a, p. 14) recently found that the human predisposition to react to the termination of a relationship with sadness and protest is essentially universal, even across cultures and age groups. The fundamental emotional implication of the belongingness hypothesis is that changes in one's belongingness status, whether real, potential, or imagined, would elicit emotional responses, with good affect associated with increases in belongingness and negative affect associated with declines. Furthermore, steady or chronic high belongingness should result in an abundance of positive affect, whereas chronic deprivation should result in an abundance of negative affect.

However, at the tail-end of their extensive review of the literature pertaining to this subject, they write, "existing evidence supports the hypothesis that the need to belong is a powerful, fundamental, and extremely pervasive motivation" (p. 497) and "the human being is naturally driven toward establishing and sustaining belongingness" (p. 499).

"Only when we have a sense of belonging are we able to act with courage in facing and dealing with our difficulties," Corey (2001) said in favour of the necessity of belonging. (pg. 112). From this perspective, kids who have a stronger feeling of belonging are less likely to experience psychiatric issues and have a higher quality of life (Corey, 2001).

Contextualising this concept into the space of the university, within the confines of which this study takes place, a sense of belongingness can be defined as "the individual's view of whether he or she feels included in the college community" (Hurtado and Carter, 1997). Going a bit further, we can also use the definition used by Maestas, Vaquera, and Zehr (2007), which defines it as, as "students' subjective feelings of connectedness or cohesion to the institution". Belongingness in a college setting becomes the extent to which the student feels they can fit into the campus and how much they are a part of a distinct 'campus culture'. (e.g., Mounts, 2004; Osterman, 2000; Pittman & Richmond, 2008). Osterman (2000) further tells us about how there is a relationship between student learning, performance and interpersonal relationships. A heightened sense of belongingness therefore can also lead to higher grades, increased perception of academic skills, improved motivation and lower amounts of depression (e.g., Mounts, 2004; Pittman & Richmond, 2007, 2008).

Tinto (1987, 1988, 1993) has made significant contributions to theories of sense of belongingness in campus, focusing especially upon the departure of students from campus. According to him, academic challenges, individuals' inability to resolve their educational and occupational goals, and their failure to acquire or remain absorbed in the intellectual and

social life of the institution are three significant drivers of student leave. Students must be integrated into formal (academic performance) and informal (faculty/staff relationships) academic systems, as well as formal (extracurricular activities) and informal (peer-group interactions) social systems, according to Tinto's "Model of Institutional Departure."

Tinto's approach was critiqued by Woolsey and Walsh (2009) for providing little practical advice for individual pupils beyond its overall predictive validity. Another critique of the model is that it is culturally insensitive and unsuitable for students of colour (Museus & Quaye, 2009). Furthermore, while Tinto's model is the most widely utilised in retention research, empirical support for it is varied. Friedman and Mandell (2009) found that the value of social integration, as opposed to academic integration, has gotten stronger empirical evidence.

All of these elements impact a sense of belongingness. Such an idea is not only within the confines of the field of psychology. Sociological theory, especially that of Spady, posits the same conclusions by studying the very same thing — the *absence* of the student's body from the campus. Generally speaking, students enter college with different identities, levels of academic preparation, and educational intentions. Students then engage with social and academic aspects of the college environment informed by these entering characteristics. These students' college experiences then shape their sense of belonging, institutional commitment, and/or academic achievement, which then lead to persistence intentions and decisions. To put it into academic terms, Walton and Cohen (2007) looked into the concept of belonging uncertainty, which is the idea that socially stigmatised groups have less certainty in their social relationships and are thus more sensitive to elements that imply belonging may be difficult in specific circumstances, such as academic settings. They referenced research and literature that showed belonging and related notions like social connectedness have substantial mental and physical health implications. The authors expected that indicators suggesting kids from stigmatised groups, particularly black students, would have few intellectual peers in terms of academic achievement would have a bigger influence on them.

Models of Sense of Belongingness

There are 5 broadly accepted models for the sense of Belongingness (Pardede, Gausel and Høie, 2021), which this section will expand upon a little.

The 'Identity-Proximity' Model

According to Kohut (1971, 1977) and Kohut et al. (1984), a cohesive self cannot exist without someone else to mirror oneself in. That is, the "other" in the connection gives a platform for one's worth to be mirrored, for one to be liked in return, and for one to feel a sense of connectedness and similarity with the "other." In this approach, it is the experience of reactions from "the other" that restores and wraps self-experiences and leads to the establishment of self-identification in the presence of "the other." Similarly, Baumeister and Leary (1995) claimed that one's subjective experience of oneself is mediated by one's social interactions, which preserve a sense of belongingness based on their proximate distance from oneself. Any flaws or failings might jeopardise one's relationships, which in turn jeopardises one's need to belong, resulting in significant emotions of loneliness and alienation (Gausel and Leach, 2011), anxiety, and despair (Baumeister and Leary, 1995; MacDonald and Leary, 2005). The sense of one's identity through the need to belong met via affiliation and relationship with the proximal "other" is what we call "identity-proximity."

Emotion-Sharing – Reciprocal Connectedness

The psychological feeling of social connectivity achieved through emotion sharing is thought to be involved in the yearning to belong. A sense of belonging develops from childhood through adulthood through companionship, affiliation, and connectivity, according to Lee and Robbins (1995). Despite their inability to objectively corroborate their three-part thesis, they successfully maintained that one's urge to belong is more related with a sense of worth gained from connections with others, and eventually, relationships outside their comfort circle. Their theory is based on the idea that throughout these stages, the yearning to belong is marked by the ability to reciprocally share feelings and hence experience adult connectedness. As a result, Lee and Robbins (1995) claimed that emotion-sharing and reciprocal connectivity satisfy the need to belong.

Supportive-Proximity – Emotional Support from Others

People evaluate stressful situations based on whether they believe they have the resources to cope with the pressures, according to Lazarus (1991). Checking if they have the social resources they need to manage is one of the most important coping techniques in regard to social stressors. As a result, when faced with a stressful situation, people frequently turn to their social networks for emotional support. As a result, evaluating stressful situations should stimulate one's sense of belonging (or the urge to reach out for emotional support) beyond significant persons, allowing one to re-appraise the stressor based on the emotional support received from whoever is close enough to offer support. As a result, Hill (1987) proposed that one's social affiliation motive can be constructed around the goal of providing constant emotional support, because one's need for belongingness is sensitised by subjective experiences and cues (Kelly and Barsade, 2001; Pickett et al., 2004). As a result, the urge to belong might be seen as a need for emotional support from close individuals.

Similarity of Self and Others – Social Identity

According to social-identity theory, how we identify with those who are similar to us affects our understanding of who we are (Tajfel and Turner, 1979). Self-categorization, according to Turner (1999), becomes fully operative as a social identity only once an individual has identified with his or her social category. As a result, the number of possible social groupings to which one belongs has an impact on one's worth. If one obtains belongingness by being assigned to a group of people who are similar to oneself, one will prioritise that group just because one is a member of that group. As a result, the need to belong is fueled by a cognitive process in which one's self-worth is determined by the degree of resemblance between oneself and others, as reflected by group membership (Tajfel, 1978; Turner et al., 1987).

Environmental-Satisfaction – Interactions and Experiences

The effects of the environment with which one interacts are linked to a sense of belonging. According to Bronfenbrenner's (1979) ecological framework, human experiences and development are linked to interpersonal interactions and environmental events as acceptable or unsatisfactory. As a result, belonging based on "environmental-satisfaction" is linked to how one focuses or attaches oneself to the overall satisfaction of an experience in one's environment. As a result, one's desire to participate is fueled, since is the influence of one's self-perception of belongingness, as this sense of emotional connection within a setting can lead to feelings of rejection if not met, or belonging if met (e.g., Lynch, 1976; Relph, 1976; Canter, 1977).

