

COURSE ENJOYMENT AND LEARNING STYLE OF PARTICIPANTS OF A DISTANCE LEARNING PROGRAM IN HEALTH PROFESSIONS EDUCATION (HPE)

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ABSTRACT

Objective: To identify and relate enjoyment levels of various components of MCPS-HPE course and the learning styles of the course participants followed by explanation of the reasons for enjoyment, non-enjoyment and how enjoyment factors can be enhanced.

Study Design: Mixed method sequential study.

Place and Duration of Study: College of physicians and surgeons, Pakistan, Regional Center, Lahore from January 2013 to April 2014.

Material and Methods: Learning style of MCPS-HPE course participants of 2011-13 batch was identified through Kolb's Learning Style Inventory version 3.1; and participant's perception of the most enjoyable areas in the contact sessions and assignment completion were sought on two respective survey forms followed by structured interviews. Analysis of the quantitative data was performed using SPSS version 19. "Framework method" was used for the manual analysis of qualitative data.

Result: Learners identified social interaction, team work, knowledge construction, active learning and self-efficacy as enjoyable while cognitive overload, disruptions in learning, and deadlines as factors impeding enjoyment. Acquiring learning skills, contextual simplified learning, addressing disruptions and promoting active learning and proactive mentorship were suggested as measures for improving enjoyment level. Predominantly our participants were convergers who enjoyed the course more than those with other learning styles.

Conclusion: Team work along with experiential learning improves learners' self-efficacy and enthusiasm. Ensuring contextual learning and proactive mentoring can address negative impact of cognitive overload, inappropriate facilitator's attitude and deadlines on course enjoyment while taking into account various learning styles.

Keywords: Course enjoyment, Learning styles, Health professions education.

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INTRODUCTION

Course enjoyment plays a crucial role in enhancing the learning process¹. Enjoyment subsequently determines intrinsic motivation for a task² associated with excellence and success³. Furthermore the influence of learning style on students' perceptions of class enjoyment has been acknowledged⁴.

Knowing one's learning style, which highlight "how" individuals prefer to learn, helps

in self-directed learning, making career choices and enhancing enjoyment during learning, hence increasing intrinsic motivation and success⁵. VAK (Visual-Auditory-Kinesthetic)⁶, Biggs surface, deep and strategic learning model⁷ and Kolb Learning Styles Inventory (KLSI)⁵ are well represented learning styles in literature. KLSI classifies learning style as converging, accommodating, diverging and assimilating based on a vertical continuum of perception and a horizontal continuum of processing that form a quadrant. Perception Continuum depicts emotional response, such as preferring to learn by thinking or feeling whereas, Processing Continuum involves approach to a task, such as preferring to learn either by doing or watching⁵.

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Distance learning program is a rapidly increasing area of education offering opportunities for learners to continue their education at their convenience⁸. Due to scarcity of evidence, there is a need to investigate the relationship of course enjoyment and learning styles in a Health Professions Education (HPE) distance learning program since course enjoyment is directly linked to intrinsic motivation, which ensures timely completion and popularity of the course⁹. Membership of College of Physicians and Surgeons of Pakistan in Health Professions Education (MCPS-HPE) is a blended distance learning program including face to face along with supervised distance learning¹⁰. Such distance learning programs should be designed to accommodate participant's learning styles as well as enjoyment factor to maximize learning. The purpose of this study was to first identify and relate enjoyment levels of face to face learning sessions as well as assignment sections of MCPS-HPE course and the learning styles of the MCPS-HPE course participants according to KLSI followed by explanation of the reasons for enjoyment, non-enjoyment and how enjoyment factors can be enhanced.

MATERIAL AND METHODS

This mixed-method sequential study was conducted at College of physicians and surgeons, Pakistan, Regional Center, Lahore from January 2013 to April 2014 following ethical approval. Only those MCPS-HPE participants of 2011-13 batch who had attended three contact sessions; and completed assignments of 4 modules were included in the study. Using non-probability convenience sampling, close-ended survey forms were distributed to all 23 MCPS-HPE participants along with a consent form followed by semi-structured interviews of 7 participants.

Survey was used for the identification of learning styles of each participant through KLSI⁵; and participant's perception of the most enjoyable areas in the contact sessions and assignment completion using two questionnaires

with Likert scale ranging from 1(Never) to 5(All of the times).

