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(A CHARTERED UNIVERSITY)

**Assessing the Effect of Work-Study Conflict on Academic Stress
and Wellbeing in University Students.**

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Abstract

This research assessed the effect of work-study conflict and academic performance, academic stress and wellbeing of university students. Some of the prior studies show that those students who have higher work-study conflict have higher stress and lower wellbeing. This quantitative research was administered by 140 survey-based questions to students studying at FCCU Lahore. Spillover theory was used to frame hypotheses for this study. Data was analyzed using SPSS (v.22). Descriptive statistics were generated depending on the nature of variables. Factor analysis was conducted to assess construct validity of scales (work-study conflict, academic stress scale, wellbeing scale) followed by reliability analyses using Cronbach's Alpha to assess internal consistency. Results of multivariate regression analyses showed that higher work-study conflict significantly predicted higher academic stress and lower wellbeing. Likewise, higher academic stress significantly predicted lower wellbeing. Another interesting finding of the study was that students working within FCCU had higher wellbeing than those who were working outside FCCU. The findings of this research can help in devising interventions and policies to mitigate the negative consequences of work-study conflict.

Keywords: Work-study conflict; Part-time employment; Academic Stress; Wellbeing

Introduction

Various research and studies suggested that there are multiple factors for stress in graduate and undergraduate students. It includes both academic and non-academic factors. These factors can be socio-cultural, psychological, and environmental (Brand & Schoonheim-Klein, 2009). Research suggests that academic factors were the pre-dominant cause which later led to physical, social, and emotional stress. Students having high stress have high level of depression and poor level of self-esteem (Baste & Gadkari, 2014). Literature suggested that higher levels of stress is related to poor academic performance. Other factors such as faculty expectations, grading, conflicting field, and classroom demands, ambiguity of standards, lack of support from field instructor etc., are the sources of stress (Butler, 1972; Gilbert, 1982; Scott, 1980; Wertkin, 1986 as cited in Fortune, 1987) Additionally, roles such as spouse, parent, and worker lead to an elevated level of stress. According to the research, students who combine several roles such as married students and those students who are involved in part-time employment experience stress due to multiple roles and social isolation. These students perform poorly as compared to full-time students (Cruthirds & Strong, 1984; Lusk & Miller, 1985 as cited in Fortune, 1987)

Part-time employment can be defined as work performed by a person who works less than standard number of hours (less than 30 hours a week), they are often not allowed to participate in the beneficial plans of organization. ILO defines part-time workers as “an employed person whose normal hours of work are fewer than those of comparable full-time workers” (Convention C175 - Part-Time Work Convention, 1994 No. 175, n.d.) Due to the increase in the cost and financing of education, it becomes compulsory for many students to combine work and study. (Lipke, 2000; Curtis & Lucas, 2001; Curtis & Williams, 2002 as cited in Lingard, 2012). Research suggests that semester time work has positive social and educational benefits on students. (Lucas, 1997; Watts & Pickering, 2000; Watts, 2002; Lucas

& Lammont, 1998). Paid work related to vocational course work proves beneficial and serves as an aid to academic knowledge and career. But it can also have detrimental effects on students and their studies. Working long hours can be damaging to students mentally and academically (Lingard,2012). Research in Australia suggests that those students who combine study with paid work are more prone to inter-role conflict and stress (Vickers et.al., 2003). This research determined wellbeing, inter-role conflict and stress/burnout level in students who faces work-study conflict.

Significance of Study

This research focused on three different variables work-study conflict, wellbeing, and academic stress. It helped to examine the relationship of work-study conflict on the wellbeing and academic stress of students. It also determined that, how less satisfaction level leads to student burnout. It is the first study in Pakistan dealing with work-study conflict and its relationship with wellbeing and academic stress. Through this research we can find the gaps in the field and can take prompt and effective steps for improvement of field and to lessen the burnout and promoting the part time work environment because in this era it becomes necessary for students to opt for part-time employment in order to meet their financial needs.

Study Aims

This study is aimed to determine the effect of work-study conflict on academic stress and wellbeing in university students. It is an effort to indicate gaps and to improve the work-study environment.

Research Question

How work-study conflict affects the academic performance and wellbeing of students?

Literature Review

Bhujade (2017) argued that higher education is a stressful period which individual need to cope with, there are many reasons such as distant living from families, heavy syllabus, and inefficiency in higher education programs etc. Stress can be defined as “particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources” (Lazarus and Folkman, 1984 as cited in Berjot & Gillet, 2011) It can also be termed as psychological state which derives from the person’s appraisal of success with which he or she can adjust to the demands of the society (Bhujade, 2017). College students face more complex problems today as compared to the decade ago. These stressors include academic demands, change in family and societal relations, exposure to new people’s ideas and temptations. Salient features like time management, pressure, tough competence, fear of failure, struggle to establish identity, emotional problems like inferiority complex, anxiety, worrying, not able to think properly, consider life not worth living contributes to increased stress level (Bhujade, 2017).

The financial condition of a student is also one of the reasons of stress. Researchers stated that due to high college costs, young adults also want amenities which extra money bought, for some students it is not a choice but a compulsory to do a job along with studies. They need to work to save for college and to financially support their family.