Psychological Adjustment

“Psychological adjustment can be defined as one’s sense of subjective distress and their ability to function in daily life” (Cruze et al. 2020; Peterson 2015). A high sense of psychological adjustment has a positive correlation with an ability to function positively. When thinking of college adjustment as a separate construct, it's important to remember that it leads to a sense of belonging and fit in the collegiate setting. It is made up of a variety of factors (such as intellectual, social, and emotional adjustment), all of which culminate in a strong sense of attachment (as defined by Tinto's theory) to the chosen college (e.g., Baker & Siryk, 1984, 1986, 1989; Tinto, 1993). College adjustment, on the other hand, can be challenging for first-generation college students. Brooks-Terry, 1988; Elliott, 2014; Mehta, Newbold, & O'Rorke, 2011; Reynolds & Weigand, 2010; Winograd & Rust, 2014) suggest that first-generation college students' parents may have significantly imposed hurdles and may not provide advise, direction, or suggestion for navigating college expectations.

Even though the relationship between a sense of belongingness and judgement has been explored before (e.g., Sharma and Sharma, 2019), there have been no dedicated studies that explore a sense of belongingness and psychological adjustment. The studies that we have looked at above help us understand through their findings that a sense of belonging might prove to be a resilience factor in promoting psychological adjustment in students with negative entrance characteristics, thus helping them overcome socio-economic and psychological impediments that they might carry over to the university. College belongingness is essential for better psychological adjustment and well-being of young people, and people with a high sense of belonging reported fewer psychological adjustment challenges, such as depression, anxiety (Arslan et al., 2020; Arslan & Tanhan, 2019; Davis et al., 2019; Tanhan, 2020) and behavioral problems, such as suicidal behaviors, conduct problems (Arslan, 2019; Arslan & Tanhan, 2019; Olcoñ et al., 2017; Rostosky et al., 2003; Tanhan, 2020). This present study is dedicated to the development of this particular idea while also trying to express it in a quantified manner.

This study frames the relationship between the sense of belongingness and psychological adjustment within the first year of college, which might be more crucial for the development of the young adult, and even determine the success of the student in the long run. To explore this idea, we must once again move into anthropology, especially to the ideas of the Dutch Anthropologist Arnold Van Gennep, who argued that the movement of one individual from one group to another involves three steps: separation, transition and incorporation (Gennep 1987). What our study focuses on is the first stage, i.e., *separation*. Separation seems to be a major part of the student’s life in the first semester, for one breaks apart all the ties one had before one joined the campus in itself. In such an endeavour, we are not unprecedented, as Tinto (1987) has used Gennep’s thesis to build his own, the Model of Student Departure, where he adapts the latter’s ideas into the university campus. His study circles back to the *absence* of the body of the student from the campus. The introduction of the Pandemic as an extraneous variable provides us with another fundamental question: to what extent does the pandemic affect the transition from one environment to the other, and does that impact the student’s overall sense of adjustment?

While talking about the transition in a general atmosphere, the transfer to college and the subsequent adjustment can be stressful. Academic stress has been associated with an increase in mental health issues such as depression and anxiety, as well as a greater dropout rate among first-year college students (Dixon Rayle & Chung, 2007; McClain & Abramson, 1995). Furthermore, high levels of stress have been linked to changes in new and increasing

academic responsibilities, poor time-management skills, and financial demands, particularly among first-year college students (Misra, McKean, West, & Russo, 2000). Stress perceptions have also been connected to academic, social, and emotional adjustment issues (Brissette, Scheier, & Carver, 2002; Crockett, Iturbide, Torres Stone, McGinley, & Calo, 2007; Kerr, Johnson, Gans, & Krumrine, 2004; Kerr, Johnson, Gans, & Krumrine, 2004).

Self-efficacy is a notion that influences how people feel, think, and conduct. Performance accomplishments, vicarious learning, social persuasion, and emotional arousal are four forms of self-efficacy proposed by Bandura (1997). Each of the sources can have a substantial impact on a student's college adjustment and success. The individual's own and observed experiences will influence their belief in their ability to succeed at college tasks. Furthermore, social motivation derived from social support may inspire an individual to take on difficult tasks associated with the transition process. Finally, emotional arousal can impair a person's ability to cope with stress, as well as their ability to adjust. Self-efficacy can be defined broadly or specifically for a certain endeavour, such as academic self-efficacy.

Factors Impacting Psychological Adjustment

Transition/adjustment, social interaction and help-seeking abilities, social support, scholarship support, motivation and self-efficacy, academic support, economic position or background, perceived stress, and homesickness emerged as primary factors affecting psychological adjustment amongst undergraduate college students from the data analysis done by Fennie et. al. (2020).

Transition/Adjustment

According to studies, the first transition from high school to university is critical in forecasting academic success, establishing the trajectory of the entire academic journey, and impacting student persistence and performance (Nel, Troskie-de Bruin, & Bitzer, 2009). Students considered the transfer to higher education to be a difficult and daunting process, according to several research (Cliniciu, 2013; Hughes & Smail, 2015; Maundeni, Malinga, Kgwatalala & Kasule, 2010; Mudhovozi, 2011; Robinson et al., 2012; Wissing & Temane, 2008). Students who took part in university orientation programmes adjusted better to their new surroundings than those who did not (Owusu, Tawiah, Sena-Kpeglo, & Onyame, 2014).

Social interaction, social support, and help-seeking capabilities

According to studies by De Coninck, Matthijs, and Luyten (2019), DeWitz, Woolsey, and Walsh (2009), Honicke and Broadbent (2016), and Hughes and Smail (2016), students with good social interaction abilities were more successful with the transition to university than those with poorer social interaction abilities (2015). This finding might be explained by the fact that students with stronger social interaction skills are more likely than students with weaker social interaction abilities to rely on their social networks to assist them transition to college. Students with well-developed helpseeking behaviours were better adapted to the stresses of college life and more likely to get higher grades than those without these talents, according to Richardson et al., 2012; Sommer & Dumont, 2011.

Social Support

Mason (2019a, 2019b, 2013), Hughes and Smail (2015), Mudhovozi (2011), and Richardson and colleagues (2012) all found that social support is a key component in academic performance. University admission was less daunting for students who reported engaging and spending time with friends, as well as meeting new friends. Students who had a lot of parental support were more effective in dealing with the problems and stressors they

experienced in school (De Coninck et al., 2019; McGhie, 2012; Mudhovozi, 2011; Pillay & Ngcobo, 2010; Wissing & Temane, 2008).

Scholarship Support

Surprisingly, scholarship recipients did worse academically than non-scholarship recipients (Berlanga, Figuera, & Pons-Fanals, 2013). This might be due to scholarship students' penchant for cramming too many classes into their schedules and the pressure they feel to succeed. Furthermore, scholarship recipients are more likely to come from historically marginalised groups and may be less prepared for higher education than non-scholarship recipients (McGhie, 2012). More than half of the population of South Africa lives in poverty and lacks access to a good education (Mason, 2019a, 2019b; McGhie, 2012; Omarjee, 2017).

Motivation and Self-Efficacy

Owing to high levels of self-regulation in their learning activities, students with strong intrinsic motivation and self-efficacy had superior overall college adjustment (Petersen et al., 2009; Richardson et al., 2012; Ryan & Deci, 2000a) (Petersen et al., 2009; Prat-Sala & Redford, 2010; Sommer & Dumont, 2011). Furthermore, students who displayed intrinsic motivation and self-efficacy demonstrated autonomy and employed self-initiated experimental strategies in their university transition (Hsieh, 2014; Prat-Sala & Redford, 2010; Ryan & Deci, 2000a, 2000b).

