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Learning Climate, Intrinsic Motivation and Psychological Wellbeing among Clinical Psychology Trainees in Pakistan

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Shumaila Rasul<sup>1\*</sup>, Elizabeth Maria Schwaiger<sup>2</sup>**Abstract**

Self-determination theory proposes that satisfaction of the basic human needs for autonomy, competence, and relatedness are essential for people to perform at their best across cultures. The study aimed to investigate self-determination theory in a collectivistic culture using the relationship between learning climate, intrinsic motivation, psychological wellbeing and academic performance. Students doing postgraduate degree in Clinical Psychology program ( $n=150$ ) with (females = 130, males = 12) were recruited from universities of Lahore, Pakistan. Path analysis was conducted. Path model I showed the weak correlation of learning climate with intrinsic motivation. Subscales of Intrinsic Motivation Inventory (IMI) (interest/enjoyment, competence, perceived choice) showed indirect effect with psychological wellbeing whereas subscale of IMI (pressure/tension) shared direct effect as pressure among students in collectivistic culture was found to be affecting their psychological wellbeing. In Path model II, learning climate and intrinsic motivation showed indirect effects on CGPA. Learning climate of Eastern countries is more controlling so learning climate and pressure/tension directly and indirectly affected psychological wellbeing. The findings highlighted that students in Pakistan are not practicing intrinsic motivation to achieve academic performance. Therefore, needs of self-determination theory are not satisfied in academic performance of students in collectivistic culture.

**Keywords:** Intrinsic Motivation, Learning Climate, Psychological Wellbeing, Self-Determination Theory

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**Introduction**

Often, students in eastern counties have fewer opportunities to exercise autonomous behaviors and choices. Such students are more likely to follow external values of society and may experience the lack of autonomy as supportive rather than restrictive from their cultural lens.

Comparatively, students in the west may consider external values of society as pressure or being obliged to do something and consider it as constraints to their self-growth (Tang et al., 2021).

The motivation of students to pursue their careers depends upon the individual, their family, the environment of the educational institutes, and the importance placed upon education by the career path that is chosen (Akomolafe et al., 2013). The types of motivation that drive an individual to pursue their career can be explained by self-determination theory (SDT; Deci & Ryan, 2004) which indicates that human motivation is divided into three different levels. Meeting the psychological needs of SDT, specifically autonomy, competence, and relatedness, and finding an elaborative or unified sense of self can increase the level of motivation and therefore improve multiple performance outcomes (Deci &

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Ryan, 2004). The limited research on students from the East has shown that they average lower as compared to western students in satisfaction of the need for autonomy and competence, although all three needs have been found to promote psychological wellbeing (PWB) and intrinsic motivation, even in eastern populations (Tang et al., 2021). The role of the needs of SDT, especially autonomy, on motivation has been linked with PWB in the West, whilst the need for relatedness has been found to hold greater significance in eastern cultures (Tang et al., 2021). Therefore, culture plays an important role in determining the importance of each of these “universal” needs (Deci & Ryan, 2008).

Students feel motivated when they perceive their learning environment consistent with their cultural norms and values (Zhu & Leung, 2010). In many Eastern countries, the focus is on ‘we.’ This consciously advocates harmony, emphasizes relationships over tasks, and uses languages in which ‘I’ is excluded to preserve sense of belongingness. Opinions are predetermined by in-groups which becomes an aspect of personality as compared to the more individualistic culture of many Western countries (Hofstede, 2011). Culture and personality are linked with each other when it comes to national culture. The parents’ support for autonomy also enhances PWB of children in West as compared to East (Tang et al., 2021). This is deeply rooted in the culture as independent culture favours autonomy versus interdependence which signifies collectivistic culture practices (Tang et al., 2021). Hofstede (2011) explained that Eastern society often has strict social norms that controls the basic need for gratification more than Western societies that allow freedom of gratification of human needs. Deci and Ryan (2008) have proposed that the needs of autonomy, competence and relatedness from self-determination theory are essential in varying cultures and these factors are important for human optimal functioning.

Nie et al. (2014) has noted that the needs (i.e., autonomy, competence, and relatedness) for PWB are universal, but that autonomy is viewed differently in different cultures. All cultures differ in support and significance given to autonomy along with its limitations in relation to different environments. Iyengar and Lepper (1999) emphasized that when the need of autonomy is satisfied among students who belong to individualistic cultures, their learning performance improves, as compared to students from collectivistic culture. Students from collectivistic culture often appreciate when others make choices for them and it makes them intrinsically motivated towards their learning because it promotes harmony and these students give more importance to sense of belongingness with their groups rather than having their individual choice of interests and values (Bhat & Naik, 2016). It is important to consider motivation and psychological well-being in order to determine the academic performance of the students as these factors influence the academic performance (Bhat & Naik, 2016).