It is observed in recent years that finances, and cost of education is increased to such an extent that it become necessary for every student to combine work and study (Lipke, 2000; Curtis & Lucas, 2001; Curtis & Williams, 2002). Some researchers suggested that work-study can provide positive social and educational benefits to students (Lucas, 1997; Watts & Pickering, 2000; Watts, 2002; Lucas & Lammont, 1998 as cited in Lingard, 2007). Paid work is beneficial to student as an aid in academic knowledge and career prospects when it comes to vocational coursework (Lingard, 2017). Working hours might impact the students’

academic along with co-curricular activities. (Wadood et.al., 2018). Students having less support from family and those who work more than twenty hours a week have a negative impact on their academic performance (Wadood et.al., 2018).

Studies in Australia suggested that those university students who combine paid work with their studies faces inter-role conflict and stress (Vickers et al., 2003). Vickers et al., 2003 suggested that the odds of dropping out of students who worked 20-29 hours from university is approximately 160 percent greater than those students who do not work at all. It is 200-204 percent for those who worked over 30 hours a week. Participation in paid work can lead to detrimental effects such as low grades, high turnover intentions from study and poor psychological health (Owen et al., 2017). Rolfe (2002 as cited in Lingard, 2007) reported that UK academics believed that excessive unsocial part time working hours led to tiredness and depression in students. Researchers suggested that university students are at the greater risk of burnout. Boudreau et al. (2004 as cited in Lingard, 2007) consider burnout as stressor which include long working hours, tension about academic grades, uncertainty about future, less control and minimum satisfaction with balance between personal and practical life, also less support from family and friends.

Students are the building blocks of the nation and future workforce. Their commitment, success and development drive future success and economic development when they enter into the labor market. Therefore, it is compulsory to determine which factors have positive and negative effects when work and study is combined (Owen et.al., 2017).

Some factors like poor working conditions, low level of resources, high demands can lead to low work-study facilitation and elevated level of work-study conflict. Work-study conflict can be defined as “The experience when demands and responsibilities in a workplace interfere with an ability to meet the demands and responsibilities in the study domain”

(Markel & Frone, 1998 as cited in Chu, 2018) whereas work-study facilitation is defined as the “Improvement in students’ ability to engage in study due to participation in work” (Butler, 2007 as cited in Chu, 2018).

It can be identified from a student’s workplace. Students who are employed in poorly designed having high demands and low resources, experience high level of work-study conflict (Adebayo, 2008). High level of job demands like workload and long working hours are linked with high level of work-study conflict. Students having high job resources reported lower level of work-study conflict (Butler, 2007; Creed et.al., 2015 as cited in Chu, 2018) Other factors such as social support, family support, university, and work support influence work-study conflict (Adebayo, 2008).

It is reported that those students who have high work-study conflict have poor health and wellbeing (Adebayo et.al., 2008). Poor sleep quality and fatigue, poor psychological health is reported in students who have higher work-study conflict (Park & Sprung, 2013 as cited in Chu, 2018). Students have a higher number of physical injuries such as contusions and bruises at workplace (Ou & Thygerson, 2012 as cited in (Owen et.al., 2017). They are more prone to depression (Cinamon, 2016 as cited in (Owen et.al., 2017). The higher the work-study conflict higher the level of minor physical injuries. There is little evidence to support an association between general physical health and work-study conflict (Park & Sprung, 2013 as cited in Owen et.al., 2017). In short, we can say that those students who have poor work-study conflict have poor health and wellbeing (Owen et.al., 2017).

Different models have been proposed to assess work-study conflict, work-study facilitation, and work-study interface to address the conditions in workplace which influence students in their studies. The main focus of work-study conflict and interface model is the detrimental side of combined work and study whereas work-study conflict and facilitation

model consider positive and negative effects observed by combining work and study. Work-study interface/conflict is bidirectional model in which the interference of work with student role and student role interfered with work results in higher stress level and decreased satisfaction level is discussed. This model was proposed by Lingard (2007). It is based on the propositions from scarcity perspective to role theory (Marks, 1977 as cited in Owen et.al., 2017). According to this perspective individuals have finite prescribed resources, time, and energy. Therefore, resources used in one role such as work is unavailable for another role for instance study. Investing both the roles, student will experience role conflict which is result of committing to one role invariably reduces the ability to accomplish another role (Owen, 2018). Markel and Frone (1998) suggested that those students who spend high numbers of hours in paid employment had high level of work-study conflict. Those students who have high level of work-study conflict are more likely to miss their lectures and tutorials (McNall and Michael, 2011 as cited in Owen et.al., 2017). In short, students experiencing dangerous level of work-study conflict have high chances to get excluded from the family.

Spillover theory originated from Sieber's idea of personality enrichment and is used to study work-study conflict. Spillover is a general bidirectional model in which positive and negative values, behaviors and skills which are transferred from one role to another is assessed (Crouter, 1984; Staines, 1980; Zedeck, 1992 as cited in Ayadurai, 2018). There can be positive spillovers and negative spillovers from work to study domain (Hansen et.al., 2006 as cited Ayadurai, 2018). Individuals can experience stress and fatigue during these spillovers (Googins, 1991 as cited in Ayadurai, 2018).

