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RESEARCH ARTICLE

UNCOVERING TRANSFORMATIVE EXPERIENCES AMONG STUDENTS WITH SHORTCOMINGS IN STATISTICS

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ABSTRACT

This study explored the use of projective techniques to uncover the students' learning preferences, shortcomings in the course, their transformative experiences and their resulting performance by construction and completion. Students were tasked to construct their action research participants' demographic profile, survey questionnaire, action research proposal, letter protocol to conduct a survey, letter to participants, documentation on the survey conducted, presentation of written research, publication, and their personal projection after two years. Results showed that instead of the usual big-group-in-one-classroom setting, the majority of the respondents prefer to study alone wherein learning-by-doing method of teaching is found highly preferred. Further, common reasons why these students are having difficulties and sometimes failed with the course were financial instability, health problems, on-the-job training, and conflict of class-OJT schedules. Nevertheless, the use of the projective technique facilitated the honing of skills needed to pass the course while maintaining freedom and comfort. The progress of the students is apparent in their completion of the tasks shown in the provided checklist. The methods, materials and tools, and the results of this study could be used in addressing student learning difficulties, in preparing the teachers' teaching approaches, and in helping school administrators in managing the teaching environment.

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INTRODUCTION

Higher education institutions, along with the Commission of Higher Education (CHED) hope to create an educational environment capable of generating and nurturing development, thereby, producing globally competent individuals who are well-equipped with general knowledge and intellectual capacities needed by the industry. This, however, is a duty that calls for the research-supported advancement of the many aspects of education anchored on many principles-five of which are herein considered. First is that it is an obligation of the State to ensure that its citizens enjoy basic fundamental rights including the right to education. Secondly, there is a need for academic freedom in aspects of "who may teach", "what may be taught", "how it shall be taught," and "who may be admitted to study" (Altbach, 2001). The third principle concerns the variety and diverse kinds of intelligence every human being possesses (Prieto, 2017). One may have social intelligence-the ability to *get along* well in the society, or survival intelligence-the ability to survive, among other forms of intelligence. In every kind of intelligence, however, requires a respective technique of which, when employed, may be assessed to be effective or not.

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This further leads to the need to consider the fourth principle of employing the right tool. To evaluate educational quality by using the wrong assessment instruments is a subversion of good sense (Popham, 1999). Although educators need to produce valid evidence supporting the effectiveness of the techniques, standardized achievement tests are the wrong tools for the task. Finally, the principle of differing public versus private personality poses a challenge to many results as individuals disguise one's inner personality for norm conformity. The "public" facets of personality shield the private personality from the curious and conformity-demanding world of other persons. Often, only projective techniques will bring out what the individual does not want to tell about himself and what he himself does not know (Prieto *et al.*, 2017).

Objectives of the Study

- Address students learning difficulties in passing the Practical Statistics course of Surigao State College of Technology-Mainit Campus, Magpayang, Mainit, Surigao del Norte, Philippines;;
- Prepares the teachers' teaching approaches; and

- Help school administrators in managing the teaching environment.

MATERIALS AND METHOD

The study used phenomenological research design to explore the lived experiences of individuals during a phenomenon. Formulation of the research instrument and its validity & reliability is anchored to the theory of (Prieto, 2017) in the research methodology. The following instruments used are:

The Opinionnaire: It was used in gathering data to showcase the Learners' demographic profile, failing grades determinants, learning preferences, shortcomings from their transformative experiences and to confirm the usage of projective techniques in the teaching-learning-assessment.

Checklist of Accomplishment: It was used for formative assessment, for scoring or grading criterion. This served to evaluate how effective the projective methods as to personal development. The instrument was validated through face validity because this study involved practical situations which needed practical results. Validity and reliability were based only to the judgment of the Researcher. Hence, accordingly (Nevo, 1985) said that the term "face validity" implies that a test which is to be used in a practical situation should, in addition to having pragmatic or statistical validity, appear practical, pertinent and related to the purpose of the test (Hardesty, 2004) stressed that "face validity", since is subjective to the opinion of the experts and/or respondents, relates to the degree that the respondents or users judge the assessment instrument for appropriateness to the targeted construction and completion objectives (under projective techniques). This is usually done by showing your measurements to experts (could be fellow researchers or teachers) and getting their feedback on whether these measures are relevant to the specific objectives.

