Determinants of Student Satisfaction while working in Groups

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Abstract

The increasing popularity of team structures in business environment coupled with the common practice of including group projects/assignments in university curricula means that business schools should direct efforts towards maximizing team as well as personal results. Yet, most frameworks for studying teams center exclusively on team level outcomes to address organizational needs. Far fewer studies have examined effectiveness at individual team member level in an educational context. The quantitative study on which this paper is based investigated the impact of team process on the effectiveness of individual satisfaction in group work amongst business students in Hong Kong with work group effectiveness and management educational literature providing the theoretical background. The study surveyed 489 university business students and revealed that all three team process factors, namely workload sharing, mutual support and communication play a positive and significant role in individual satisfaction in team settings.
Keywords: Individual Satisfaction; Team Process; Workload Sharing; Mutual Support; Communication; Group Work; Teamwork; Student Project

INTRODUCTION

Team structure is getting more popular in business environment to achieve certain tasks of the organization. These tasks are more commonly done in shape of group projects and assignments. This means that university graduates must have the abilities and capabilities to work in team structure to maximize results to be achieved as well as enhancing individual performance. It is important to identify suitable team factors which directly relate and effect individual satisfaction of business professionals and management educators. This research study explored the relationship between team process and individual satisfaction in work groups and work group effectiveness amongst business students of Faisalabad, Punjab Pakistan.

This paper is based on team process characteristics and satisfaction of students while they are working in team structure. Study based on models of two contemporary input-output based group effectiveness (Campion, Medsker& Higgs, 1993; Hoegl&Gemuenden, 2001) and applied them in educational context with data collection and analyses on individual level. Knowledge of team process and its effectiveness is the contribution of this research study. Correlated relationship of three significant factors of a team and individual satisfaction has been verified. Educational institutions could use this model to develop new teaching methodology and developmental strategies by directing their students to enhance knowledge, skills and develop awareness and attitude in group based activities. Students must understand the importance of team and its effectiveness and they must develop themselves to cater market requirements so that they could have a better career in business and professional life.

Universities should also play a vital role to acknowledge the importance of the group activities in students through deploying adequate resources and enabling the business graduates to perform in teams by addressing the needs of the business market

Literature Review

In this challenging environment, business industries have been practicing utilization of teams to tackle with increased competition, changing environment and manage demands for ever-performance. Health, construction, IT and engineering industries normally used to have team structures (Kang, Yang & Rowley, 2006; Doolen, Hacker & Van Aken, 2006; Ammeter &Dukerich, 2002; Weil, 1995).Devine, Clayton, Philips, Dunford andMelner (1999) derived that 48% of US organizations use teams to get their job done. According to The Training profession report, 82% of US organizations having more than 100 employees use team structure. Most of the works done by the students today are in teams which is a good response to this increased use of team structure in the organizations (Forrester &Tashchian, 2006).

Now a day's business schools have more focus on developing student teams during their educational process to improve team skills by a changing their teaching methods, delivering conventional lectures has been replaced by individual, cooperative learning and self directed work teams(Markulis, Jassawalla&Sashittal, 2006; Druskat, 2000; Shaw, 2004; Deeter-Schmelz, Kennedy & Ramsey, 2002; Livingstone & Lynch, 2000; Levi, Rinzel, Cadiz &Cacapit, 1998; Kunkel & Shafer, 1997; Freeman, 1996). Group work is the core course content of any main business course (Amato & Amato, 2005; Vik, 2001).

It is argued that development and practice of team work skills in institutionsis helpful in real business world. However, Gardner and Korth (1998) notified that managers are still not satisfied with the production of fresh graduates graduating from their institutions as they still don't have sufficient team related skill. This deficiency might be based upon the teacher's involvement in the training of the students behavior required to get effective results while working in teams. With this mounting reputation of teams in education institutions and corporate sector, there is need to have a scientific look (research) on the team's effectiveness and individual satisfaction while working under team/group structure.