Deci et al. (1991) elaborated that autonomy supportive environments enhance intrinsic motivation and students who are intrinsically motivated show positive academic performance. Research studies have been carried out pertaining to autonomous learning environment and applicability of the SDT in Western countries, but little work has been done with related variables in Eastern countries. There are few studies which show the needs of SDT predicting PWB and PWB being related to autonomous motivation (Milyavskaya & Koestner, 2011; Patrick et al., 2007; Salami, 2010). Autonomy is similar to intrinsic motivation as Durso et al. (2016) and Shen et al. (2015) explained that autonomy supportive academic environment gives opportunity of self-direction, whereas a teaching style which is more autonomous in nature has given more positive outcomes than controlled teaching style (Ten Cate et al., 2011). The

collectivistic culture often has a more controlled academic environment as the power distance is larger between teacher and student (Hofstede, 2011). Commonly, these cultures practice teacher-centred education rather than student-centred education. Such cultures also use the practice of rote learning. The kind of autonomy provided to the students affects their decision making power, procedural autonomy or cognitive abilities and drives students to practice either intrinsic or extrinsic motivation towards their studies (Furtak & Kunter, 2012). The student personality with regard to problems at school also plays a vital role where learning climate and psychological well-being are concerned (Lombardi et al., 2019); but, learning climate largely directs student's level of motivation (Baeten et al., 2012).

Crumpton and Gregory (2011) have explained that intrinsically motivated students are more persistent in academic activities, consistent in attendance, learn practically, enhance their skills by taking part in classroom activities and are mostly excited by their academic courses as compared to students who are extrinsically motivated. Prospero and Vohra-Gupta (2007) explained that intrinsically motivated students, due to their level of motivation, secure getting high GPAs. Deci and Ryan (2004) have explained the way people satisfy SDT needs is different among individualistic and collectivistic culture. The more chances the students have to practice their basic needs of autonomy, competence and relatedness, the more they rate high on psychological well-being and intrinsic motivation (Niemi & Ryan, 2009). The needs of competence and autonomy are required to experience intrinsic motivation and they also help in maintaining it, but the need for relatedness does not mean that the behaviour is going to be autonomous. Intrinsic motivation is more related to the internalization of the values of environment in which the individual lives (Gagne & Deci, 2005; Shillingford & Karlin, 2013). The Western

culture supports the need of autonomy which enhances intrinsic motivation among students (Deci et al., 1991). Hsu and Huang (2006) elaborated that students living in autonomy-supportive home environments develop such learning models which also affect one's learning and social characteristics. People whose needs of autonomy and competence are met live positive, satisfied lives and experience less physical symptoms such as sleep problems, appetite issues and headache (Patrick et al., 2007).

Given the way culture impacts these variables, the aim of the study was to find the relationship of learning climate, intrinsic motivation and psychological well-being in postgraduate clinical psychology students of Lahore, Pakistan. The study also aimed to find the relationship of learning climate and role of intrinsic motivation and psychological well-being with postgraduate clinical psychology trainees in this more collectivistic culture. The hypotheses of the study were as follows:

1. Learning climate (Learning Climate Questionnaire) affects intrinsic motivation (Intrinsic Motivation Inventory) which in turn affects psychological well-being (Psychological Well-being Questionnaire).
2. Learning climate (Learning Climate Questionnaire) affects intrinsic motivation (Intrinsic Motivation Inventory) which in turn affects performance outcome (CGPA).

## Method

### Participants

Based on the research conducted in the past (Lombardi et al., 2019; Shillingford & Karlin, 2013; Zhou et al., 2009) and g-power analysis, the sample size for this study consisted of 150 students (both males and females) of Clinical psychology program. The participants were taken from both government and private institutes.

### Inclusion Criteria

- Students signed the informed consent before participating in the study.
- Students of postgraduate Clinical psychology program participated from both government universities (Lahore College for Women University and Punjab University) and private universities (Forman Christian College, A Chartered University, Kinnaird College for Women University, Riphah International University QIE Campus, University of Management and Technology) of Lahore, Pakistan.
- Students who were studying in the postgraduate Clinical Psychology program from any semester (1-4<sup>th</sup>) participated in the study.

### Measures

Data was gathered using following questionnaires:

#### Learning Climate Questionnaire

Astin (1968) and Pace (1963) developed a questionnaire consisted of 15-items measuring autonomy, relatedness and competence which was validated by the studies (Williams & Deci, 1996) and the scale was further adapted and it also had high internal consistency (Black & Deci, 2000). The academic environment of the institute was taken into consideration while it was further used to assess the general learning environment. It has alpha values of 0.93 and 0.95.