Theoretical Framework

For this research Spillover Theory was applied to understand the spillover effects in the work-study conflict of part-time students. It was developed from Sieber's (1974 as cited in Ayadurai, 2018) idea of personality enrichment. It is a process in which individual experience

in one role affects the individual experience in another role and these resulting role experience in other roles can be categorized as positive spillover or negative spillover (Staines, 1980). Individual faces fatigue and stress during these spillovers (Googins, 1991). Spillover is a bidirectional general model where positive and negative values, behaviors, and skills are transferred from one role to another (Crouter, 1984; Staines, 1980; Zedeck, 1992). Positive spillover and negative spillover can be observed from work domain to study domain causing stress and fatigue in individuals.

Based on this theory, it is in line with both the conflict and enrichment of study to work and work to study. If there is enrichment between work-study and vice versa then there is positive spillover because the satisfaction and achievement from work affects the same emotion in study and vice versa. But if there is work-study or study-work conflict then there is negative spillover because the problems and despair in work affect the same emotion in study and vice versa.

Methodology

Study Design

Part-time employment can be defined as work performed by a person who works less than standard number of hours (less than 30 hours a week), they are often not allowed to participate in the beneficial plans of organization. ILO defines part-time workers as “an employed person whose normal hours of work are fewer than those of comparable full-time workers” (ILO part-time work convention 1994 (No.175). This research focused on part-time employed students to determine the effect of work-study conflict on the academic performance and wellbeing of students using a structured questionnaire. The study followed quantitative research design and a structure questionnaire using Google forms was administered for data collection.

Sampling Design and Data Collection

The researcher contacted the Financial Aid Office, Forman Christian College (A Chartered University) Lahore [FCCU] and requested them to email the questionnaire to undergraduate students working under work-study program (WSP) at FCCU. After reviewing the questionnaire and discussing the objectives and usage of the study with research supervisor and researcher, Head of Academic Office FCCU graciously accepted the request, and the questionnaire was forwarded to the official emails of all the students registered under WSP. A total of five reminders were sent to these emails over the course of two months. A total of 52 students working under WSP responded to the questionnaire. In order to increase the sample size to make the study more representative, a link to Google Form Survey was circulated in student’s WhatsApp groups and Facebook groups within FCCU. The questionnaires returned were 155 in one month’s duration, and 15 of them were dropped due to high missing values. The final sample size for this study was 140.

Instrument

Research survey questionnaire was administered consisting of 63 questions and 4 portions. The first portion covered the demographic information, second portion consisted of work-study conflict questions. The third and fourth portion consisted of academic stress and wellbeing respectively.

Hypothesis

H1: Higher work-study conflict will be related to higher academic stress.

H2: Higher work-study conflict will be related to lower wellbeing.

H3: Higher academic stress will be related to lower wellbeing.

Variables

The key variables in the study were work-study conflict, academic stress, and wellbeing.

Conceptualization

Work-study Conflict

Work-study conflict can be defined as “The experience when demands and responsibilities in a workplace interfere with an ability to meet the demands and responsibilities in the study domain” (Markel & Frone, 1998)

Academic Stress

Academic stress can be defined as the body’s response to the academic demands exceeding the adaptive capabilities of students. Approximately 10-30% of students experience academic stress during their academic career (Alsulami et.al., 2018).

Academic stress is now considered as the primary cause of the alarming figures (Lee & Larson, 2000 as cited in Reddy et al., 2018) refers stress as an interaction between environmental stressors, student’s appraisal, and reactions for same. This term is now

considered as career stopper and becomes a grave reality (Kadapatti & Vijayalaxmi, 2012 as cited in as cited in Reddy et al., 2018)). Therefore, it becomes a significant cause of concern as it is symptomatic of rising mental health concerns (Nadamuri & Ch, 2011 as cited in Reddy et al., 2018)

Wellbeing

Wellbeing consists of three important components: life satisfaction, pleasant affect, and unpleasant affect. Affect refers to pleasant and unpleasant moods and emotions, whereas life satisfaction refers to cognitive sense of satisfaction with life (Diener & Suh, 1997 as cited in Dodge et al., 2012).

World health organization defined wellbeing or quality of life in following terms “An individual perception of their position in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a broad ranging concept affected in a complex way by the person’s physical health, psychological state, personal beliefs, social relationships, and their relationships to salient features of their environment (WHO, n.d.).

Operationalization

Work-study Conflict Scale

For work-study conflict, a modified version of bidirectional work family conflict scale developed by Netemeyer et al. (1996) as cited in Ayadurai, (2018) was used, with the validation of Cronbach’s alpha ranging from 0.82 to 0.90 (Greenhaus & Beutell, 1985 as cited in Ayadurai, 2018). For this research, the word “family” was replaced with “study” and the scale is read as work-study conflict scale. It consists of 5-item work-study conflict scale and 5-item study-work conflict scale uses a 7-point Likert scale anchored by 7 = strongly agree, 6 = agree, 5 = slightly agree, 4 = neither agree nor disagree, 3 = slightly disagree, 2 = disagree, 1 = strongly disagree. The range of the scale was 10-70.

Scale for Academic Stress

For the measurement of academic stress, Perception of Academic Stress (PAS) scale was used. It is an 18-item scale developed by Dalia and Adel Gabriel (2015 as cited in Bedewy & Gabriel, 2015). It has an internal consistency of 0.7 (Cronbach's alpha) having the evidence for content validity, and factor analysis resulted in four correlated and theoretically meaningful factors. The first five questions in the scale were reverse coded. It used 5 category response scale anchored 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree. The range of scale was 17-85.