Most of the research work has evaluated the both individual satisfaction as well as team performance (Salas, Stagl, Burke & Goodwin, 2007) but it has been noticed that team performance has been focused more (Olivera& Straus, 2004). It becomes critical academic issue to equip business graduates with team skills so that they could have competitive advantage in the challenging business world. Getting into the group work and direct efforts to proper dimension facilitate students to achieve individual/personal satisfaction.

Communication

Duncan and Moriarty (1998) Communication is an activity that associates humans together and helps to create relationship. Individuals use means of communication to build relationship with others. Communication is an action of arranging, organizing, coordinating, informing and subordinating between individuals. Communication is not only informing others (Zhu, May, & Rosenfeld, 2004), it is in fact a responsible act for the success or failure of the task (Orpen, 1997).

Within a team structure, communication means continuous, formulized, clear and open exchange of information (Hoegl&Gemuenden, 2001). Good communication allows frequent flow and movement of information across the members which results in high satisfaction and better personal growth of team members. Buckenmyer (2000) argued that successful group formation depends upon communication.

Study of cross-functional new product teams found that teams having Collaborative communication are more willing to express job related doubts, become more innovative and work efficiently (Lovelace, Shapiro and Weingart2001). Stoel (2002) also revealed that frequent communication of information results in satisfaction of the team members.

Open communication of feelings within a work group helps to overcome work stress which ultimately helps management to get maximum potential and motivation (Perrow, 1986). Campion et al. (1993) and Hoegl and Gemuenden (2001) also found a strong relationship between communication and team effectiveness.

Workload Sharing

Workload sharing means division of workload amongst team members. It is an equal share of work assigned to each team member (Werner & Lester, 2001). Campion et al. (1993) argued that team effectiveness can be enhanced by fair work load sharing. Academicians use variety of techniques to enhance effectiveness of students groups by maintaining a healthy and equal share of workload within team of students.

Similarly, Erez, Lepine and Elms (2002) found in a study of self-managed undergraduate teams that workload sharing is a important predictor of individual satisfaction and team performance. Only workload sharing amongst the four determinants demonstrated asignificant relationship with member satisfaction. So these initiatives recognize the potential significance of work load sharing amongst students group work.

Performance has been effected by the workload is the most widely studied topic (Bowers, Braun, & Morgan, 1997). However some work has been done to investigate the relation of work load on group work.

Individuals require maximum attention to complete a task while he/she is working alone. (Young & Stanton, 2000) individuals have limited capacity to perform responsibilities so if task demands more attention

from one then task would not be completed. In team work individual are not only responsible to perform task responsibilities but also managing and allocating resources among them and this allocation and management of resource is depend on individual level of expertise, training and skills.

Mutual Support

Mutual support is process of participation which starts with sharing of common experiences of different situations and issues. It is actually getting and giving help to others, applying self-help skills that end in development of knowledge (Cook et al, 1999). Hoegl&Gemuenden, (2001) defined mutual support as cooperation to achieve common goals.Campionet al. (1993) argued that positive social interactions and passion to help other can enhance the effectiveness of the team.Bhanthumnavian (2003) explored that performance of subordinates can be enhance through social support from their supervisor. Competition and conflicts amongst team members cause tension. Mutual support is more productive for interdependent tasks rather than competition (Hoegl and Gemuenden, 2001), it also enhances team morale (Heaney, Price & Rafferty, 1995).

Research Question:

To achieve the purpose of the study research question is:

What is the relationship between team process and students satisfaction amongst business graduates in Faisalabad universities?