Researchers found that self-efficacy has an impact on motivation and task persistence (DeWitz, Woolsey, & Walsh, 2009; Honicke & Broadbent, 2016; Van Dinther et al., 2011). As a result, rather than academic success, self-efficacy appears to be associated to improved college adjustment (Ramos-Sánchez & Nichols, 2007).

Academic Support

Students indicated that academic support in the form of affable, helpful, friendly, and encouraging instructors helped them achieve academically in studies by Mudhovozi (2011) and Nel, Govender, and Tom (2016). The availability of support from fellow students and academic staff had a favourable impact on the transition to university of undergraduate students, according to DeWitz, Woolsey, and Walsh (2009), Hughes and Smail (2015), McGhie (2012), and Sommer and Dumont (2011). Tutorials, extra classes, and bridge courses may provide additional academic support to guarantee a favourable academic adjustment experience.

Socioeconomic Status or Background

Students from poor socioeconomic backgrounds considered a university degree as vital, according to McGhie (2012) and Sommer and Dumont (2011), since the certification has a direct impact on the student's earning ability and the student's family's economic well-being. This shows that while adolescents from low socioeconomic origins may be strongly driven to succeed in school, they may not be appropriately equipped to do so. (Jama, Monnapula-Mapesela, & Beylefeld, 2008; Suliman, Mkabile, Fincham, Ahmed, Stein, & Seedat, 2009; Van Heerden-Pieterse, 2015).

Perceived stress from academic pressures and homesickness

Elias, Ping, and Abdullah (2011) conducted research on the association between stress and academic performance among 376 undergraduate students at a Malaysian institution. The amount of stress experienced was determined by the year of undergraduate studies. In

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comparison to second-year students, first-year students had less stress (Wilson et al., 2015; Elias et al., 2011). Academic performance was the greatest source of stress for pupils, and academic performance declines as stress levels rise.

McGhie, 2012; Mudhovozi, 2011; Robotham & Julian, 2006; Thurber & Walton, 2012) found that students who were homesick experienced more stress when transitioning to university than those who were not homesick. This was due to the fact that pupils who were homesick were obsessed with memories of their family members.

REVIEW OF LITERATURE

Gopalan, Carmichael and Lanza (2021) analyzed the key concept of belongingness among college students amidst the pandemic. They tried to understand whether belongingness varied in pre-covid and post-covid situations, especially for key socio demographic groups (underrepresented racial/ethnic minority students, first-year students). And secondly whether belongingness buffered students from adverse mental health in college. Longitudinal models and regression analysis was computed from the data of a longitudinal study. Herein data was collected from 1004 students just before the pandemic in November 2019, and later in March 2020. The results indicated that the high levels of belonging pre and post covid remained consistent for students except underrepresented racial minorities and first generation students who reported a lower sense of belonging as compared to their peers. They also found that feelings of belongingness consistently buffered students against depressive symptoms and anxiety amidst the Covid-19 pandemic for all students.

Kirby and Thomas (2021) conducted research on how to foster classroom-level belongingness. In an online survey, they asked psychology and education college students to evaluate a course using the Teacher Behaviour Checklist (TBC), the Classroom Community Scale, and the Classroom Climate Scale. The study results indicated that caring and supportive teacher behavior (a TBC factor) predicted 1) a community of connectedness and 2) a climate of high instructor organization and support. Professional competency and communication (a TBC factor) predicted 3) a stronger community of learning and 4) a climate of higher academic expectations. Exploratory analyses also revealed that caring and supportive teacher behaviour predicted higher learning and academic expectations; professional competency and communication predicted higher connectedness and instructor organization and support; and professional competency and communication predicted higher connectedness and instructor organization and support. High-impact teaching approaches appear to increase classroom sense of belonging in general.

Singh, Gupta, and Chauhan (2021) conducted research to see if psychological adjustment can mediate the association between social support and mental health. Responses were acquired from 390 Indian individuals (N=390) using a survey-based methodology and online questionnaires. This study used a cross-sectional correlational research design and the snowball sampling approach. The data analysis was done using correlational, hierarchical regression analysis, and mediation analysis. The results indicated that psychological adjustment and social support were found to be highly positively connected with mental health, according to correlational analysis results. The results of the mediation study demonstrated that social support has an indirect effect on mental health and psychological adjustment. The association between social support and mental health was partially mediated by psychological adjustment.

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Mahama and colleagues (2021) looked at how peer attachment and learning styles were moderated by a sense of belonging among students during COVID-19. 284 final-year undergraduates were chosen by stratified-proportionate and convenient sampling processes using an analytical cross-sectional survey methodology. The Learning Preference Scale (Owens & Straton, 1980), Adolescent Friendship Attachment Scale (Wilkinson, 2008), and Psychological Sense of School Membership were used to collect data from the respondents (Goodenow, 1993). Descriptive (Frequencies and Percentages) and inferential statistics were used to analyze the data (Multivariate Multiple Regression, Simple Moderation with Hayes Process Macro and Multivariate Analysis of Variance). According to the findings, most students engaged in less peer attachment and felt a diminished sense of belonging, while secure attachment predicted individuals' individual learning styles. Furthermore, there are no significant differences between males and females with regards to peer attachment, learning styles and sense of belonging.

Nambbiar (2020) conducted an online survey to investigate teachers' and students' perceptions of online education. In the midst of the present pandemic crisis, the Indian education system has made a recent change by delivering classes via online means. As a result, this survey examines the attitudes and concerns of college and university teachers and students about attending online programmes, which have become mandatory as a result of COVID19. The sample included 70 teachers and 407 students from Bangalore's colleges and universities. An online survey method was used for data collection. The results indicated that in terms of social presence, interaction, and satisfaction, the results of this study show that face-to-face learning is preferred over online learning. Although online classes were perceived to be convenient and time saving, yet both teachers and students perceived them less structured and effective when compared to classroom mode of learning.

Arslan (2020) conducted a study to explore if subjective vitality mediated the association of loneliness with psychological adjustment and whether college belongingness moderated the mediating effect of subjective vitality on student's adjustment in context of loneliness. The study had 333 participants between the ages of 19-41 years. They found that subjective vitality decreases the negative effect of loneliness on psychological adjustment. Herein loneliness is understood as a lack of intimate and meaningful relatedness to another individual and insufficient social relationships. Their findings also suggest that college belongingness may happen to serve as a resilience factor in promoting psychological adjustment in young adults with negative life experiences.

Arslan, Yildirim and Zangeneh (2020) conducted a study to understand a moderated mediation model where in college belongingness mediated the relationship between coronavirus and anxiety and psychological adjustment. This mediation effect was moderated by social media addiction. The student consisted of 315 undergraduate students from Turkey. The results of the study indicate that college belongingness does partially mediate the relationship between coronavirus anxiety and psychological adjustment. By extension the study also found association between college belongingness and psychological adjustment.

Sun, Lin, and Chung (2020) looked at the relationship between perceived peer support, emotional well-being, and depressive symptoms among university students. In July 2020, during the third wave of the COVID-19 epidemic, 255 students at a public university in Hong Kong took part in an online survey to assess their opinions of accessible peer support, emotional well-being, and depressed symptoms. The findings demonstrated that depression

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symptoms were negatively linked with perceived accessible social support, and that both negative and positive indices of emotional well-being attenuated the connection between perceived available friend support and depressed symptoms. University students exhibited indicators of heightened depressive symptoms throughout the outbreak, according to the data. The research makes a significant contribution to our understanding of university students' mental health during a global pandemic.