#### Psychological Wellbeing Questionnaire

Ryff (1989) developed a scale for psychological well-being which consists of varying items and the 42-item version was used by the researcher which measured different dimensions including; environmental mastery, autonomy, personal growth, relatedness with others, the purpose of life and the self-acceptance. It achieved the balance between the length of the scale and goals to measure the appropriate depth and has been employed in

longitudinal studies (Ryff, 2014). The scale has the alpha value of 0.71 and 0.80.

#### Intrinsic Motivation Inventory

Ryan and Deci (2000) developed a scale in order to measure the subjective experience of the participants related to the task given. The researcher used 22-item task evaluation questionnaire which assessed the enjoyment or interest of the participants, their choice related to the task, their level of competence along with the pressure, the task imposed on the participants. The scale has an alpha value of 0.85. Intrinsic motivation inventory had four subscales: subscale IMI1 (interest/enjoyment) and subscale IMI2 (perceived competence), subscale IMI3 (perceived choice) and subscale IMI4 (pressure/tension). The item-19 from IMI subscale 3 (perceived choice) was used during research data collection but was excluded during analysis for reliability purposes to make the subscale reliable and after exclusion, it was found in the optimal range of inter-item correlation (Pallant, 2016). Mean, standard deviation, and inter-item correlation for subscale were calculated after excluding item-19. All other analysis was conducted using the new subscale formed without item-19 for subscale 3 of IMI.

#### Procedure

The study was approved by IRB vide reference no. IRB-223/06-2020. The participants were given informed consent to ask about their willingness to participate. The demographic questions were asked including the gender, age, marital status, socio-economic background and CGPA of the trainees where CGPA was used as an outcome measure. Then 'Learning Climate questionnaire' was given. Afterwards, students were given a clinical case study to write the management plan based on their knowledge and learning from clinical psychology program. The approximate time of ten minutes was given to write the management plan in order to use the self-report measure of IMI (Deci et al., 1994). This followed by 'Intrinsic motivation inventory' (IMI) in order to measure

student's intrinsic motivation while writing the management plan for given case study. Lastly, students were given psychological well-being questionnaire.

### Ethical Considerations

Ethical values were taken into account especially confidentiality and anytime

withdrawal from the research which were clearly stated in informed consent.

### Statistical Analysis

The statistical analysis used were Pearson Product Moment Correlations and Path Analysis.

## Results

**Table 1**

*Sociodemographic Characteristics of the Participants (N=150)*

| Variables             |                    | <i>f</i> | Percentage | <i>M</i> | <i>SD</i> |
|-----------------------|--------------------|----------|------------|----------|-----------|
| Gender                | Male               | 12       | 8%         | 24.41    | 1.619     |
|                       | Female             | 138      | 92%        |          |           |
| Age                   |                    |          |            |          |           |
| Marital status        | Single             | 132      | 88%        |          |           |
|                       | Engaged            | 6        | 4%         |          |           |
|                       | Married            | 11       | 7.3%       |          |           |
|                       | Divorced           | 1        | 0.7%       |          |           |
| Socio-economic Status | Middle-class       | 104      | 69.3%      |          |           |
|                       | Upper middle-class | 31       | 20.7%      |          |           |
|                       | Lower middle-class | 15       | 10%        |          |           |
| Academic Institute    | FCCU               | 41       | 27.3%      |          |           |
|                       | KC                 | 27       | 18%        |          |           |
|                       | LC                 | 17       | 11.3%      |          |           |
|                       | UMT                | 29       | 29%        |          |           |
|                       | PU                 | 14       | 9.3%       |          |           |
|                       | RIU QIE            | 22       | 14.7%      |          |           |
| CGPA                  |                    |          |            | 3.434    | 0.323     |

*Note.* FCCU = Forman Christian College, A Chartered University, KC = Kinnaird College for Women University, LC = Lahore College for Women University, UMT = University of Management and Technology, PU = Punjab University, and RIU QIE = Riphah International University, QIE Campus, *f* = frequency, *M* = mean, *SD* = standard deviation

**Table 2**

*Psychometric Properties for Learning Climate Questionnaire (LCQ), Intrinsic Motivation Inventory and Psychological well-being Questionnaire (PWB) (N=150)*

| Variable | Range | <i>M</i> | <i>SD</i> | Reliability      |                                 |
|----------|-------|----------|-----------|------------------|---------------------------------|
|          |       |          |           | Cronbach's Alpha | Average Inter-item Correlation* |
| LCQ      | 78    | 79.85    | 15.3      | 0.91             |                                 |
| IMI1     | 6     | 34.25    | 7.8       | 0.85             |                                 |
| IMI2     | 6     | 24.35    | 5.99      | 0.85             |                                 |
| IMI3     | 6     | 17.47    | 4.71      |                  | 0.30                            |
| IMI4     | 6     | 17.21    | 5.6       |                  | 0.33                            |
| PWB      | 142   | 174.10   | 24.1      | 0.88             |                                 |