Theoretical Framework

Factors that collectively influence individual student satisfaction are based on process outcome model as mentioned in fig. 1. This model emphasis on the interactivity process and studies how these factors effect individual satisfaction in team structure. Team Process is considered as independent variable based on three factors: Workload sharing, communication and mutual support and individual satisfaction as dependent variable. The model has one significant construct, team process, which is hypothesized as having an impact on individual satisfaction. Success of a team is depending upon the interaction between team members (Marks, Mathieu and Zaccaro, 2001). Among three variables communication was found stronger predictor of individual satisfaction in educational and management setting. (Werner & Lester, 2001;Campion et al., 1993).
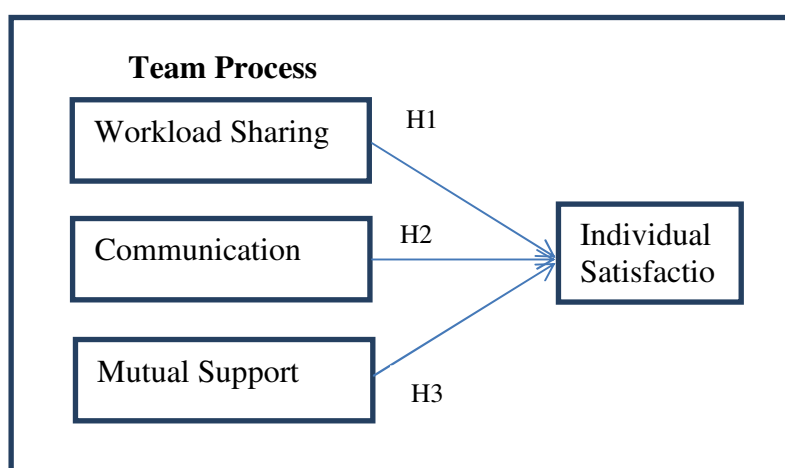

Figure 1: Framework of Individual Satisfaction

Hypotheses Development

H1: Workload Sharing is positively correlated with individual satisfaction.

H2: Communication is positively correlated with individual satisfaction

H3: mutual support is positively correlated with individual satisfaction.

Research Methodology:
Nature of the study:
The foremost purpose of this study is to explore the relationship among Team process (workload sharing, mutual support communication) and individual satisfactionwhich have not been discussed in Pakistani universities furthermore there is not enough data on team process is available in universities of Pakistan. First there it is identified that those colleges and departments in the university where students are working in teams and then to find that either they are satisfied or not while working in the teams. This study builds a theory based on team process and individual satisfaction.

Type of Investigation:

The type of investigation is descriptive based on "correlation" and "regression" because proposed hypotheses are required to be validated through correlation and regression.

Study Setting:

Study conducted in natural environment; in normal circumstances as we collected all responses from the university students studying in two public universities in Faisalabad, Punjab, Pakistan. Therefore study setting is noncontrived.

Unit of Analysis:

Unit of analysis are individual respondent as students are studying in university for their education and for the completion of the semester work they are assigned several tasks which they have to perform in team context.

Population and Sampling:

The research is carried out in two public universities of Faisalabad. These two universities represents major portion of the whole market in this city. Focus of the study is the individual students who are working or had worked in teams. Study population is consist of students of the two public universities.

Sampling Technique:

Considering the whole context of this study Random samplingtechnique is used.

Instrument:
Data collection tool is self-administered questionnaire based on the extensive literature review. Questionnaire consists of three independent variables (Work load sharing, mutual support, communication) and one dependent variable as individual satisfaction. Responses have been collected from 430 students on hard copy questionnaire distributed among students in their classes and asked to fill the questionnaire in 20 minutes. This tool is the only source of information gathered from the respondents. Each item of questionnaire is assessed through five point scale with 1= strongly disagree to 5= strongly agree. Collected data is analyzed by using latest versions of AMOS and SPSS. Suggestions and recommendations is based on these analyses.

Results

Descriptive Statistics
Descriptive statistics scores of all variables are presented in table 1. These scores verified that all respondents of team have positive experience. They also believe that all members helped each other in the work groups from workload sharing, mutual support and communication. Workload sharing has higher score (3.92) and lowest for Communication (3.56).