Elmer, Mepham, and Stadtfeld (2020) conducted a comparison research using longitudinal data acquired since 2018 to examine students' social networks and mental health before and after the COVID-19 epidemic. The researchers examined changes in social networks (friendship, interaction, social support, co-studying) and mental health indicators (depression, anxiety, loneliness and stress) in two cohorts of Swiss undergraduate students who had experienced the crisis ($N = 212$), as well as comparisons to a previous cohort ($N = 54$). The results from the study indicated that interaction and co-studying networks had become sparser, and that more students were studying alone, based on within-person comparisons. Furthermore, when compared to pre-crisis metrics, students' stress, anxiety, loneliness, and depressive symptoms increased. Fears about missing out on social activities gave way to concerns for their health, family, friends, and future. COVID-19 particular anxieties, isolation in social networks, lack of contact and emotional support, and physical isolation were all linked to negative mental health outcomes in exploratory investigations. When differing levels of social integration and COVID-19 associated stresses were controlled for, female students appeared to have worse mental health trajectories as compared to men.

Bakchus et. Al, (2019) conducted a study to compare the effects of sexual orientation, history of sexual assault, and sense of belonging on depression and suicidality in LGBQ and heterosexual students. The 2017–2018 Healthy Minds Study drew a total of 60,194 students from 60 different universities across the United States. The study analyzed the three-way interaction effects using the PROCESS macro model in SPSS. Results indicated that sexual assault had different effects on mental health based on sexual orientation and sense of belonging. In the face of sexual assault, a strong feeling of belonging was protective, and its absence was detrimental to mental health, particularly among LGBQ students. Based on the result the study suggests that improving one's sense of belonging may be a technique for reducing depression and preventing suicide, particularly among LGBQ students.

Graham and McClain (2019) conducted a study to explore how peer mentorship contributes to the academic and socio-emotional outcomes of a sample of Black collegians. Furthermore, the study examines whether variations in student outcomes function due to the type of mentorship endorsed by students. The study seeks to answer whether, among black college students with peer mentors, do mentorship type, mentorship experiences, belongingness, and impostor feelings predict GPA and college adjustment? For the same, a conical correlational analysis was used. The other research question is whether differences exist in belongingness, impostor feelings, GPA, and college adjustment between students who have informal peer mentors only, students who are engaged in formal and informal peer mentorship, and students who do not have peer mentors? MANOVA was used to examine the second research question. Participants were 117 self-identified black students between the age range of 18-25. The findings demonstrated a positive link between mentorship, mentorship experiences, and college adjustment, as well as an inverse link between impostorism and mentorship. Furthermore, compared to students without mentors, those with mentors reported considerably stronger feelings of belonging and college adjustment.

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Ngyuen, Werner and Soenes (2019) examined the role of university students' motivation for spending time alone for their adjustment to college life, and also explored the correlates for students' healthy motivation for solitude. They conducted two studies on first-year undergraduates in Canada. In study 1 Data was obtained in Study 1 at three different time periods separated by two weeks. In Study 2, data was gathered over the course of a month at two distinct times. The findings demonstrated that embracing alone time for autonomous reasons was linked to improved self-esteem (Study 1), stronger sense of relatedness to others, and decreased loneliness in those who reported feeling less socially connected (Study 2). These findings imply that supporting a healthy need for isolation isn't always a sign of social malaise. Additionally, having parents that are autonomy supporting and create a feeling of independence was linked to kids' autonomous drive for spending time alone.

Burton (2018) conducted a study to examine the implications of finding belongingness during the transition to college and how belongingness affects overall well-being. Overall, the hypotheses regarding this research were supported. He found that stronger feelings of belongingness were associated with lower levels of maladaptive feelings, such as depression and loneliness. They hypothesized that students who report stronger feelings of belongingness would feel less lonely and depressed. Additionally, they also hypothesized that students who report stronger feelings of attachment to relationships back home are hypothesized to feel a lower sense of belongingness. The participants in the study were 299 undergraduate students from a university in the Southeastern United States. The study used correlational analyses and regression analyses to obtain results. The statistics supported the hypothesis of the research. Stronger feelings of belongingness were indeed associated with lower levels of maladaptive feelings such as depression and loneliness. The peer sub-scale in the belongingness questionnaire was significant across all variables measured. It reveals that belongingness among peers can have an important effect on first-year students' adjustment to college in the way that they buffer maladaptive feelings.

Bowman et al. (2018) conducted a study that examines week-by-week data from 882 undergraduates during their first semester of college and gives unique insights regarding their college sense of belonging and components of college student adjustment. The extent to which weekly variations in students' experiences and interpersonal interactions predicted matching changes in adjustment outcomes was investigated using fixed-effects regression analysis. Changes in belonging and well-being were most significantly linked to social connection, relationship satisfaction with college mates, and feeling successful in class. Some experiences that are frequently disregarded in higher education studies were also important predictors; notably, time spent exercising and parental relationship satisfaction were linked to better outcomes, whereas excessive social media use was linked to worse outcomes.

Hutz, Martin & Beitel (2017) studied the relationship between student's ethnocultural person-environment fit and college adjustment. The study aimed to explore the effects of sex and ethnicity on person-environment fit and adjustment. The results of the study indicated a moderate correlation between person-environment fit and college adjustment. There were significant differences in sex and perceptions of person-environment fit. Women reported a higher level of fit and greater sense of belongingness than men.

Mauder (2017) investigated the association between peer attachment, problematic peer relationships, and university attachment. A total of 135 social science undergraduate students from an English institution took part in the study. They expected that students with

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greater degrees of peer and university attachment would be better suited to university life. It was also projected that students who had troubled connections with their university classmates would have a lesser attachment to the university and have a harder time adjusting to university life. The data was analysed using correlation and hierarchical regression models. The results revealed that how devoted students were to their university mates influenced their transition to university. Attachment to the university was also linked to adjustment in students whereby students having stronger attachment to the institution reported a higher university adjustment.

Olivas (2017) investigated the association between college adjustment (social, emotional, and academic adjustment) and protective factors (individual, family, and extrafamilial). 304 students from introductory psychology classes took part in this study. There were 254 ladies and 50 males among the participants, who hailed from a prominent western US institution. Men and women were also compared in terms of the relationship between protective variables and college adjustment. Higher levels of self-esteem, quality education, and superior coping abilities strongly predicted greater social adjustment to the collegiate setting, while higher levels of intellect and quality education significantly predicted greater academic adjustment. When protective variables were compared between men and women, it was discovered that men had a greater self-perception of personal talent than women. There were no gender differences in any of the other protective factors.

Layous et al. (2016) conducted a study that looked at the protective effects of self-affirmation for students who have the subjective sense that they do not belong in college. Such a feeling can be pertinent to the student's inner world and might have debilitating effects on their academic performance. Over three semesters, those who reported a lack of belonging in a predominantly White sample of college undergraduates saw their grade point average (GPA) drop. The study found that students who reported poor belonging but affirmed their core beliefs in a lab-administered self-affirmation writing assignment, on the other hand, improved their GPA over time, with the effect of affirmation being substantial enough to provide a main effect across the entire sample. The affirmation intervention reduced and even reversed, the drop in GPA among students who had a low sense of belonging.

Civitci (2015) studied college students to study life satisfaction and perceived stress. The study had two objectives; the first was to investigate the changes in perceived stress and life satisfaction regarding college belonging, major belonging, and participation in extracurricular activities. The second was to test the moderating effect of college and significant belonging, and extracurricular activities in the relationship between perceived stress and life satisfaction. A total of 477 undergraduate students from a Turkish public institution took part in the study. The Perceived Stress Scale, the Satisfaction with Life Scale, and a personal information form were used to collect data. According to the findings, students who had a high level of college and major belonging had low perceived stress and high life satisfaction. Furthermore, whether or not students participated in extracurricular activities had little effect on their subjective sense of stress and life satisfaction. Students who participate in extracurricular activities with a high level of college sense of belonging, on the other hand, had lower reported stress and higher life satisfaction. The hierarchical regression analysis revealed that only college belonging performed a moderating role in the link between felt stress and life happiness. The study highlights that college belonging is an essential factor for college students in terms of their stress and life satisfaction.