RESULTS AND DISCUSSION

This study is qualitative in phenomenology, the numerical value in terms of frequencies and percentages as presented in table 1 and table 2 does not intended to interpret statistical results but precisely to simplicity and give comprehensive presentation of data. Note that projective techniques in this study were not limited to teaching approaches or strategies, it was also used as an analytic tool lens for interpreting results of the gathered data from in-depth interview among students with shortcomings in practical statistics and their accomplished tasks by construction and completion. Students generally have a preferences for a particular learning style (Mkonto, 2015) and that preferred learning style portrays the student's capabilities, environment and past learning experiences (Mkonto, 2015). Despite, in some situations, students may adopt a different learning style but tend to maintain a preference for a particular learning style, it seems to be understood that no learning style that is inferior to another, but learning styles have different attributes to students as they interact with information differently, hence they have different preferred variety of learning styles. The author believed that by recognizing the differences in the way students learn is the first step in raising students' awareness of their own learning styles and the existence of other learning styles and when students are aware of their learning styles, they learn quickly

and easily and eventually succeed in their studies, and by this identification of learning styles helps them acquire problem-solving skills, felt more comfortable and the more they take ownership of their learning (Biggs, 2011). Table 1 shows the distribution of the student's learning preferences, from in-depth interview. In this study, the following responses of the students proved something else as follows. Student 1: "Nabagsak ako sa una nako na pag-eskwela ani nga subject. Sa midterm nakapasar ko, pero sa final exam na bagsak ko. So, gi-INC ko. Ang gusto tana nako nga teaching style Sir kanang lecture type, tinamban style ba. Tapos mas mo preferred ko nan mag-inusara pagtuon, kanang sa gawas mag klasi kanang open ra, tapos gusto nako kanang hilum nga palibot. Mas ganahan ko magtrabaho sa ako mga tasks kung mag-inusara rako, ug ganahan ko matapos dajon ang trabaho nako sa wala pa ang deadline, ug mas ganahan ko ug learning by doing, pero dili ko gusto masayang ako oras tapos dili pa diay kinahanglanon ang output, gusto nako kanang priority first, do first". (I was failed on this subject on my previous study because of the periodical examination, then, I like much a lecture type of teaching e.g. step-by-step basis, and I like to study alone, then, I like to finish my works ahead from the target date of submission, and I like that there are no deadlines. And I like much learning by doing but I don't want to waste my time, I rather like to do first thing first.)

The foregoing response of one of the learners indicated that he preferred a lecture since he/she is more comfortable with the approach. He further pointed out that comes with his/her preferred teaching approach, he/she wanted to be alone working with his lesson or assignments since he/she can accomplish things fast and productively without someone else assistance and avoid wasting time.

Student 2: "Ikaduha ko na ini na kuha na subject Sir, adtong una wala ko kapasar sa midterm tapus, tag-INC, tagpa-removal tapus nabagsak ko sa exam. Kuman kung paminawan kami ang gusto nako na klasi sa pagtudlo jaon kami maghimo mismo aron amo masabtan ang klasi jaon research type. Bahin sa classroom setting wala ko'y problima bisan asa ug unsa nga room bahala walay aircon basta hilum lang ug linaw kanang walay disturbo, tapos prisko jaon jaoy hangin na fresh, parihas sa iban gusto sab nako mag-inusara magtrabaho kay peaceful ra, kay madali ko mahuman pag maka focus kay sa daghan lisud na hinoon, tinuod jud bitaw Sir na mas gana kung actual jud ang pagtoon kay mas mahinumduuman namo kung giunsa, tapos mas gana nga dili bitaw maghatag nan deadlines kay ma pressure hinuan kami, total amo man gajud trabahoon kay para makapaar kami." (This is my second time to enroll in this subject, I failed in my first study during the midterm examination of which I was given an incomplete grade. If only given the opportunity to be heard, I wish that teaching style is research type in nature. We prefer going for an actual workout and so that we understand what we studied. About the classroom setting, I don't have any complain, it is not a problem for me whether or not the room is poorly ventilated. For me, I would rather have a quite environment like my other classmates I like to study alone. I can focus on taking time with my lesson alone rather than with my classmates. Much better if there are no deadlines to avoid being pressured after all we are doing our best to ensure we passed the subject.). The succeeding response of one of the learners indicated that he preferred research since he/she is more comfortable with the approach. He also pointed out that comes with his/her preferred teaching approach, he wanted to go with experiential