Learning styles were identified as converging, accommodating, diverging or assimilating. Individuals with ability to utilize any of the four styles according to the learning situation were classified as having a balancing style (5).

Enjoyment was rated for various components of the contact as well as assignment sections of MCPS-HPE course and was expressed as weighted average of 5 point Likert scale frequencies. The participants' identified learning styles were related to various components of the contact session (table-1) as well as assignment section (table-2) through cross-tabulation of descriptive statistics.

Qualitative part involved explanation through seven 20-30 minutes semi-structured individual interviews of participants selected by purposeful homogenous sampling strategy using the following questions about both the contact session and the assignment components:

1. What were the most enjoyable aspects of the course and why?
2. What were the least enjoyable aspects of the course and why?
3. Which improvements do you suggest in making the course more enjoyable?

The audio-taped interviews were conducted in English for accurate transcription by the principal investigator after informed written consent. "Framework method"¹¹ was used for the manual analysis of qualitative data. The data analysis process included verbatim transcription of the entire session followed by familiarization with the interview and coding of the data in the transcripts involving sorting the data and assigning them to priori themes of "most enjoyable aspects", "not enjoyable aspects" and "suggestions for improvement" thus developing and applying a working analytical framework. This was followed by interpretation including comprehending and linking the subthemes and

finally generating conclusions through charting data into the framework matrix. Analysis of the quantitative data was performed using SPSS version 19. Plausibility, sturdiness and confirmability of the qualitative data analysis were achieved through a constant reiterative

further triangulation of qualitative and quantitative data.

RESULTS

Response rate for the survey forms was 87% (n=20). KLSI preferred learning styles were converging of 7 (35%), diverging 6 (30%),

Table-1: Enjoyment during contact session of MCPS-HPE course.

S.No	Items regarding Contact session	Weighted average of 5 point Likert scale frequencies of learning styles (%)			
		Converging (n=7)	Accommodating (n=3)	Diverging (n=6)	Balancing (n=4)
1	Enjoyed interactive lectures	4.7 (94)	3 (60)	3 (60)	3 (60)
2	Enjoyed Small group discussions	4.9 (98)	3.3 (66)	4.5 (90)	4.5 (90)
3	Enjoyed other small group activities	4.9 (98)	3.7 (74)	4.5 (90)	4.5(90)
4	Enjoyed practical exercises	4.4 (88)	4.7 (94)	4.7 (94)	4.2 (84)
5	Enjoyed home assignments	3.1 (62)	2.7 (54)	3.8 (76)	2.5 (50)
6	Enjoyed social interaction	4.9 (98)	3.7 (74)	5 (100)	4.5 (90)
7	Enjoyed the learning environment	4.9 (98)	3.3 (66)	4.7 (94)	4.5 (90)

Table-2: Enjoyment during assignment work of MCPS-HPE course.

S.No	Items regarding Assignments	Weighted average of 5 point Likert scale frequencies of learning styles(%)			
		Converging (n=7)	Accommodating (n=3)	Diverging (n=6)	Balancing (n=4)
1	Enjoyed your assignments	4 (80)	3.7 (74)	4(80)	4(80)
2	Dealt with the assignments without undue stress	3.3 (66)	2.7 (54)	3.3(66)	3.5(70)
3	Accomplished what you wanted to do	4.3(86)	3.7 (74)	3.7(74)	4(80)
4	Were pleased with your accomplishment	4.3 (86)	3.3 (66)	4(80)	4.3(86)
5	Were interested in your assignments	4.4 (88)	3.7 (74)	3.5(70)	4.3(86)
6	Concentrated on the assignments	4.4(88)	3.7 (74)	3.2(64)	4.3(86)
7	Kept up with the expected work	4.3 (86)	2.7 (54)	3.7(74)	4.3 (86)
8	Communicated and interacted with ease with others while working on assignments	4.3 (86)	4.3 (86)	3.8(76)	4.3 (86)

process of member checking. Finally the results were interpreted and conclusions drawn through

accommodating of 3(15%) and balancing of 4(20%) of the participants. Demographic

characteristics have not been intentionally included to maintain anonymity and confidentiality of participants due to the discrete nature of the group selected for research and to eliminate any possibility of bias.

The weighted average of 5 point Likert scale frequencies according to various learning styles in the "enjoyment during contact session" and "enjoyment during assignment work" survey forms are displayed in Tables-1 and 2 respectively.