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Menaga & Chandrasekaran (2015) conducted a study to find out whether significant differences existed in college students with respect to their: Gender, Type of Locality, Type of Degree and Type of income. The study adopted a survey method, where 300 participants responded. Participants were college students from Thiruvanaamali district, Tamil Nadu. The study calculated t and f ratios. The results indicated there was significant difference in adjustment with regards to gender, type of degree and family income. Significance was unfounded on variables of Type of family and type of locality.

From the perspective of first-year university students Sevinc and Gizir (2014) took up a qualitative case study intending to analyze the most common reasons that negatively affect adjustment to university and coping methods used by first-year university students in the adaptation process. The participants were 25 first-year university students from Mersin University. The information was acquired through interviews, which were conducted using a set of 24 interview questions devised by the researchers. Following the process of discovering, coding, and categorizing data patterns, the collected data were content-analyzed. The findings revealed important elements that have a detrimental impact on first-year university students' academic, social, personal-emotional, and institutional transition. Academic adjustment was negatively affected by relationships with faculty and classroom quality. Students experiencing social adjustment difficulties had little interaction and little social support from classmates, because of these relations being perceived as competitive, superficial and selfish. Individual characteristics such as shyness, fear of failure/disapproval, loneliness, and homesickness, as well as institutional elements such as a sense of identity and belonging to a university, were also identified as significant influences on students' adjustment.

Freeman, Anderman & Jensen (2010) investigated the associations between undergraduate students' sense of class belonging and their academic motivation in that class, their sense of class belonging and perceptions of their instructors' characteristics, and their class and campus-level sense of belonging. Students at a southern institution were given questionnaires, which were completed by freshmen (N = 238). The authors discovered links between (a) students' feelings of belonging in class and their academic self-efficacy, intrinsic motivation, and task value; and (b) students' feelings of belonging at the class level and their perceptions of instructors' warmth and openness, encouragement of student participation, and organization. The findings revealed that, as in younger populations, a sense of belonging is connected with academic motivation in college-level students. Second, the current findings began to identify specific instructor traits, such as warmth and openness, student participation, and instructor organization, that are connected with college students' sense of class belonging. The findings revealed that all three traits were linked to a sense of belonging, with the most essential being the encouragement of student participation and interaction.

Hervey (2009) conducted a study to see if there were any links between the pattern of transitions in a child's life and their success in adjusting to college for Missionary Kids (MKs). The sample was limited to undergraduate students whose parents worked for a non-profit organization, called the "Missionary Kids". It was hypothesized that MKs who had more negative experiences in previous transitions would find it more difficult to adjust to college, than those who had less interaction with Western peers while growing up and less support when returning to North America would have more difficulty in the transition process, and that those who were further along in the education process would feel more

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adjusted than those who had recently returned. While the first hypothesis was confirmed, the second and third hypotheses were only partially confirmed.

Pittman and Richmond (2008) conducted a longitudinal study to understand how changes in sense of university belonging, quality of friendships, and psychological adjustment were associated. Data was collected from college students at 2 points of time in their first year. The study used regression, correlation and attritional analysis to obtain results. While their findings could not support a causal link between university belonging or friendship quality and better adjustment. It did suggest that university belonging and friendship quality are important factors to a student's adjustment in college.

Ostrove and Long (2007) investigated the extent to which social class status builds a sense of belonging at college, and the manner in which belonging informs adjustment to college. Social class background was strongly connected with a sense of belonging at college and was slightly related to academic achievement among 322 liberal arts college students, but not with the quality of their college experience. The association between class background and college adjustment was mediated by a sense of belonging. It's crucial to highlight that, rather than having a direct impact on a number of important college outcomes, social class background—as measured both objectively and subjectively—appears to have a significant impact on a variety of important college outcomes via a sense of belonging. Not only do these findings suggest that class background structures a sense of who belongs, but also that it has crucial implications for college experience and performance.

Hertel (2002) conducted a study on the college student's generational status and their college adjustment. The major aim of the study was to explore the differences and similarities between first generation and second-generation college students in their first year of college. And also understand the role of different variables in predicting their college adjustment. The study used multiple regression analysis and multiple *t* tests to analyze the data. The study found that on-campus friend support predicted overall adjustment better for second-generation students. But self-esteem and on-campus support consistently predicted adjustment for both first and second generation students.

Paul and Brier (2001) conducted a study where friend sickness, preoccupation with and concern for the loss of or change in pre-college friendships, was seen as a significant source of distress for college students, affecting college adjustment. Friend sickness, pre-college predictors, and characteristics of college adjustment were investigated ten weeks into the first semester in short-term longitudinal research of 70 college students ($N = 70$). The study hypothesized that friend sickness was associated with pre-college social concerns, a discrepancy between pre-college expectations and college experiences, more pre-college friends in the college social network, and loneliness and poor self-esteem in college. According to the findings, students focused on and concerned about their pre-college friendships exhibit poor adjustment.

Chen (1999) did an extensive review of existing literature to delineate the key aspects of transition to higher education which guided his purpose of setting guidelines for counselors to deal with this population. The thorough review demonstrated that perceived social support is a major aspect in adjustment to college life, students who felt socially connected and supported were able to cope better. The same was reaffirmed by Hale et. al (2005) in their article about social support and physical health. Chen also demonstrated how fostering new relationships was an important factor in adjustment and further to the self-esteem of the

students. The article brought out the importance of social connectedness, a related concept to sense of belongingness.

METHODOLOGY

Aim

The aim of the study is to understand the impact of college sense of belongingness on the psychological adjustment of undergraduate college students studying in the offline and online modality.

Rationale

Sense of belongingness and adjustment though widely studied concepts have not yet been studied together, more so sparsely in the Indian context. The research aims to understand whether a sense of belonging can directly impact one's adjustment. During the Covid-19 pandemic, students switched to an online modality of learning which affected their sense of belonging towards their educational institutions. The study, by its comparative design between students in the offline and online modality of learning, tries to understand if this isolation from the university is a factor that affects their sense of belongingness to the university and goes on further to explore if this has impacted the student's psychological adjustment.

Objectives

- To investigate the relationship between college sense of belonging and psychological adjustment of undergraduate students.
- To assess whether students in the offline and online modality of learning differ with respect to their college sense of belongingness and adjustment.
- To explore gender differences on the constructs of college sense of belongingness and adjustment.

Hypotheses

- College sense of belongingness predicts psychological adjustment in undergraduate college students.
- There will be significant differences between students in offline and online modality of learning with respect to their college sense of belongingness.
- There will be significant differences between students in offline and online modality of learning with respect to their adjustment.
- There will be a significant difference between males and females with respect to their college sense of belongingness
- There will be a significant difference between males and females with respect to their adjustment.

Research Design

A research design acts as a blueprint of the study that incorporates all the elements of the study in a logical and coherent manner. The current study is a comparative design that studies the differences between two samples. The first sample consists of undergraduate students who studied in the online modality during the covid-19 pandemic. The second sample consists of undergraduate students who studied in the offline mode. Both the samples had students restricted to 2nd year college. Non probability sampling was used in the current research. Quota sampling method was used wherein one sample consisted of

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students who studied in the online modality whereas the other sample consisted of students who studied in the offline modality.