*Note.* LCQ = Learning Climate Questionnaire, IMI = Intrinsic Motivation Inventory, *M* = Mean, *SD* = Standard Deviation

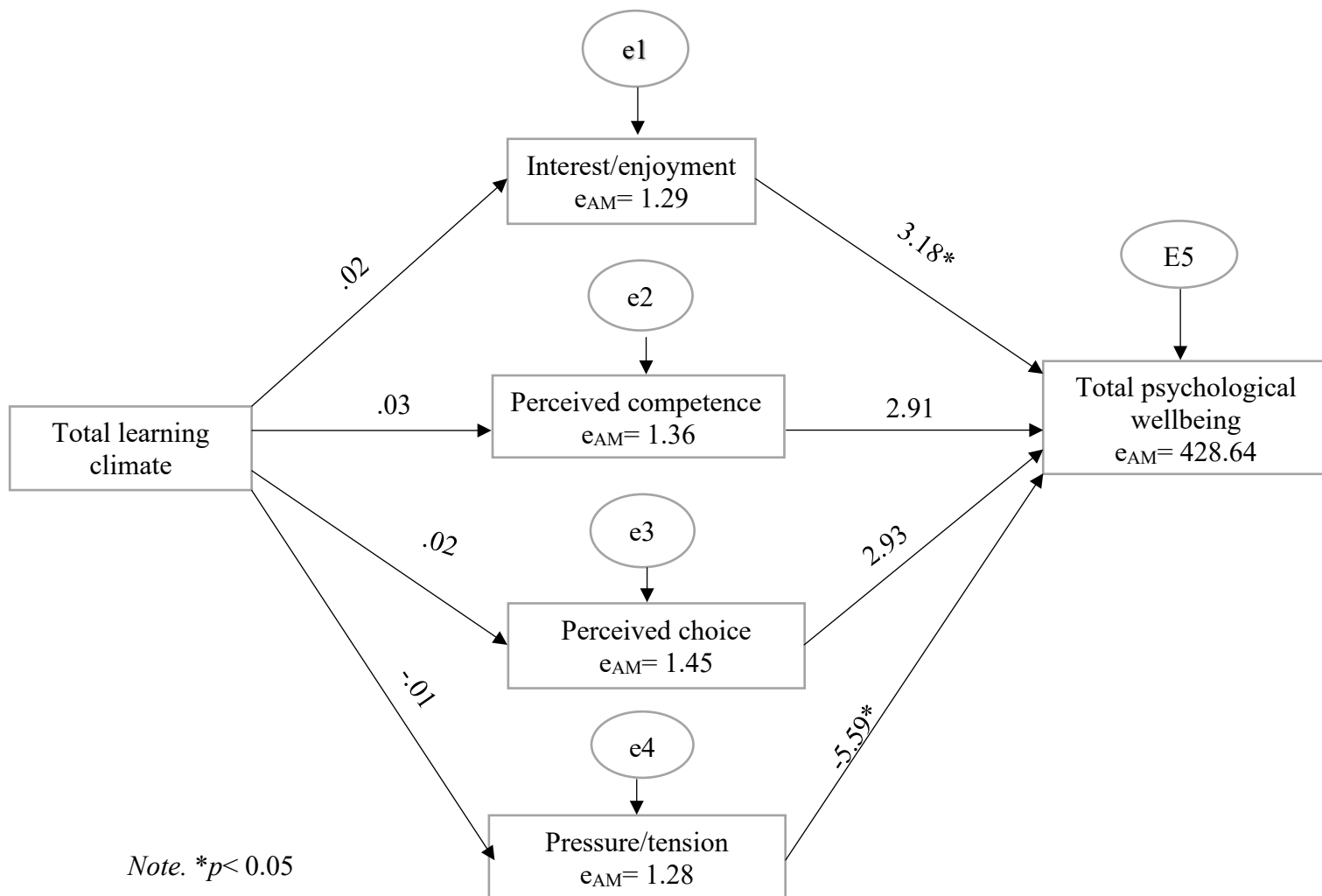
\* For IMI 3 and IMI 4 subscales, the average inter-item correlation was used as a measure of reliability given the low number of items.