Scale for Wellbeing

For the measurement of wellbeing, The General Wellbeing Schedule (GWB) was used. It was an 18-item self-administered questionnaire developed for U.S. Health and Nutrition Examination Survey (HANES 1) developed by Fazio, A.F. (1977 as cited in (PhenX Toolkit: Protocols, n.d.)). It included positive and negative questions across six dimensions: positive wellbeing, self-control, vitality, depression, anxiety, and general health. Each item had a time frame "previous month." 6 points response scale representing intensity or frequency was used in the first 14 questions. The remaining four questions used 0-10 rating scale defined by adjectives at each end. Questions 1,3,6,7,9,11,13,15 and 16 were reverse scored and items within each subscale were added together. The range of score was 0-110, with lower score reflecting distress whereas higher score reflecting positive wellbeing.

Ethical Consideration

All the ethical considerations were taken into account during the research. It was ensured that the necessary precautions must be taken to protect the confidentiality and anonymity of the participant. Students from either WSP (currently in the program) or the general student body participating in this survey was not asked to share their email, name, roll number, address, and phone numbers. It was ensured that students who are 18 and above years only can

participate in the study. Only the student and her supervisor have access to the collected data and after all individual information in the data file was categorized to ensure confidentiality and anonymity. No third party (within FCCU or outside FCCU) was given access to the collected data. Data was analyzed and presented as aggregates and no identifying information was highlighted in any case. A statement at the start of the invitation letter clearly states a Disclaimer that "This survey is being by an undergrad student for her final year Sociology research (SOCL499) and Students are not required by the Financial Aid Office or any other Forman office to fill this survey. Participation in this survey is completely voluntary and participation will neither result in any reward nor any penalty". Objectives of the research were clearly stated in the consent form with no deception. It was ensured that no student faced any physical or emotional harm. Respect and dignity of every participant was taken care of/into account.

Budget

The budget for this whole research was 5000Rs/- which includes printing and binding cost, and it was self-managed.

Data Analysis

For data entry, organizing, and cleaning, Statistical Package for Social Sciences (SPSS, v. 22) was used. Descriptive statistics such as mean, standard deviation, and range (LL – UL) were generated for socio-demographic control variables used in the study (see Table 1). For categorical variables, frequencies and percentages were generated (see Table 2). For assessing psychometric properties of scales used in the study (Work-Study Conflict, Academic Stress, and Well Being), factor analysis was conducted for all the scales to ensure their construct validity, followed by reliability analyses using Cronbach's alpha to assess internal consistency (Table 3). The items relevant to each construct were then computed to

make relevant scales. Descriptive statistics (mean, standard deviation, and range) were generated for all the scales (see Table 3). To predict wellbeing from work-study conflict and academic stress in addition to socio-demographic variables, three separate multiple regression analyses were carried out. In the first regression model, academic stress was predicted from work-study conflict and socio-demographic variables used in the study (see Table 4). There was independence of residuals as assessed through Durbin-Watson statistic which was 2.1. Tolerance values for all the predictor variables were greater than 0.4 and VIF (Variance Inflation Factor) values were less than 3, which showed that multicollinearity was not a problem. In the second regression model, wellbeing was predicted from work-study conflict and socio-demographic variables used in the study (see Table 5). There was independence of residuals as assessed through Durbin-Watson statistic which was 2.1. Tolerance values for all the predictor variables were greater than 0.4 and VIF values were less than 3, which showed that multicollinearity was not a threat. In the third regression model, wellbeing was predicted from academic stress and socio-demographic variables used in the study. There was independence of residuals as assessed through Durbin-Watson statistic which was 2.2. Tolerance values for all the predictor variables were greater than 0.4 and VIF values were less than 3, which showed that multicollinearity was not present.

Results

Descriptive Statistics of Continuous Variables

Descriptive statistics of continuous variables such as mean, standard deviation, and range of variables used in the study was generated. Mean and standard deviation of age was 23.11 \pm 3.46 years, which shows that approximately 68% of the respondents were between the ages of 19.7 - 26.6 years. Results indicated the mean and standard deviation of credit hours was 16.66 \pm 1.78, which showed that approximately 68% of respondents were enrolled for 14.88 - 18.44 credit hours. It also elaborated that approximately 68% of respondents had work experience of 0.46 – 50.62 months. Further it shows that approximately 68% of respondents were working between 2.68 – 8.62 hours and between 3.22 - 6.62 days. Mean and standard deviation of average hours/day for study was 5.3 \pm 3.0, which shows that approximately 68% of respondents were studying between 2.3 – 8.3 hours. Results are elaborated in Table 1.

Table 1
Descriptive Statistics of Continuous Variables used in study (N = 140)

Variable	Mean	SD	Range
Age (years) [N = 136]	23.11	3.46	18 - 44
Credit hours (N=137)	16.66	1.78	6 - 19
CGPA (N=133)	3.32	0.45	1.3 - 4
Work experience (months)	25.54	25.08	1 - 180
Working hrs./day	5.65	2.97	1 - 24
Working days/ week	4.92	1.70	1 - 10
Monthly Income (PKR)	63262.7	112136.47	2340 - 1000000
Average hrs. for study/day	5.3	3.0	1 – 15

Data indicated that 57.9% of respondents were males and 42.1% were females. 87.1% of the respondents were doing BA/Bs (hons) program while 12.9% were from MS/MPhil programs. 7.9% of respondents were freshmen, 12.1% were sophomore, 20.0% were junior and 60.0% were from senior year. Moreover, 50.7% were involved in co-curricular activities and 49.3% were not involved in co-curricular activities. Results are shown in Table 2.