Variables

The study consists of 2 variables

Independent variable - Sense of belongingness

Dependant variable - Psychological adjustment

Description of sample

Online modality

This sample consisted of students who had transitioned from school to college and had not attended any physical classes in their colleges due to the restrictions in the covid-19 pandemic. The age range was between 17-19. The sample (N= 122) consisted of 74 females and 48 male participants.

Offline modality

This sample consisted of students who transitioned from school to college and attended classes in the physical mode for the first time after the lockdown restrictions were uplifted. The age range was between 17-20 years. The sample (N= 55) consisted of 45 females and 9 males participants.

Description of tools

Revise sense of belongingness scale: The measure was developed by Hoffman, M.B., Richmond, J.R., Morrow, J.A., & Salomone, K. in 2003. It consists of 4 domains; perceived social support, perceived classroom comfort, perceived faculty support and perceived isolation. It consists of 26 items which are responded to on a 5 point likert scale. Where 1= completely untrue, 2= mostly untrue, 3= equally true and untrue, 4= mostly true, 5=completely true. No items are reversed. The total score ranges from 26 to 130, where higher scores indicate higher sense of belongingness. The coefficient alpha was computed to ascertain the internal consistency of the entire scale and each of the 4 factors. Results indicated a coefficient alpha of 0.91 for the entire scale. Coefficient alphas for the four factors were 0.90 for perceived classroom comfort, 0.82 for perceived isolation, 0.84 for perceived social support, and 0.77 for perceived faculty support.

Brief Adjustment Inventory (BASE-6): It is a brief self-report measure of general psychological adjustment. The item pool contains six items and assesses individuals' perceptions of emotional distress. Sample items include "To what extent have you felt unhappy, discouraged, and/or depressed this week?" and "How much has emotional distress interfered with feeling good about yourself this week?" All six items were on a seven-point Likert scale (1 = not at all, 4 = somewhat, 7 = extremely), higher scores indicating lower general psychological adjustment. The items in BASE-6 reflect 3 aspects of psychological adjustment that is symptom distress, interpersonal functioning and social role functioning. Completion of the BASE-6 requires approximately one minute. The BASE-6 demonstrates excellent internal consistency and reliability. For college students sample it had a coefficient alpha of 0.87

Procedure

The following steps were undertaken for the data collection:

- A google form was created consisting of both the questionnaires together.

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- It was first sent out to students studying in the online modality during the covid-19 pandemic
- Later when college resumed the questionnaire was sent to the students studying in the offline mode.
- The respondents were informed of the study's ethical codes and considerations, along with the confidentiality after which their informed consent was taken.
- No participant was allowed to be a part of both the samples.

Statistical analysis

IBM SPSS version 20.0 was used for the statistical analysis. Regression was used to see whether sense of belongingness predicted psychological adjustment. T-test was used to find out significant differences with respect to modality of learning and gender for both sense of belongingness and psychological adjustment.

RESULTS

The aim of the study was to explore whether College sense of belongingness is a predictor of Psychological adjustment in undergraduate students. The sample consisted of 116 undergraduate students. Furthermore they were divided into two groups, participants belonging to the online modality; those who attended college online without attending a single physical class on campus. The second group was the offline modality group; it consisted of students who attended college physically for the first time after the pandemic restrictions on institutions were lifted. The results of the study are displayed below.

Table 1 Descriptives

Sense of belongingness					
	Total sample	Males	Females	Online modality	Offline Modality
N	116	33	83	62	54
Mean	102	91.94	106	82.87	123.96
Std. Deviation	26.740	23.94	26.87	9.63	22.88
Variance	715.02	4.16	2.95	93.95	523.81
Psychological Adjustment					
	Total sample	Males	Females	Online modality	Offline Modality
N	116	33	83	62	54
Mean	26.31	24.27	27.12	2.6	25.98
Std. Deviation	9.16	9.47	8.96	8.95	9.46
Variance	83.97	1.65	0.98	80.24	89.64

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Table 1 represents the descriptives for the study sample. The total number of participants was 116 out of which there 83 females and 33 males. The mean for the sample was $M= 102$, $SD=26.74$ on college sense of belongingness. While for psychological adjustment the sample had a mean score of $M= 26.31$, $SD= 9.16$.

Females had a mean $M= 106$, $SD= 26.67$ on college sense of belongingness and a mean of $M=27.12$, $SD= 8.96$ on psychological adjustment. Males had a mean $M= 91.94$, $SD= 23.94$ on college sense of belongingness and a mean of $M= 24.27$, $SD= 9.47$ on psychological adjustment.

The online modality group had a mean of $M=82.87$, $SD= 9.63$ on college sense of belongingness and on psychological adjustment the mean was $M= 26.6$, $SD= 8.95$. The offline modality group had a mean of $M= 123.96$, $SD= 22.88$ on college sense of belongingness and on psychological adjustment the mean was $M= 25.98$, $SD=9.46$.

Table 2 Correlation between Sense of belongingness and Psychological Adjustment

Variable	M	SD	1	2
1.Sense of Belongingness	102	26.74		
2.Psychological Adjustment	26.31	9.16	-.202*	

*Note ** significant at 0.01 level of significance * significant at 0.05 level of significance*

Table 2 depicts the correlation between college sense of belongingness and psychological adjustment. The results indicate that both the variables are significantly correlated $r(114) = -.202$, $p<0.05$.

Table 3 Correlation between factors of sense of belongingness and Psychological adjustment

		Adjustment
Adjustment	Pearson Correlation	1
	Sig. (2-tailed)	
	N	116
Perceived social support	Pearson Correlation	-.182*
	Sig. (2-tailed)	.050
	N	116
Perceived isolation	Pearson Correlation	.307**
	Sig. (2-tailed)	.001
	N	116
Perceived classroom comfort	Pearson Correlation	-.390**
	Sig. (2-tailed)	.000
	N	116
Perceived faculty support	Pearson Correlation	-.406**
	Sig. (2-tailed)	.000
	N	116

*Note ** significant at 0.01 level of significance * significant at 0.05 level of significance*

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Table 3 presents the correlation between factors of sense of belongingness and psychological adjustment. The results of Pearson correlation indicate that there was a significant negative association between psychological adjustment and perceived social support $r(114) = -.182$, $p < 0.05$; perceived classroom comfort $r(114) = -.390$, $p < 0.001$, perceived isolation $r(114) = .307$, $p < 0.001$ and perceived faculty support $r(114) = -.406$, $p < 0.001$.

Table 4 Model Summary

Model	R	R Square	Adjusted square	R	Std. Error of the Estimate
1	.202 ^a	.041	.032		9.014

Predictors: (Constant), Sense of belongingness

Table 5 Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	393.182	1	393.182	4.839	.030 ^b
	Residual	9263.645	114	81.260		
	Total	9656.828	115			

Dependent Variable: Adjustment

Predictors: (Constant), Sense of belongingness

Table 6 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)					
	Sense of belongingness	33.364	3.314	-.202	10.068**	.000
		-.069	.031		-2.200*	.030

*Note ** significant at 0.01 level of significance * significant at 0.05 level of significance*

A linear regression was carried out to test if college sense of belongingness predicted psychological adjustment. Tables 2, 3 and 4 represent the output for the same. The results of the regression indicated that the model explained 3.2% of the variance and that it was significant at $F(1, 114) = 4.839$, $p < .05$. It was found that college sense of belongingness significantly predicted psychological adjustment in undergraduate students.