Table 1:

	Individual Satisfaction	Workload Sharing	Communication	Mutual Support
Mean	3.90	3.92	3.56	3.7
Median	4.00	4.14	4.71	4.00
Mode	3.43	4.00	2.71	3.71
Std. Deviation	0.96	1.10	1.18	1.30
Range	4.00	5.00	5.57	4.86
Minimum	2.29	1.57	1.14	1.71
Maximum	4.29	4.58	4.9	4.8
Sum	427.00	427.86	396.00	408.14

Table 2:

	Mean	Std. deviation
Workload sharing		
Everyone did a fair share of the work.	3.41	0.908
No one in my team depended on other team members	3.30	1.013
Nearly all the members contributed equally to the work.	3.28	0.912
Mutual support		
The team members helped and supported each other	3.76	0.779
Conflicts were easily and quickly resolved.	3.49	0.728
Discussions and controversies were conducted constructively.	3.76	0.715
Suggestions and contributions were respected.	3.95	0.651
Suggestions and contributions were discussed and further developed.	3.55	0.652
Our team was able to reach consensus	3.91	0.675
Communication		
Frequent communication within the team.	3.63	0.851
Members communicated often in spontaneous.	3.50	0.816
Members communicated mostly directly and personally	3.66	0.833
Project-relevant information was shared openly	4.04	0.741
The team members were happy with the timeliness	3.53	0.762
The team members were happy with the precision of the information	3.66	0.691
The team members were happy with the usefulness of the information	3.75	0.714
Individual satisfaction		
I enjoy the kind of work I do in this team.	3.78	0.781
I am satisfied with this team.	3.85	0.751
My personal needs are more satisfied than frustrated by team experience.	3.36	0.752

Table 3:

	Individual satisfaction	Workload Sharing	Communication	Mutual Support	P	Hypothesis	Result
Individual satisfaction	1.00						
Workload Sharing	0.71	1.00			0.00	H1	Accept
Communication	0.67	0.68	1.00		0.00	H2	Accept
Mutual Support	0.65	0.64	0.58	1.00	0.00	H3	Accept

Hypothesis Testing:

An appropriate level of validity has been achieved after detailed analysis of data and reliability of data was also achieved. Regression analysis was used to test three hypotheses H1, H2, H3 which are based on individual satisfaction as dependent variable and workload sharing, communication and mutual; support as independent variables.

Results in table 3 are described below;

1. P-value = 0.00, Work Load Sharing is significant as H_o is rejected as p-value <0.05.

2. P-value = 0.00 Communication is significant as H_o is rejected as p-value <0.05.

3. P-value = 0.00 Mutual Support is significant as H_o is rejected as p-value <0.05.

Therefore, workload sharing, communication and mutual support among team members are correlated to individual satisfaction. Hence H1, H2 and H3 are accepted.

Discussion

The results of this research study were alike of Werner and Lester (2001) who explained that workload sharing is positively correlated with satisfaction of the team. Respondents felt that working in a team is quiet fair as they share everything, everyone strives to contribute and no one relied on others to get work done. This means that fair division of work load builds confidence and trust between each other to achieve assigned tasks and producing best quality work by increasing their efficiency. These individuals normally behave positively in the work place which in result develops friendly environment and satisfaction with organization (Chou, Wang, Wang, Huang & Cheng, 2008).

Free riding behavior may be the one of the ways to achieve satisfaction by influencing workload sharing which is mostly complained by the students (Hansen, 2006; Brooks &Ammons, 2003; Buckenmyer, 2000).

Fairly distributed workload also creates a sense of ownership and belonging to the team. In academia free riding may results in a negative perception of the work group. Hence work load sharing is a vital factor that contributes to achieve an individual satisfaction in a team structure.

The findings of this study also discovered that mutual support had a strong influence on individual satisfaction. It was also consistent with the results of previous studies on team effectiveness that establish interpersonal understanding amongst team members to be positively correlated with team learning and conflicts and individual satisfaction to be negatively associated, and (De Dreu&Weingart, 2003; Druskat, 2000; Jehn, 1995). Hence, developing mutual support can be an effective way of attaining individual satisfaction in student group work.