Table 1. Distribution of Students' Learning Preferences

Indicators	Frequency	Percentage
As to socialization		
Like to be alone	4	50.00
Like to be with classmates	2	25.00
Likes to be with a teacher	2	25.00
As to teaching style		
Like Lecture	4	50.00
Like research	4	50.00
As to classroom setting		
Like with air-condition	1	12.50
Like an outdoor	3	37.50
No preference	4	50.00
As to environment/venue		
Like a soft chair with pillow	1	12.50
Like quite	5	62.50
No preference	2	25
As to Learning		
Learning by doing	5	62.5
Learning by understanding	3	37.5

Table 2. Distribution of the Students' Shortcomings in Practical Statistics

Shortcomings	Frequency	Percentage
Financial instability	1	12.50
Health problems	2	25.00
On-the-job Training	3	37.50
Conflict of classes	2	25.00

Table 3. Students' individual accomplishments (from January 17, 2019 to April 30, 2019)

Item No.	Tasks	Students							
		1	2	3	4	5	6	7	8
1.	Participants' demographic profile	✓	✓	✓	✓	✓	✓	✓	✓
2.	Survey questionnaire	✓	✓	✓	✓	✓		✓	✓
3.	Action research proposal	✓	✓	✓		✓		✓	✓
4.	Letter protocol to conduct survey	✓	✓	✓		✓		✓	✓
5.	Letter to addressed to the participants	✓	✓	✓		✓		✓	✓
6.	Documentation on survey conducted	✓	✓						
9.	Self-portrayed projection	✓	✓	✓		✓		✓	
Total Accomplished Tasks		7	7	6	2	6	1	6	5

Table 4. Students' Individual Total Accomplishments

Students	No. of Accomplishments
1	7
2	7
3	6
4	2
5	6
6	1
7	6
8	5

Table 5. Self-portrayed projection after two years

Students	Self-portrayed projection after 2 years	Expected outcomes
1	Forester in the Caraga Region	Can do practical statistics e.g. formulating survey questionnaires, conduct survey and interview, gathering data and analyzing results in relation to agroforestry.
2	Manager in a national agency	Can do monitoring duties and responsibilities relative to statistical activities e.g. checking the validity of the survey and its reliability, interpreting the findings of the written research report, and probably recommending possible solutions.
3	Researcher	Proposed to continue and use the results in his action research and produce a product for the benefit of the society and generate an income.
4		
5	Government employee	Works in any agencies with her expertise.
6		
7	A family man	Raised his own business establishment, with the ideal and happy family; living in abundance.
8		

learning or learning by doing to ensure he would make it regardless of the condition of the environment he was with. The concerned student would not be affected whether or not classroom is poorly ventilated and determined to work hard without being with someone else. The presence of other learners does not concern him since he can accomplish things fast and was assured of meeting the deadlines.

Student 3: "Grabe jud kasakit sa ako adto sir, kay nadisgraya man gud ko adto gikan sa sa motor , tapus na hospital, tapos amo adto kay wala man ko ka take ug exam adto na time, tag-bagsak na dajon ako. Bahin sa socialization, ganahan rako na magtuon uban sa ako mga classmates ug sa ako teacher, ug mas mo pabor ko nan research methods, tapos air-conditioned and room, tapos kutson ang chair, tapos with pillow, tapos hilum ang palibot, kanang naa maintain ang teacher kay mas nakabalo siya, tapos pag-naa lisud buhaton matudloan dajon kami, mas okay man gud kanang matapos dajon ang trabaho nga wala pa ang deadlines, pero dili ko ganahan nga may deadline kay ma pressure ko, sanan mas gana kung samtang magtuon kanang actual jud, tapos ipasabot nganong ingon ana ang resulta, kay pag magtrabaho ko kanang gusto nako human-human jud". (You know sir, it was so hard for me to accept if given a failing grade. I practically flanked from the subject since I was up to something due to a vehicular accident resulting in my inability to take the scheduled examination. About my learning preferences, I preferred to be with my classmates and teacher and do more research in an air-conditioned room with a soft chair and pillow. I wish a peaceful and quite environment and the presence of our teacher every time we have our classes so that we would be more guided and clarified about the subject matter. With our teacher, the results of any activities could be emphasized and allow us to understand better and finish the task in a timely manner). Student's response indicated that she was inclined to do research together with his classmates and teacher since she would be more comfortable. She also preferred an air-conditioned room with a soft chair and pillow for convenience sake. She desired to learn by doing thru experiential learning and wished to be her teacher at all times...