Frequencies and percentages are reported for categorical variables (gender, marital status, socio-economic status, academic institute) and means and standard deviations for continuous variables (age in years, CGPA) (Table 1). The means, standard deviations, and reliability or inter-item correlation of scales used in the study are presented in Table 2. To determine the reliability of the scales used in this research study, Cronbach's alpha coefficient and inter-item correlations were used. Indicating that Cronbach's alpha values for scales must meet the criteria of having values 0.7 or above (Pallant, 2016). All the scale items which required reverse scoring were reversed before checking reliability. The Cronbach's alpha values of scales i.e.,

Learning Climate Questionnaire and Psychological Wellbeing Questionnaire met the criteria with having alpha values above 0.7 which was considered good reliabilities for both the scales. Intrinsic motivation inventory had four subscales and their reliabilities were individually determined which came out to be good for two subscales IMI1 (interest/enjoyment) and IMI2 (perceived competence). According to Pallant (2016), the scales having five items or lower than five, can use inter-item correlations to determine their reliability. For IMI3 (perceived choice) and IMI4 (pressure/tension) inter-item correlation was used which came in the optimal range of 0.2-0.4 for both these subscales.

**Figure 1**

*Path Model 1 to show Relationships between Learning Climate, IMI subscale 1, IMI subscale 2, IMI subscale 3, and IMI subscale 4 with Psychological Wellbeing*



## Testing of Hypothesis

### Hypothesis 1

Learning climate (Learning Climate Questionnaire) effects intrinsic motivation (Intrinsic Motivation Inventory) which in turn effects psychological well-being (Psychological Well-being Questionnaire). For testing hypothesis 1, Learning Climate and all four subscales of Intrinsic Motivation Inventory including subscale 1 (interest/enjoyment), subscale 2 (perceived competence), subscale 3 (perceived choice), subscale 4 (pressure/tension) were used as independent variables and Psychological Well-being (PWB) as dependent variable to construct path diagram that can reflect the variables and can provide combinations to reach an outcome. PWB was used as an outcome measure for path model I.

The findings showed that learning climate was weakly correlated with intrinsic motivation with non-significant results suggesting it as sensitive to sample participants. The results also showed that the independent variables respectively displayed relationships with dependent variable which means that learning climate effects intrinsic motivation which in turn effects psychological wellbeing among clinical psychology students. Interest/enjoyment (IMI1) strongly effected psychological wellbeing with significant results with indirect relationship as interest/enjoyment increased, psychological wellbeing also increased. Whereas pressure/tension showed direct

### Hypothesis 2

Learning climate (Learning Climate Questionnaire) effects intrinsic motivation (Intrinsic Motivation Inventory) which in turn effects performance outcome (CGPA). For testing hypothesis 2 learning climate and four subscales of intrinsic motivation inventory including subscale 1

relationship with psychological wellbeing as if pressure/tension increased, psychological wellbeing decreased and showed a direct path and beta weight also reflected unique contribution of pressure/tension with PWB giving significant negative results. All other variables perceived competence and perceived choice showed an indirect relationship with psychological wellbeing as they effected psychological wellbeing among clinical psychology students giving non-significant results.