Out of the 7 participants who were interviewed, 4 had converging, 2 diverging and 1 had a predominantly accommodating learning style. Table-3 shows the identified priori themes and emerging subthemes along with comments in the context of issues concerning learning during MCPS-HPE course which were "enjoyable", "not enjoyable" and "suggestions for improvement" as described by participants grouped according to their learning styles during the interview.

DISCUSSION

Learning should be fun. Research increasingly underlines the significance of enjoyment in education both as a right in itself and as a fundamental support for learning, highlighting that situations considered as enjoyable by the learners, are not appropriately prioritized by educationists¹².

In our study, the subthemes that emerged, following interview analysis, in the context of the most enjoyable aspects of the course were social interaction and team work, knowledge construction, active learning, self-efficacy and learner's enthusiasm (table-3). The positive impact of team work on course enjoyment is highlighted in literature as well¹³. As in ours, experiential learning leads to student enjoyment of the learning process, is confirmed by other studies¹⁴. Research seconds our learner's identification of self-efficacy and learner's enthusiasm as enjoyable factors¹⁵.

Our learners did not enjoy the cognitive overload, deadlines, disruptions in learning and inappropriate facilitator's attitude (table-3). Evidence supports our learner's reservations regarding teacher's neglect of the learner's needs which thus impedes learning enjoyment¹⁴. Similar to our learners, time management was a challenge faced by students enrolled in other online HPE courses¹⁶.

Emphasis on proactive mentorship, learning skills, contextual active learning and addressing disruptions were suggested as measures for improving enjoyment (table-3). The course should be so designed that concept building is based on learner's workplace experiences¹⁴. Goal clarity, social interaction and knowledge improvement are recognized as potent elements to enhance learning enjoyment¹⁷ which in turn improves academic achievement¹⁸.

We chose KLSI, as it is well represented in literature, as the basis for determining learning styles in this program¹⁹. In agreement with literature, our participants were predominantly convergers, who typically pursue problem-solving careers such as medicine²⁰. Being enthusiastic about team work and social interaction, they enjoyed interactive lectures and small group sessions the most relative to other learning styles (table-1). These learners concentrated the most on assignment work (table-2) as further endorsed by their comments regarding learning enthusiasm and disruptions (table-3). Along with learners having balancing learning style, the convergers were not only pleased with their accomplishment during assignment completion but would also keep up with the expected pace of work (table-2). Other studies also support the positive views regarding blended learning, expressed by learners with a converging learning style²¹.

Divergers in line with their excellent "people skills"⁵, enjoyed the social interaction during the contact sessions to the maximum (table-1), albeit missing their own family²² (table-3). Taking a lot of stress, this group concentrated the least and

found it hardest to interact easily with others while working on assignments which lack interactive activities (table-2).

Accommodators are good at actually doing things instead of merely reading about and studying them⁵. As seen in table-1, learners with the accommodating learning style only enjoyed the practical exercises significantly among all the other activities conducted during the contact sessions. Relative to other learners, the accommodators were most stressed out and least likely to keep up with the expected pace of work while working on the assignments (table-2).

Learners with a balancing style may be great decision makers at work along with strong "people skills" to work in teams thus getting things done with creativity⁵. As seen in Tables-1 and 2, these versatile learners in our study actually enjoyed nearly all the activities during the contact sessions and assignment work

Limitations

Course enjoyment by learners may vary because of differences in curriculum thus our findings in the context of MCPS-HPE, cannot be extrapolated to all other blended learning programs. Our results exhibit differences in the extent of enjoyment in various components of this course according to student's learning style preferences. However, the significance of these differences need to be ascertained cautiously as there are studies which question the basis of matching learning strategies to learning styles in business education²³ in contrast to other studies which support the notion^{24, 25}.

CONCLUSION

Blended learning programs such as MCPS-HPE should be designed to enhance enjoyment of the course to increase intrinsic motivation of learners. Team work along with experiential learning improves learners' self-efficacy and enthusiasm. Ensuring contextual learning and proactive mentoring can address negative impact of cognitive overload, inappropriate facilitator's attitude and deadlines on course enjoyment while taking into account various learning styles.

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CONFLICT OF INTEREST

This study has no conflict of interest to declare by any author.