Table 2
Frequency Distribution of Categorical Variables used in study (N = 140)

Variable	Frequency	Percentage
Gender		
Female	59	42.1
Male	81	57.9
Program		
BA/Bs (hons)	122	87.1
MS/MPhil	18	12.9
Year of Study		
Freshmen	11	7.9
Sophomore	17	12.1
Junior	28	20.0
Senior	84	60.0
Study Major		
Not Confirm	1	0.7
Socialscience	86	61.4
Naturalscience	27	19.3
Appliedscience	2	1.4
Pharm D	5	3.6
Humanities	7	5.0
Engineering	8	5.7
Medical	4	2.9
Are you involved in co-curricular activities?		
No	69	49.3
Yes	71	50.7

Factor Analysis

Factor analysis was conducted to assess the construct validity of scales. Factor loadings for all the indicators of work-study conflict were greater than 0.4 except for one of the items (**Working often makes me short-tempered and irritable**) that has factor loading less than 0.4. The remaining 9 items explained approximately 48.7% variance in the construct of work-study conflict. Mean and standard deviation of work-study conflict was 35.4 ± 10.8 , which showed that approximately 68% of respondents had a work-study score between 24.6 – 46.2. The value of Cronbach's alpha (0.87) showed that internal consistency exists. Factor loadings for all the indicators of academic stress scale were greater than 0.4 except one of the items (**Even if I pass my exams, am worried about getting a job.**) that has factor loading less

than 0.4. The remaining 17 items explained approximately 25.39% variance in the construct of academic stress. Mean and standard deviation of academic stress was 47.5 ± 9.1 , which showed that majority of the respondents had medium level stress had a score on academic stress between 38.4 –56.6. The value of Cronbach's alpha (0.81) showed that internal consistency exists.

Factor analysis was conducted to assess the construct validity of wellbeing scale. Factor loadings for all the indicators of wellbeing scale were greater than 0.4 except two of the items (**Have you been in firm control of your behavior, thoughts, emotions, or feelings?** and **Have you felt down hearted and blue?**) that has factor loading less than 0.4. The remaining 16 items explained approximately 33.26% variance in the construct of wellbeing. Mean and standard deviation of wellbeing was 50.0 ± 14.9 , which showed that approximately 68% of respondents were between 35.1 –64.9. The value of Cronbach's alpha (0.84) showed that internal consistency exists. Results are elaborated in Table 3.

Table 3
Psychometric Evaluation and Descriptive Statistics of Scales used in study (N = 140)

Variable	Factor Loading	Variance (%)	Cronbach's Alpha	M (SD)	Range
Work-Study Conflict		48.71	0.87	35.4 (10.8)	9 - 58
Work prevents sufficient time for study.	0.74				
No time left to do extra work for studies.	0.68				
Study misses out because of work.					
Work has a negative impact on study.	0.77				
Work suffers because of study.	0.59				
Study concerns distract me at work.	0.44				
Would be better employ if didn't study.	0.51				
Study has a negative impact on day-to-day duty.	0.58				
Difficult to concentrate at work due to study responsibilities.	0.71				
	0.66				
Academic Stress		25.39	0.81	47.5 (9.1)	21 - 76
Confident that I'll be a successful student.	0.67				
Confident that I'll be successful in my career.	0.78				
Can make academic decisions easily.	0.64				
Time allocated to work, and class is	0.60				

enough.					
Enough time to relax after work.	0.66				
Teachers are critical of academic performance.	0.68				
I fear failing the course this year.	0.71				
Think that worrying about exam is weakness of character.	0.60				
Teachers have unrealistic expectations of me.	0.64				
The size of curriculum is excessive.	0.64				
The amount of work assignment is too much.	0.51				
Unable to catch-up if getting behind work.	0.49				
Unrealistic expectations of parents stress me out.	0.60				
Competition with peers for grades is intense.	0.46				
Exams questions are usually difficult.	0.65				
Exam time is short to finish answers.	0.65				
Exam times are stressful to me.	0.59				
Wellbeing		33.26	0.84	50.0(14.9)	9 - 87
Feeling in general	0.55				
Bothered by nervousness or your nerves.	0.61				
Felt so sad and had problems that wondered if anything was worthwhile.	0.62				
Felt under any pressure or stress.	0.55				
Satisfied and happy with your personal life.	0.49				
Wonder, if you are losing mind or control etc.?	0.44				
Have you been anxious or worried?	0.63				
Have you been waking up fresh and rested?	0.45				
Been bothered by illness or fear about health?	0.47				
Life full of interesting things.	0.61				
Feeling emotionally stable?	0.65				
Felt tired or exhausted?	0.65				
Concerned about your health.	0.64				
How relaxed or tensed you have been?	0.63				
How much energy and vitality you felt?	0.73				
How depressed and cheerful have you been?	0.65				

Multiple Regression Analysis

Multiple regression analysis was carried out to predict academic stress from socio-demographic variables and work-study conflict. The results of the regression indicated the model explained 26.1% of the variance ($R^2 = .346$, adj. $R^2 = .261$, $F(13,100)=4.062$, $p<.001$).