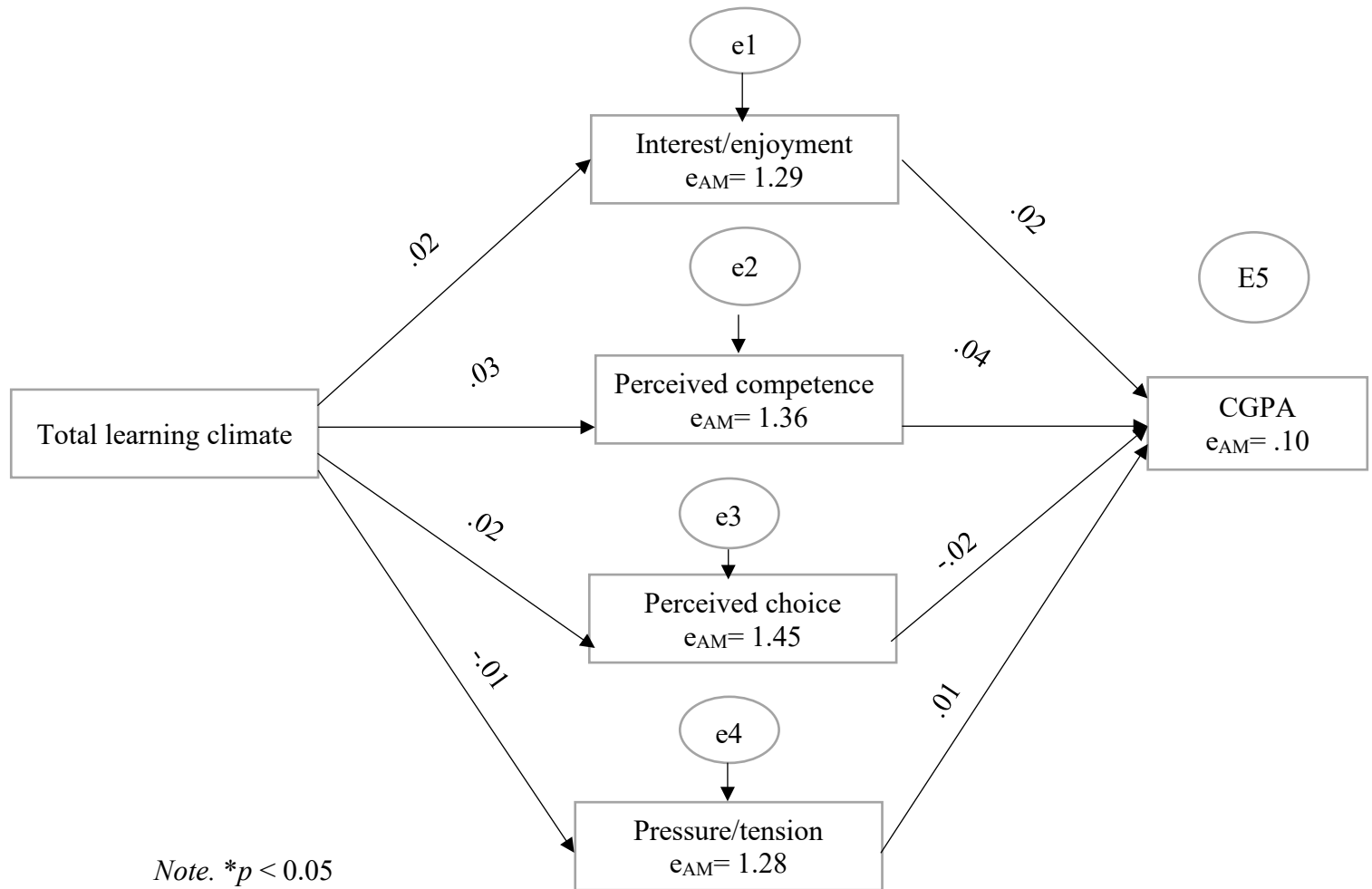
### Goodness of Fit

Goodness of fit of Model I was analysed using AMOS SPSS. Chi-square test was used to analyse path matches for significance. Chi-square was found as 200.04, degrees of freedom (*df*) came out as 7. The probability of the model was 0.00 which assesses the overall fit of the model, also suggesting it is significant. (Kline & Hooper, 2008) suggested the cut-off p-value must be greater than .05 which was not found for this model. This explains that the model might be sensitive to number of sample participants. The comparative fit index (CFI) was found as .304 and according to cut off, it must be greater than and equal to .90. The root mean square error of approximation (RMSEA) was .430 which according to cut-off must be less than .08. S(RMR) was found as 22.1 which according to cut-off must be less than .08 which was not found for this model suggesting it is not a good fit.

(interest/enjoyment), subscale 2 (perceived competence), subscale 3 (perceived choice), subscale 4 (pressure/tension) were used as independent variables and CGPA as dependent variable where CGPA was also used an outcome variable to construct path diagram.

**Figure 2**

*Path Model II to show the Relationships between Learning Climate, IMI subscale 1, IMI subscale 2, IMI subscale 3, and IMI subscale 4 with CGPA*



The findings showed that the independent variables respectively displayed relationships with dependent variable giving non-significant results. The effect size decreased for all independent variables showcasing indirect effect of these variables with CGPA as learning climate does not greatly affect intrinsic motivation and as intrinsic motivation decreased, CGPA also decreased. Learning climate and intrinsic motivation was found to be weakly effecting CGPA of clinical trainees.

#### **Goodness of Fit**

Goodness of fit of Model II was analysed using AMOS SPSS. Chi-square test was used to analysed path matches for significance. Chi-square was found as 202.9, degrees of freedom ( $df$ ) came out as

7. The probability of the model was 0.00 which assesses the overall fit of the model, also suggesting it is significant. (Kline & Hooper, 2008) suggested the cut-off p-value must be greater than .05 which was not found for this model. This explains that the model might be sensitive to number of sample participants. The comparative fit index (CFI) was found as .153 and according to cut off, it must be greater than and equal to .90. The root mean square error of approximation (RMSEA) was .433 which according to cut-off must be less than .08. S(RMR) was found as .396 which according to cut-off must be less than .08 which was not found for this model suggesting it is not a good fit.