Table 7 Model Summary

Model	R	R Square	Adjusted square	R	Std. Error of the Estimate
1	.481 ^a	.231	.204		8.178

Predictors: (Constant), Perceived faculty support, Perceived isolation, perceived social support, Perceived classroom comfort

Table 8 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2233.696	4	558.423	8.350	.000 ^b
	Residual	7423.134	111	66.875		
	Total	9656.828	115			

Dependent Variable: Adjustment

Predictors: (Constant), Perceived faculty support, Perceived isolation, perceived social support, Perceived classroom comfort

Table 9 Coefficients

Model		Unstandardized Coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.693	6.549		4.381	.000
	Perceived social support	.169	.163	.108	1.040	.301
	Perceived classroom comfort	-.325	.215	-.167	-1.513	.133
	Perceived isolation	.589	.269	.228	2.193*	.030
	Perceived faculty support	-.348	.130	-.285	-2.677**	.009

Dependent Variable: Adjustment

Table 9 shows the multiple linear regression between factors of sense of belongingness and psychological adjustment. The results indicated there was a collective significant effect between factors of sense of belongingness and psychological adjustment, ($F(4,111) = 8.350$, $p < 0.05$, $R^2 = .231$). The individual predictors when examined further indicated that perceived isolation ($t = 2.193$, $p = 0.05$) and perceived faculty support ($t = -2.677$, $p = 0.01$) were significant predictors in the model.

Table 10 t test for difference in college sense of belongingness and psychological adjustment scores between Online modality and Offline modality

	Online modality	Offline modality	t	Df	Sig value
Sense of belongingness	M= 82.87 SD= 9.69 Mean	M = 123.96 SD= 22.88 Mean	-12.87**	114	.000
Adjustment	M= 26.60 SD= 8.95	M= 25.96 SD =9.46	.359	114	.808

*Note: ** significant at 0.01 level of significance * significant at 0.05 level of significance*

Table 10 presents the t test for difference between online and offline modality of learning with respect to college sense of belongingness and psychological adjustment. Students in online mode ($M = 82.87$, $SD = 9.63$) and students in offline mode ($M = 123.96$, $SD = 22.88$) showed significant differences with respect to their college adjustment which is denoted by $t(114) = 12.87$, $p < .001$. This indicates that there is a significant difference between students in offline and online modality of learning with respect to their college sense of belonging at $\alpha = 0.01$ level of significance.

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Table 10 shows the difference in psychological adjustment between offline ($M= 25.98, SD= 9.46$) and online modality ($M= 26.6, SD= 8.95$) of learning denoted by $t(114) = .359, p> 0.05$. Since the p value is greater than $\alpha = 0.05$, there exists no statistically significant difference between both groups with regards to psychological adjustment.

Table 11 t test for difference in college sense of belongingness and psychological adjustment scores between Males and Females.

	Males	Females	t	Df	Sig value
Sense of belongingness	M= 91.94 SD = 23.94	M= 106 SD = 26.87	-12.87**	114	.000
Adjustment	M= 24.27 SD= 9.47	M= 27.12 SD= 8.96	.359	114	.808

*Note: ** significant at 0.01 level of significance * significant at 0.05 level of significance*

Table 11 presents the t test for difference between males and females with respect to college sense of belongingness and psychological adjustment. Table 11 shows the difference in college sense of belongingness between males ($M= 91.94, SD= 23.94$) and females ($M= 91.94, SD= 23.94$) as denoted by $t(114) = 2.61, p> 0.05$. Since the p value is smaller than $\alpha = 0.05$, there exists a statistically significant difference between both groups with regards to college sense of belongingness.

Table 11 shows the difference in psychological adjustment between males ($M= 91.94, SD= 23.94$) and females ($M= 91.94, SD= 23.94$) as denoted by $t(114) = 1.51, p> 0.05$. Since the p value is greater than $\alpha = 0.05$, there exists no statistically significant difference between both groups with regards to psychological adjustment.

DISCUSSION

The study aimed to understand the relationship between college sense of belongingness and psychological adjustment. It explores whether a college sense of belongingness predicted psychological adjustment in undergraduate college students. With the world succumbing to the Covid-19 pandemic, institutions shut down worldwide. College is an indispensable part of a students' life; hence it has become an important variable to study. More importantly, the impact of one's sense of belonging to their College on their psychological adjustment. For this purpose, the study collected relevant data and, with the help of regression and t testing, arrived at multiple conclusions. The results of the study are discussed below by taking up each hypothesis.

H1: College sense of belongingness is a predictor of psychological adjustment in undergraduate students.

Table 1 enumerates the regression analysis for the hypothesis. As can be seen the college sense of belongingness significantly predicted psychological adjustment $b= -.202, t(114)= -2.20, p<0.05$. indicating it is statistically significant. This means that college sense of belongingness indeed predicts psychological adjustment in undergraduates students. Hence our hypothesis is accepted. College sense of belongingness also explained a significant proportion of variance in psychological adjustment scores, $R^2= 0.41, F(1,114)= .030, p<0.05$. This result is also supported by our correlation analysis, wherein both the variables are strongly correlated $r(114) = -.202, p<0.05$. This can be understood in the light that college consumes a significant portion of students' life in terms of number of hours, mentally

and physically. A drastic transition from school to college makes it necessary for students to adjust quickly in order to function normally. This adjustment can only be achieved when the students feel that they are a part of their university or college. France, Finney and Swerdzewski (2010) distinguished between group attachment and member attachment as separate elements of overall university attachment. Where in group attachment refers to attachment to the university as a whole while member attachment refers to attachment to the people within the university. Maunder (2016) conducted a study which showed that group attachment, that is attachment to the university, was a significant predictor of student's adjustment. Because feelings of attachment are closely aligned with constructs of belonging and connectedness, whereby students feel that they 'fit' within the institution (France, Finney and Swerdzewski 2010; Wilson and Gore 2013) the study corroborates with our own findings of college sense of belongingness being a predictor of psychological adjustment.

The finding can also be established in the light of previous studies informing us that change in a sense of belonging led to changes in college student's adjustment (Bowman et. al, 2018; Ostrove & Long 2007, Sevinc & Gizir, 2014). Students with a strong sense of belonging also reported better adaptive help-seeking behaviors (Won et al., 2019), less psychological issues (Pittman & Richmond, 2007; Thompson et al., 2019) and loneliness (Mounts, 2004), and higher emotional well-being (Civitci, 2014). Furthermore, multiple studies have shown that belonging is an important protective factor for students' psychological health and adjustment when faced with stresses or adversities (Backhaus et al., 2019; Civitci, 2015; Eisenberg et al., 2007; Nuttman- Shwartz, 2019; Zhang et al., 2020).

Furthermore, we also ran multiple regressions between factors of sense of belonging and psychological adjustment. As seen in table 9, two of these factors produced significant results indicating their role in predicting psychological adjustment in students. The first being faculty support, Kirby and Thomas (2021) also found that high-impact teaching approaches increased the students' sense of belonging in general and contributed to their adjustment. A supportive faculty can help students navigate through the academic pressures in college and acts as mentors to them. They are looked up to and often seeked out for advice and mentorship. Such an environment would put the student at ease knowing that their professors are reachable and accessible in case of any help that they require. This would relieve them of any unnecessary stress and fear of authorities thereby reducing their sense of distress and improving adjustment. The second factor is perceived isolation. The results indicate that lower the sense of perceived isolation, better psychological adjustment would result. This can be further understood by what Hagerty et al., 1996 and Russell et al, 1984 said that the idea of "sense of belonging" is defined as a component of interpersonal relatedness that is most dissimilar to loneliness and strongly linked to social support. Loneliness is seen to be the result of a failure to connect with others, whereas the feeling of support is thought to be based on the belief that one is fundamentally integrated into a social network and has sufficient resources (Cohen & Wills, 1985).

While not all factors of sense of belongingness were significant predictors of psychological adjustment, they are all significantly correlated to psychological adjustment as can be seen in table 3. Perceived faculty support, perceived isolation and perceived classroom comfort were significantly correlated at $\alpha = 0.01$ level of significance. And perceived social support was significantly correlated with psychological adjustment at $\alpha = 0.05$ level of significance.