The results of this research study propose arelationship between communication and individual satisfaction in student collective work. The findings confirmed prior studies which claimed that communication openness contributes to job satisfaction and team learning (Breen, Fetzer, Howard &Preziosi, 2005; Rogers, 1987); information sharing is positive associated to team success (Wittenbaum, Hollingshead, Paulus, Hirokawa, Ancona, Peterson, Jehn& Yoon, 2004); and proactive communication effects in better team performance and greater satisfaction amongst teammates (Lancellotti& Boyd, 2008). Thus, the extent of communication gives the impression to enhance students' overall satisfaction.

In conclusion, this research study designates that people working in teams, whether they be permanent or momentary teams, show behavior that is consistent across both work and non-work teams. This study is one of the few studies of student team work in Pakistan, and the generally findings are in line with the following studies of Forrester and Tashchian (2006); Erez, Lepine and Elms (2002); Deeter-Schmelz, Kennedy and Ramsey (2002); and Lovelace, Shapiro and Weingart (2001) on team effectiveness/performance for work or student teams in Western countries.

Limitations

Despite of the study's success in constructing real-world suggestions for improving team process and personal satisfaction in student teams, the research itself has limitations that need to be identified and explained. Firstly, the data regarding team process and individual satisfaction were collected by a self-reported questionnaire survey only, means research relied on a single source of collection data. This might raise the question of common method variance.

A second limitation of this study, data were cross-sectional rather than longitudinal therefore it is unable to predict causal relationships. The findings can only show the impact between the independent and dependent variables, but no conclusions can be drawn on whether the relationships are causal.

Thirdly, this research study applied a quantitative methodology to study team process as a positive and significant inducing factor on individual satisfaction. Specifically, the study inspected the positive effect of three team process features on individual satisfaction. Although it is known that there might be other contributing factors, this research only studied three factors as antecedents to individual satisfaction.

Lastly, since the survey sample was limited to a business graduate population in Faisalabad, there is limitations to generalization of the results to more diverse student populations.

Recommendation for Future Research

Based on the finding of this research study, few recommendations are made for future research work. Firstly, this study is based on cross-sectional data collection only whereas longitudinal research may have more diversified results as they could have effects of overtime. By using multidimensional measurement this could further enhance the causal relationship and establish strategies which can enhance student satisfaction and learning over the period of time while they are working in groups.

Secondly, this research study is limited to Faisalabad's university students. It is not confirm that results of this study can applied to other university students and business graduates of other cities and even non university students. Future research should be done in context to examine this gap.

In the last, three hypotheses were tested in this research study to understand the antecedents of student satisfaction in team structure. In future it is recommended to consider more variables which may have impact on student satisfaction like work force diversity, leadership and group structure.

CONCLUSION

Because of current economic situation and increased competition, using team to achieve assigned targets is getting more popularity in business and educational institutions. This research study makes few contributions to the knowledge as the effectiveness of the team and significance of the individual in a team.

There are few studies who have examined the effectiveness of team and its issues, performance of team in group structure (Kuo, 2004; Holland, Gaston & Gomes, 2000; Gibson, 1999), whereas this research study explored the strong relationship between characteristics of team process and individual satisfaction in universities of Faisalabad's business schools.

This research study contributes to business education institutions by providing evidence of team effectiveness and effectiveness of individual satisfaction. This study empirically verified the significance of team structure and its effectiveness regarding student's satisfaction of business graduates under group work. . It also provides insight to the most effective factors that could enhance student satisfaction.Outcomes of this research designate that team process influences individual satisfaction. The findings also indicate that although students are working together on a temporary basis on group tasks, they exhibit behavior consistent with those of permanent teams in the workplace.

Given the steadiness in members' behavior in both work and student teams, the results recommend that the framework and variables applicable to studying team effectiveness in work settings can also be applied to educational settings.

This study dispels the generally held assumption that students instinctively know how to work together as a team (for instance, that team members will be able to communicate effectively through various channels, team members will share work amongst themselves in an equitable manner) and will find group work a rewarding experience.

Identification of the effect of the different dimensions of team process on student satisfaction lays an important foundation for educators and students when considering process interventions for improving team attitude, knowledge and skills in student projects.

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