The results showed that one unit increase in age resulted in 0.75 units increase in academic

stress ($\beta = 0.75, p < .05$). The results further showed that one unit increase in CGPA decreased academic stress by 3.55 units ($\beta = -3.55, p < .05$). The key variable work-study conflict statistically significantly predicted academic stress as one unit increase in work-study conflict resulted in 0.40 units increase in academic stress ($\beta = 0.40, p < .001$). The remaining variables in the model were statistically insignificant ($p > .05$). The results are summarized in Table 4.

Table 4
Multivariate Regression to predict Academic Stress from Work-Study Conflict in University Students (N = 114)

Variable	B	SE _B	P-value	R ²	Adj. R ²
				0.346	0.261
Age (years)	0.75	0.37	.044		
Gender	-2.93	1.62	.073		
Program	-2.29	2.85	.424		
Year of Study	-0.86	1.21	.479		
Credit hours	0.84	0.57	.141		
CGPA	-3.55	1.78	.049		
Work experience (years)	-0.03	0.04	.448		
Working hrs./day	0.34	0.34	.306		
Working days/ week	0.21	0.47	.663		
Working in same organization	3.12	1.71	.072		
Average hrs. for study	0.19	0.25	.453		
Involved in co-curricular activity	0.61	1.51	.689		
WS Conflict	0.40	0.07	.000		

Multiple Regression was run to predict wellbeing from socio-demographic variables and work-study conflict. Results indicated the model explained that 22.3% of variance ($R^2 = .312$, $\text{adj. } R^2 = .223$, $F(13,100) = 3.492, p < .001$). The results showed that males had 9.36 units higher wellbeing than females ($\beta = 9.36, p < 0.01$). Results showed that one unit increase in work-study conflict decreased wellbeing by 0.40 times ($\beta = -.40, p < 0.01$) which is statistically significant. The remaining variables in the model were statistically insignificant ($p > .05$). Results are summarized in Table 5.

Table 5
Multivariate Regression to predict Well Being from Work-Study Conflict in University Students
(N = 114)

Variable	B	SE_B	P-value	R²	Adj. R²
				0.312	0.223
Age (years)	-0.31	0.66	.640		
Gender	9.36	2.91	.002		
Program	-2.17	5.13	.673		
Year of Study	-2.50	2.18	.255		
Credit hours	1.63	1.02	.113		
CGPA	1.67	3.20	.604		
Work experience (years)	-0.01	0.07	.873		
Working hrs./day	0.30	0.61	.626		
Working days/week	-0.84	0.85	.322		
Working in same organization	3.37	3.07	.276		
Average hrs. for study	-0.80	0.44	.074		
Involved in co-curricular activity	3.88	2.71	.156		
WS Conflict	-0.40	0.13	.003		

Multivariate Regression was run to predict wellbeing from academic stress along with sociodemographic variables in university students. Results of regression indicated the model which explained 34% variance ($R^2=.416$, adj. $R^2=.340$, $F(13,100)=5.470$, $p<.001$). The results showed that males had 7.18 units higher wellbeing than females ($\beta = 7.18$, $p<0.05$). It was also found that one unit increase in credit hours that students were currently enrolled in increased wellbeing by 2.37 units ($\beta = 2.37$, $p<0.05$). Another interesting finding of the study was that the students who were working within FCCU had 5.97 units higher wellbeing than those who were working outside FCCU ($\beta = 5.97$, $p<0.05$). The variable academic stress also statistically significantly predicted wellbeing as one unit increase in academic stress decreased wellbeing by 0.78 times ($\beta = -0.78$, $p<0.001$). The remaining variables in the model were statistically insignificant ($p > .05$). Results are summarized in Table 6.

Table 6
Multivariate Regression to predict Well Being from Academic Stress in University Students (N = 114)

Variable	B	SE_B	P-value	R²	Adj. R²
				0.416	0.340
Age (years)	0.33	0.61	.591		
Gender	7.18	2.73	.010		
Program	-3.89	4.75	.415		
Year of Study	-3.43	1.98	.086		
Credit hours	2.37	0.93	.013		
CGPA	-0.61	3.00	.841		
Work experience (years)	-0.04	0.73	.616		
Working hrs./day	0.49	0.56	.379		
Working days/week	-0.66	0.78	.399		
Working in same organization	5.97	2.84	.038		
Average hrs. for study	-0.66	0.41	.109		
Involved in co-curricular activity	4.48	2.50	.076		
Academic Stress	-0.78	0.15	.000		

Discussion

This study is based to observe the effect of work-study conflict on the wellbeing of students along with academic stress. Statistics revealed that the number of working students increased worldwide (Ryan, Barns, & McAuliffe, 2011 as cited in Chu, 2018). 65% of first year students and 71% of last year students are involved in work while study in 2007 which increases to 69% and 76% respectively. Students are involved in work due to multiple reasons including support to study, to generate discretionary spending money (Devlin, James, & Grigg, 2008; Richardson, Evans, & Gbadamosi, 2014 as cited in Chu, 2018) and to gain experience and labor market skills (Broadbridge & Swanson, 2006; Curtis & Shani, 2002 as cited in Chu, 2018). But involvement in two different competing roles affect students' wellbeing, involvement in study related activities, academic performance and university engagement (ACER, 2011; Butler, 2007; Cinamon, 2016; Creed, French, & Hood, 2015 as cited in Chu, 2018). Researchers also suggested that this conflict can have detrimental effect on later achievement and success in workforce (Schneider & Yin, 2011 as cited in Chu, 2018)