## Discussion

The study was conducted to examine the relationship between the variables learning climate, intrinsic motivation, academic performance, and psychological well-being among postgraduate Clinical psychology students in Pakistan. Self-determination theory (Ryan & Deci, 2000) posits a direct relationship between these variables such that a learning climate that meets the three basic needs of autonomy, competence and relatedness will lead to greater intrinsic motivation which then leads to better academic performance and increased psychological well-being. Path analysis was used to determine the degree of prediction when all the variables were considered together in a path model. Path models were formed using standardized coefficients ( $\beta$  weights) and their goodness of fit were also checked.

The first hypothesis was “Learning climate (Learning Climate Questionnaire) effects intrinsic motivation (Intrinsic Motivation Inventory) which in turn effects psychological-wellbeing (Psychological-Wellbeing questionnaire)” where psychological well-being was used as an outcome variable to construct Path Model I. Self-determination theory posits a direct relationship between these variables such that a learning climate that meets the three basic needs of autonomy, competence and relatedness will lead to greater intrinsic motivation which then leads to better academic performance and increased psychological well-being (Ryan & Deci, 2000). The findings from Hypothesis 1 showed learning climate weakly effects intrinsic motivation which in turn effected psychological wellbeing among postgraduate clinical psychology students. By using results from this hypothesis, it can be found that both pressure/tension and to a lesser extent learning climate (both directly and indirectly) impacted psychological well-being. This means that providing a more autonomous learning environment and reducing the amount of pressure or tension for performance can increase

psychological wellbeing. The positive relationship of parents with their children who support, fulfil psychological basic needs and promote the need of autonomous academic choices can predict overall psychological well-being among students (Milyavskaya & Koestner, 2011). The support from parents and later from teachers can reduce the pressure/tension of academic environment as it is considerable that how a student feels in academic environment impacts the psychological well-being.

The results of Hypothesis I showed that interest/enjoyment strongly effected psychological wellbeing as Rania et al. (2013) explained that learning climate in the universities is more challenging for the development of student’s psychological well-being as compared to high schools, for which the PWB of the clinical trainees increased with increase in their interest/enjoyment. Nalipay et al. (2020) explained the importance of self-determination theory in comparison to Western and Eastern culture in the field of education. Although the satisfaction of three basic needs are important for both cultures’ student optimal functioning; however, these needs are easily influenced by factors such as the cognitive ability of students or socio-economic status irrespective of the culture. The challenging learning environment for clinical trainees in Pakistan has been under process since its independence from India due to subject like psychology’s recognition in the country and socio-economic status of clinical trainees (Shahzad et al., 2021).

The second hypothesis was “Learning climate (Learning Climate Questionnaire) effects intrinsic motivation (Intrinsic Motivation Inventory) which in turn effects performance outcome (CGPA)” whereas CGPA was used as an outcome variable to construct path model II. The results showed that the learning environment weakly effects intrinsic motivation which in turn weakly and non-significantly affects CGPA. The findings suggests that the

clinical psychology students in Pakistan are not practicing intrinsic motivation to achieve their academic scores as CGPA is least effected by the autonomy, competence and relatedness. Perceived choice showed negative results with CGPA suggesting as the perceived choice increased, CGPA also increased and vice versa. Patrick et al. (2007) explained that the deficiency in the fulfilment of the three basic needs from SDT leads to the deficiency and fluctuations in performance outcome. The path model II (Figure 2) was not found to be good fit for the clinical psychology students in collectivistic culture suggesting the limitations of the SDT in reference to Hypothesis 2.

Durso et al. (2016) elaborated that the external rewards and punishments are way of making attempt to build control which undermines autonomy. The controlled academic environment in collectivistic culture shifts motivation of students from their initial school years and the practice continues in university. The results of the study showed that the intrinsic motivation is not linked to academic achievement among postgraduate clinical students which highlights that there could be an influence of other types of motivation in collectivistic culture. Shen et al. (2015) explained that as teachers direct students' level of motivation as is common in collectivistic cultures, autonomous motivation among students diminishes. Students who are competent in their academic environment become confident of their abilities and also have a high sense of self-efficacy (Durso et al., 2016) but postgraduate clinical psychology students in Pakistan lack resources and opportunities. The related job in the field can be difficult to find in both the government and private sectors which can contribute to the lack of confidence and low self-esteem which shifts the level of motivation of psychology students during their practice from intrinsic to extrinsic or amotivation. Keeping intellectual capacities aside, motivation does play a significant role in academic achievement.

The uncertain political situation in Pakistan and rising inflation also contributes to the level of motivation by shifting trainees' attention from learning for growth and performance to fulfilment of basic survival needs (Shahzad et al., 2021).