Although our study was unable to find perceived social support as a significant predictor of psychological adjustment, previous studies in the past have established the contrary. Singh,

Gupta, and Chauhan (2021) in their mediation study demonstrated that social support had an indirect effect on mental health and psychological adjustment. The association between social support and mental health was partially mediated by psychological adjustment. Burton (2018) revealed that belongingness among peers can have an important effect on first-year students' adjustment to college in the way that they buffer maladaptive feelings. Hertel (2002) found that on-campus friend support predicted overall adjustment better for second-generation students. Chen (1999), did an extensive review of existing literature to delineate the key aspects of transition to higher education which guided his purpose of setting guidelines for counselors to deal with this population. The thorough review demonstrated that perceived social support is a major aspect in adjustment to college life, students who felt socially connected and supported were able to cope better. The same was reaffirmed by Hale et. al (2005) in their article about social support and physical health.

H2: There will be significant differences between students in offline and online modality of learning with respect to their college sense of belongingness.

As the results are indicated in table 10, students in online mode ($M= 82.87$, $SD= 9.63$) and students in offline mode ($M= 123.96$, $SD= 22.88$) showed significant differences with respect to their college adjustment which is denoted by $t(114) = 12.87$, $p < .001$. This indicates that there is a significant difference between students in offline and online modality of learning with respect to their college sense of belonging at $\alpha = 0.01$ level of significance. Offline college students have a higher mean score (mean = 123.96) than online students (mean = 82.97) on the college belongingness scale, indicating that offline students possibly experience a higher sense of college belongingness than those attending classes online. This can be explained by the logic that students studying online had never met their peers or seen their university owing to their transition from school to college during the pandemic when institutions were shut. Therefore, the students never got an opportunity to interact with their classmates on the campus physically, albeit there was interaction online but it was severely limited in nature. Online interactions were limited to video calls, messages and online classes. The missing physical presence possibly adds greatly to the feeling of sense of belongingness that students experience in the university setting. This argument is supported by Kohut's identity proximity model which states that the presence of others and their reactions to us help us feel a sense of connectedness and similarity with the other. This self identification with our peers in the context of university helps develop a sense of belongingness with them and the university. Bronfenbrenner's ecological model dictates the same when it asserts that human experiences are linked to interpersonal interactions and environmental events that are either satisfactory or not. This environmental-satisfaction would dictate how one attaches itself to the environment. If its needs are met and satisfied in that case it leads to feelings of belongingness. Meaning, that student's sense of belongingness would be tied to how they interact with the university environment and whether those experiences have been satisfying, and their needs and expectations have been met. In the pandemic, students were devoid of experiencing this interaction, which would explain the lower sense of belongingness in students attending college in the online modality.

H3: There will be significant differences between students in offline and online modality of learning with respect to their adjustment.

Table 10 shows the difference in psychological adjustment between offline ($M= 25.98$, $SD= 9.46$) and online modality ($M= 26.6$, $SD= 8.95$) of learning denoted by $t(114) = .359$, $p >$

0.05. Since the p value is greater than $\alpha = 0.05$, there exists no statistically significant difference between both groups with regards to psychological adjustment. The 2 groups taken up for the study were arbitrarily made and do not represent 2 different exclusive cohorts which makes it difficult to gauge for differences. It is possible that online students had inculcated online classes as a routine therefore it did not have any impact on their adjustment. The routine no more created a sense of distress, as it became a part of their daily functioning. Whereas offline students were possibly excited to finally attend their classes physically and had already formed bonds with their peers online therefore aiding the process of adjustment. Familiarity with fellow classmates and faculty could have helped to reduce the sense of distress of being in a new environment.

H4: There will be a significant difference between males and females with respect to their college sense of belongingness

Table 11 shows the difference in college sense of belongingness between males ($M= 91.94$, $SD= 23.94$) and females ($M= 91.94$, $SD= 23.94$) as denoted by $t(114) = 2.61$, $p > 0.05$. Since the p value is smaller than $\alpha = 0.05$, there exists a statistically significant difference between both groups with regards to college sense of belongingness. The result is supported by Hutz, Martin & Beitel (2017) who studied the relationship between student's ethnocultural person-environment fit and college adjustment. The study aimed to explore the effects of sex and ethnicity on person-environment fit and adjustment. Results indicated that there were significant differences in sex and perceptions of person-environment fit. Women reported a higher level of fit and greater sense of belongingness than men. Kissinger et. al, (2009) report that women generally experience a higher sense of belonging as compared to men especially in fields where women are present in a larger number. Morrow (2004) found that compared to women, men reported more perceived isolation than females.

However, Maham et. al, (2021) who looked at how peer attachment and learning styles were moderated by a sense of belonging among students during COVID-19. They found that there were no significant differences between males and females with regards to their sense of belongingness, learning styles and peer attachment. Bonnie et. al, (1996) found that there were no significant differences between men and women's sense of belonging as measured by SOBI-A and SOBI-P. The mixed results do not offer a clear picture, however the results of this study also suffer from a limitation because of the disproportionate number of females and males in the sample. There were 83 females and 33 males thus leaving scope for further investigation on the same with a more proportionate sample.

H5: There will be a significant difference between males and females with respect to their psychological adjustment.

Table 11 shows the difference in psychological adjustment between males ($M= 91.94$, $SD= 23.94$) and females ($M= 91.94$, $SD= 23.94$) as denoted by $t(114) = 1.51$, $p > 0.05$. Since the p value is greater than $\alpha = 0.05$, there exists no statistically significant difference between both groups with regards to psychological adjustment. Wang and Zhang (2015) stated that albeit there were differences in adjustment with regards to college students' majors and grades, there was no significant gender difference in levels of psychological adjustment among college students in China. There is a dearth of studies that explore gender differences on psychological adjustment. Nevertheless researchers have explored gender differences on other types of adjustment. For example, Menaga & Chandrasekaran (2015) found gendered differences on adjustment of college going students, whereas Panth, Chaurasia and Gupta

(2015) fail to confirm these findings, because they found no significant differences on adjustment between undergraduate females and males. During the pandemic all students found themselves in the same predicament irrespective of their gender. Both were burdened with work on the home and college front. Despite having varied levels of stress, and emotions, being in a similar situation might account for the lack of differences.

SUMMARY AND CONCLUSION

The aim of the study was to explore whether college sense of belongingness had an impact on psychological adjustment for undergraduate college students. The results indicate that not only are the two variables significantly correlated but also that college sense of belongingness significantly predicts psychological adjustment. The research took up a comparative study wherein it compared students in the online modality with those who were in the offline modality of teaching on both the variables. While there was a significant difference between the two with regards to their college sense of belongingness the same could not be established for their psychological adjustment. A gendered comparison was also undertaken for the variables. The study found that there was a significant difference between males and females in their college sense of belongingness with females having a higher mean than the males. No differences were found on the measure of psychological adjustment.

The study is not without its limitations. Firstly, the sample was small given the paucity of time. The distribution of males and females in the study was also lopsided. Since the study was conducted right after the lockdown was lifted from institutions, there ceases to exist a clear demarcation between the online and offline group of teaching, meaning they may not be distinct cohorts.

In the future the researchers can take up the study in a larger sample and a well differentiated cohort for comparison. Understanding the implications of college sense of belongingness on the psychological adjustment of college students serves as an impetus to work on strategies and interventions to bolster the same. While the study only concerns itself with one aspect that is psychological adjustment, future research could take up multiple dimensions of adjustment for a comprehensive study and analysis.

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Conflict of Interest

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