REFERENCES

1. Landrum ER, McAdams JM, Hood J. Motivational differences among traditional and non-traditional students enrolled in metropolitan universities. *Metrop Univ* 2000;11: 87-92.
2. Remedios R, Lieberman DA, Benton TG. The effects of grades on course enjoyment: Did you get the grade you wanted? *Br J of Educ Psychol* 2000;70:353-68.
3. Artino AR, La Rochelle JS, Durning SJ. Second-year medical students' motivational beliefs, emotions, and achievement. *Med Educ* 2010; 44(12): 1203-1
4. Richmond AS, Cummings R. Implementing Kolb's learning styles into online distance education. *Int J of Technol in Teach and Learn* 2005;1(1):45-54.
5. Kolb DA. The Kolb learning style inventory. LSI workbook version 3.1. Boston, MA: Hay Group; 2007.p1-20.
6. Hazard LL, Nadeau JP. Foundations for learning: claiming your education. 3rd ed. New Delhi: Pearson; 2012.p 107-8.
7. McManus IC. Student selection. In: Dent JA, Harden RM, editors. A practical guide for medical teachers. 3rd edition. Churchill Livingstone Elsevier Ltd; 2009.p 373.
8. Tallent-Runnels MK, Thomas JA, Lan WY, Cooper S, Ahern TC, Shaw SM et al. Teaching Courses Online: A Review of the Research. *Rev of Educ Res* 2006;76(1):93-135.
9. Simpson C, Du Y. Effects of learning styles and class participation on students' enjoyment level in distributed learning environments. *J of Educ for Libr and Inf Sci* 2004;45(2):123-36.
10. MCPS in Health Professions Education. MCPS program details[Online]. 2015;[1 screen]. Available from: URL: <http://www.cpsp.edu.pk/index.php?code=cHJvZ3JhbXxocGUucGhwfGZhY3VsdHkucGhwfDB8MA>
11. Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol* 2013; 13:117
12. Lumby J. Enjoyment and learning: policy and secondary school learners' experience in England. *Br Educ Res J* 2011; 37 (2): 247-64.
13. Gomez EA, Wu D, Passerini K. Computer-supported team-based learning: The impact of motivation, enjoyment and team contributions on learning outcomes. *Comput & Educ* 2010; 55(1): 378-90.
14. Blunsdon B, Reed K, McNeil N, McEachern S. Experiential learning in social science theory: An investigation of the relationship between student enjoyment and learning. *High Educ Res & Dev* 2003; 22(1): 43-56.
15. Hagenauer G, Hascher T. Learning enjoyment in early adolescence. *Int J on Theor and Pract* 2010; 16 (6):495-516.

16. Dyrbye L, Cumyn, A, Day H, Heflin M. A qualitative study of physician's experiences with online learning in a masters degree program: Benefits, challenges and proposed solutions. *Med Teach* 2009;31(2): e40-e46. Fu FL, Su RC, Yu SC. Egame flow: A scale to measure learners' enjoyment of e-learning games. *Comput & Educ* 2009; 52(1): 101-12.
 17. Ainley M, Ainley J. Student engagement with science in early adolescence: The contribution of enjoyment to students' continuing interest in learning about science. *Contemp Educ Psychol* 2011;36 (1):4-12
 18. Richmond AS, Cummings R. Implementing Kolb's learning styles into online distance education. *Int J of Technol in Teach and Learn* 2005;1 (1):45-54.
 19. Engels PT, Gara CD. Learning styles of medical students, general surgery residents, and general surgeons: implications for surgical education. *MC Med Educ* 2010; 10:51.
 20. Ugur B, Akkoyunlu B, Kurbanoglu S. Students' opinions on blended learning and its implementation in terms of their learning styles. *Educ and Inf Technol* 2011;16 (1):5-23.
 21. Gurpinar E , Alimoglu MK , Mamakli S, Aktekin. Can learning style predict student satisfaction with different instruction methods and academic achievement in medical education? *Adv in Physiol Educ* 2010;34(4):192-6.
 22. Kozub RM. An anova analysis of the relationships between business students' learning styles and effectiveness of web based instruction. *Am J of Bus Educ* 2010;3 (3):89-98.
 23. Popescu E. Adaptation provisioning with respect to learning styles in a Web-based educational system: an experimental study. *J of Comput Assist Learn* 2010; 26(4): 243-57.
 24. Richmond AS, Cummings R. Implementing Kolb's learning styles into online distance education. *Int J of Technol in Teach and Learn* 2005; 1(1): 45-54.
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