When students do not perform properly, fail, or drop out from college, it affects them, their families, communities, and their institutions. (e.g., student drop-out costs Australian universities approx. \$1.4 billion per year in lost income; (Hare, 2010 as cited in Chu, 2018). Result from the research conducted above states that one-unit increase in work-study conflict resulted in 0.40 times increase in academic stress. It is also observed that with the increase in age, increases academic stress by 0.75 times. Many factors can be involved to prove this stance such as with the increase in age responsibilities increases, marital status change. Roles such as spouse, parent and worker led to elevated levels of stress. Role conflict emerges when involved in more than one role. Engaging in one role negatively affects another role. (e.g., student role; Greenhaus & Beutell, 1985; Zedeck & Mosier, 1990).

Stress is associated with negative health and mental well-being. Research conducted in Norway states that stress due to job is leading factor of poor wellbeing among working adults. Moreover, this study also suggested that males have higher wellbeing than females. Multivariate regression predicted that males have 7.18 units higher wellbeing than females. ($\beta = 7.18, p < 0.05$). However, scholars argued that adverse health outcomes differ among men and women may be due to their exposure to different jobs and stress. They argued that men and women have different level of stress because they are perceived and treated differently in society, working conditions are different. In reference to gender role theory, the authors discussed gender differences in relation to the concentration of men and women working in different sectors. In horizontal segregation men are concentrated to industry and manufacturing whereas women are involved in teaching, nursing, sales job etc. which are highly stressful jobs. Keeping in view the vertical segregation of employment men and women differs in hierarchical areas and levels. Women occupy more precarious jobs and less prestigious positions and ultimately less wages compared to men. Researchers also argued that engaging double burden role such as engagement in work activities along with household chores and care responsibility put additional pressure and stress on women which subsequently affect their mental health (Mensah A., 2021).

Another interesting fact observed during research was that those students who are working with the same organization in which they are studying have higher wellbeing as compared to those who are working outside the organization. Multivariate regression shows that students working within the same organization had 5.97 units higher wellbeing than those who are working outside. Multiple reasons can be viewed for this fact i.e., students have more facilities within in the organization, there is no transport problem, and they can easily coordinate their work responsibilities with their study schedule. Keeping in view of the above discussion following recommendations are made.

Recommendation

In today's era it has become compulsory for every student to engage in employment along with studies to meet the demands. Therefore, there should be more opportunities for students for employment, especially within organization. There should be flexible working hours for students so that they can manage work and study properly without getting burnt out and stressed. Proper counseling should be provided to students to cope with academic stress. Proper social support and friendly environment at workplace should be provided to working women to cope with wellbeing issues.

Future Research

For future research more variables can be taken into account. Random sampling would be encouraged. Other mediator variables like work-family balance can also be considered. Use of broader sample and more universities can provide interesting findings and results.

Limitations

The sample size of research was small which reduced the generalizability. Also, small sample size did not represent the whole population or the entire student body as the data was collected in summer semester. Sampling frame is restricted. It was a cross-sectional study rather than longitudinal i.e., it is not conclusive and relatively a simple model. Major variables are less. Mediating variables like work-family balance etc. can be analyzed. Moreover, only FCCU was considered as population so the results could not be generalized to other private and public universities. The questionnaire was slightly extensive which may reduce response rate.

Conclusion

The study was conducted to analyze the effect of work-study conflict on wellbeing and academic performance of university students. Work along with studies is becoming necessary for students to meet their demands and to cope the financial issues. It was observed that work-study conflict has negative consequences on the wellbeing of students. Students who have higher work-study conflict have lower wellbeing and higher academic stress (Hypothesis accepted). Students working within the same organization in which they study have higher wellbeing than students who are working outside. Moreover, it was observed that male students have higher wellbeing than female students. Keeping in view the above research, there should be proper workplace environment for female students to get rid of wellbeing issues, there should be flexible working hours for students so that they can manage their work and study easily. Proper counseling should be provided to students to mitigate the negative effects of work-study conflict.

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Appendix A: Informed Consent Letter

Dear Respondent,

You are invited to participate in a survey on students who are currently engaged in part-time employment. You will be asked some general questions related to your study, work, and wellbeing. The questionnaire is attached below which will require only 10-15 minutes for its completion. There is not any kind of risk nor is there any compensation for responding. Your participation is voluntary, you can withdraw at any point. Provided information will not be released to any third party and all the steps to protect the identity and confidentiality will be ensured. By signing this form, you are agreeing that you have read the above information and indicating your consent to participate in this research study. Thank you.

Name of the participant:

Signature:

Researcher: Kundan Rana

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Appendix B: IRB Approval Certificate



FORMAN CHRISTIAN COLLEGE
(A CHARTERED UNIVERSITY)

INSTITUTIONAL REVIEW BOARD
APPROVAL CERTIFICATE

IRB Approval Certificate

IRB Ref: IRB-386/05-2022

Date: 18-05-2022

Project Title: Assessing the effect of work-study conflict on academic performance and wellbeing in university students.

Principal Investigator: Kundan Rama.

Supervisor: Sir Jawad Tariq.

Institutional review board has examined your project in IRB meeting held on 18-05-2022 and has approved the proposed study. If during the conduct of your research any changes occur related to participants risk, study design, confidentiality or consent or any other change then IRB must be notified immediately.