Vallerand and Lalande (2011) explained that intrinsic and extrinsic motivation is also affected by the parenting of students. When the child's needs of autonomy, competence and relatedness are met in early life by teachers, parents and peers, he/she is more likely to be intrinsically motivated towards learning in later life. Deci and Ryan (2008) elaborated that students who are extrinsically motivated are looking at 'what will happen after they will achieve the goal' rather than 'enjoying the process of task completion'. Such students are also less likely to achieve their life goals when their locus of causality is external to self. The postgraduate psychology students in Pakistan may be focusing more on fulfilment of their survival needs in the competitive and struggling economic conditions of the country so the motivation for learning to grow in the field shifts to 'what will happen once they graduate'.

### **Implications & Conclusion**

This study demonstrates both the applicability and the limitations of SDT for the postgraduate students in the field of clinical psychology in a collectivistic culture. Perhaps in part because the environment of the universities in Pakistan is often more controlling than Western countries, performance was found to be not predicted by competence, autonomy or relatedness and it was not associated with intrinsic motivation and learning climate of academic institute. In collectivistic culture, the opinion of relatives and friends is given more value than the individual as the environment in the household and in academic institutes is more controlled than autonomous. This shows that pressure/tension impacted psychological well-being in postgraduate psychology students in Pakistan. More research on the role of pressure and learning climate of an

academic institute in Pakistan can be done. Although Gaspay et al. (2009) emphasized that the learning climate supports collaborative interactions among students from collectivistic culture as they enjoy their learning climate more than students from individualistic culture.

This aspect of pressure/tension and academic performance outcome in students can also be research more in future. The admission criteria for students who are willing to pursue the postgraduate clinical psychology programs in Pakistan might be reviewed incorporating a screening test so that intrinsic motivation and psychological well-being is not ignored. The postgraduate clinical psychology students in Pakistan must undergo screening test along with availability of therapeutic sessions within academic institute to work on intrinsic motivation in the respective field which can help in achieving psychological well-being. This practice must begin from the formative years of students at schools in Pakistan where students are encouraged to make their own choices.

Intrinsic motivation is important for postgraduate clinical psychology students especially working in the field of mental health. Zhou et al. (2009) emphasized that autonomy is less valued in collectivistic cultures and the learning environment and its impact on practicing students' needs further research. Self-determination theory was created using samples from the West and has been found to be robust as a predictor of outcome variables such as psychological well-being and academic performance. The needs of Self-Determination Theory are applicable to the people from the West. What is less clear is the applicability in an Eastern country like Pakistan.

The study has demonstrated mixed results in terms of the needs of SDT. Church et al. (2012) suggests that the needs from SDT help individuals to develop to their full potential. The satisfaction of these needs is significant for the well-being of the people irrespective of their culture. Hassan and Al-

Jabari (2016) explained that engagement of students was greater when the learning climate was autonomy supportive even in collectivistic culture and students showed more competition in their academic performance. Therefore this can be further explored. More research is required to explore the applicability of the theory in the East. Future research could also explore the relationship of learning climate and extrinsic motivation in collectivistic culture. Future research can also explore the applicability of SDT and intrinsic motivation in schools in collectivistic culture.

### **Limitations**

The study consisted of majority of the female participants which might have given biased results. The generalizability is also hindered by the sample's geographic origin; only participants from Lahore universities in Pakistan were recruited. Therefore, the applicability of the findings to males and people outside of Lahore, Pakistan is limited. Additionally, due to the COVID-19 lockdown in Pakistan the research sample was limited to 150 and the time span for data collection was 2 months. Additionally, using path analysis, smaller samples can produce less accurate results. The demographic characteristics were not taken into account in the path analysis. These variables can have some impact on motivational states, CGPA and psychological well-being. Importantly, all cultures differ in support and significance given to level of motivation along with its limitations in relation to academic environment. The struggle of students with having more than one motivational level either intrinsic or extrinsic at the same time could have affected the needs of autonomy, competence, and relatedness and psychological well-being for this study. This was not measured in the present study. Moreover, the research was not focused on ways that can help students to practice intrinsic motivation towards their studies.

### Contribution of Authors

Shumaila Rasul: Conceptualization, Methodology, Investigation, Data Curation, Formal Analysis, Writing – Original Draft  
Elizabeth Maria Schwaiger: Methodology, Writing - Reviewing & Editing, Supervision

### Conflict of Interest

There is no conflict of interest declared by authors.

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### Data Availability Statement

The datasets of the current study are not available publicly due to ethical reasons but are available from the corresponding author [S.R.] upon the reasonable request.

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