Please be sure to include IRB reference number in all correspondence.



Dr. Kauser Abdulla Malik HL, SJ, TI
Chairman, IRB
HEC Distinguished National Professor (Biotechnology)
Dean Postgraduate Studies
Director, Research, Innovation & Commercialization (ORIC)
Forman Christian College (A Chartered University)
Lahore

For Further Correspondence:
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5	Working often makes me short-tempered and irritable	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
6	My work performance suffers because of my study commitments	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
7	Study related concerns often distract me at work	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
8	If I did not study, I'd be a better employee	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
9	My study has negative impact on my day-to-day duties	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
10	It is difficult to concentrate at work due to my study responsibilities	Strongly disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

Academic Stress.

1	Am confident that I will be successful student.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2	Am confident that I will be a successful in my future career.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3	I can make academic decision easily.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
4	The time allocated to classes and academic work is enough.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
5	I have enough time to relax after work.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
6	My teachers are critical of my academic performance.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7	I fear failing courses this year.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
8	I think that my worry about examinations is weakness of character	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
9	Teachers have unrealistic expectations of me	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
10	The size of curriculum (workload) is excessive.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
11	I believe that amount of work assignment is too much	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
12	Am unable to catch up if getting behind the work.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
13	The unrealistic expectations of my parents stresses me out	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
14	Competition with my peers for grades is quite intense	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15	The examination questions are usually difficult	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
16	Examination time is short to complete the answers	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
17	Examination times are very stressful to me out	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
18	Even if I pass my exams, am worried about getting a job.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree

Wellbeing

Please respond to the following questions keeping in view the previous month.

1	How have you been feeling in general?	In excellent spirit In very good spirit In good spirit I have been up and down in spiritsIn low spirit mostly In very low spirit
2	Have you been bothered by nervousness or your "nerves"?	Extremely so-to the point where I could not work or take care of things Very much so Quite a bit Some-enough to bother me A little Not at all
3	Have you been in firm control of your behavior, thoughts, emotions, or feelings?	Yes, definitely so Yes, for the most part Generally so Some-enough to bother me A little Not at all
4	Have you felt so sad, discourages, hopeless, or had so many problems that you wondered if anything was worthwhile?	Extremely so-to the point that I have just about given up Very much so Quite a bit Some-enough to bother me A little bit Not at all
5	Have you been under or felt you were under any strain, stress, or pressure?	Yes-almost more than I could bear or stand Yes-quite a bit of pressure Yes-some, more than usual Yes-some, but about usual Yes-a little Not at all
6	How happy, satisfied, or pleased have you been with your personal life?	Extremely happy-could not have been more satisfied or pleased Very happy Fairly happy Satisfied-pleased Somewhat dissatisfied Very dissatisfied

7	Have you had any reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel, or of your memory?	<p>Not at all</p> <p>Only a little</p> <p>Some-but not enough to be concerned or worried about</p> <p>Some, and I have been a little concerned</p> <p>Some, and I am quite concerned</p> <p>Yes, very much so, and I am very concerned</p>
8	Have you been anxious, worried, or upset?	<p>Extremely so-to the point of being sick or almost sick</p> <p>Very much so</p> <p>Quite a bit</p> <p>Some-enough to bother me</p> <p>A little bit</p> <p>Not at all</p>
9	Have you been waking up fresh and rested?	<p>Every day</p> <p>Most every day</p> <p>Fairly often</p> <p>Less than half the time</p> <p>Rarely</p> <p>None of the time</p>
10	Have you been bothered by any illness, bodily disorder, pains, or fears about your health?	<p>All the time</p> <p>Most of the time</p> <p>A good bit of the time</p> <p>Some of the time</p> <p>A little of the time</p> <p>None of the time</p>
11	Has your daily life been full of things that were interesting to you?	<p>All the time</p> <p>Most of the time</p> <p>A good bit of the time</p> <p>Some of the time</p> <p>A little of the time</p> <p>None of the time</p>
13	Have you been feeling emotionally stable and sure of yourself?	<p>All the time</p> <p>Most of the time</p> <p>A good bit of the time</p> <p>Some of the time</p> <p>A little of the time</p> <p>None of the time</p>
14	Have you felt tired, worn out, used-up, or exhausted?	<p>All the time</p> <p>Most of the time</p> <p>A good bit of the time</p> <p>Some of the time</p> <p>A little of the time</p> <p>None of the time</p>

For each of the four scales below, note that the words at each end of the 0 to 10 scale describe opposite feelings. Circle any number along which seems closest to how you have generally felt? (DURING THE PAST MONTH)

15	How concerned or worried about your HEALTH have you been?	<p>0 (Not concerned) 1 2 3 4 5 6 7 8</p> <p>9 10 (Very concerned)</p>
16	How RELAXED or TENSE have you been?	<p>0 (Very relaxed) 1 2 3 4 5 6 7 8</p> <p>9 10 (Very tense)</p>
17	How much ENERGY, PEP, and VITALITY have you felt?	<p>0 (No energy at all listless) 1 2 3 4 5 6 7</p> <p>8 9 10 (Very energetic)</p>
18	How DEPRESSED or CHEERFUL have you been?	<p>0 (Very depressed) 1 2 3 4 5 6 7 8</p> <p>9 10 (Very Cheerful)</p>