Student 4: "Bagsak ko sa exam sir, nabagsak sa final exam sir, amo hinungdan na wala ko kapasar adton una. Bahin sa learning preferences sa Socialization, gana manjud nga nay mga classmates kay sa wala, para nako sir mas ganahan ko nga daghan ko ug kauban pagtoon kay sa mag-inusara kay mas bibo tapus malingaw man gud ko kay sa mag-inusara nga mingaw. Bahin sa teaching method, mas mo pabor ko sa research methods kay sa lecture ra, walay problima para nako bisan unsa nga room may aircon o wala kay anad man ko sa kapobrihon, basta kanang walay samokan okay lang kay walay disturbo, kanang linaw raba, mas maayo jud nga samtang magtoon naa jud ang maestro pud para matudloan dajon kami sir unsay insakto. Bahin sa mga taks dili ko makasiguro nga matapos dajon nako ang ako trabaho sa deadlines, nagdepende rana sa panahon kung anaa ko oras kay medyo busy man pud ko sa lain nga obligasyon pa, para nako mas okay nang learning by doing ug oyon pud ko kanang mauman dajon ang ako tasks as soon as possible kay para wala na dajon huzzle." (I failed during my first final examination. I preferred to be with my classmates because it is more fun with someone else. About teaching method, I would prefer a research method rather than the lecture type. I do not have an issue with the classroom setting as long as there are no disturbances and our teacher is always with us every time we have our activity for

us to be guided anytime if we have our inquiries. About the tasks, I cannot guarantee that I can finish it on its target dates of completion. For me I preferred more on learning by doing and I agree to finish my studies the soonest possible time and live a burden free life). The foregoing response of one of the learners indicated that he preferred research than lecture since he is more comfortable with the approach. When it comes to classroom setting he further stressed that he has no issues about the physical set-up as long as learning takes place in an environment that is quite and peaceful and more importantly, with his teacher around.

Student 5: "Nabagsak ako adton una tungod sa absences, ug exam Sir mao na nabagsak ako, lisud alang nako ang statistics kay more on numbers. Para nako mas ganahan ra jud ko nan lecture type kay ipasabot mangud kung giunsa jud pag solve kay sa mag self-study lisuran ko. About sa classroom, parihas sa uban ganahan rako ingon ani ra nga natural ra ang hangin dili ko ganahan na aircon mas okay pag nature, wala koy paki alam sa environment basta ang ako makabalo ko sa ako tagtungan, mas maayo Sir nga naa jud ka Sir samtang mag study kami kay mas masubay-bayan man mi nimo, tapos madali ra mahuman ang amo trabaho kay on time ma correct man dajon nimo ang amo output kung sakto o dili. Tapos masabtan dajon namo kay imo man e explain diha-diha kung giunsa paghimo o pag-solve kay sa mag himo mi tapos dili diay amo. Correct pud bitaw nga adisir mi motrabaho kung gikinahanglan na dajon kay sayang ang oras, naa pud baja ta lain nga giatiman nga mga obligasyon sa kinabuhi." (I got failed in my previous subject because of recurring absences and my attitude towards the subject. Practically I don't like the subject because it dealt more on numbers which are too difficult for me. As to the venue, I have no big issues about it...fresh air is fine and enough for me. For me, I rather preferred a lecture type in teaching and with my teacher always visible in case of some concerns.). The above response of one of the learners indicated that she preferred lecture since she is easy to understand the topic with the approach and she further explained that she could easily follow the teacher's instruction as well.

Student 6: "Ikaduha ko na ini pag enroll sa subject, ang stat more on survey ug mag conduct ug data, nabuhat namo ni adton una pero nakulangan pa pagpasabot sa mga kauban o classmates, gusto nako kanang kami mismo mag research, kanang experiential learning. Nabagsak ako gumikan sa final test, kuyang ako score. Para nako mas maayo kung daghan mi magtoon, ganahan pud ko na dunay koy mga classmates samtang nagtuon kay sa mag-inusara ra. Sanan ganahan pud ko nan research kay mas daghan kag makat-onan, as to environment okay ra bisan unsa, mas mo prefer ko na hilum jud nag palibot kay walay disturbo panahon sa lecture o eskwela, Dapat jud naa ka Sir sa tanan panahon kung gikinahanglan ka namo kay para makahatag ka sa insakto nga idea, tapos mas dali ra pud matapos ang trabajo di mas maayo. tapos mas masabtan namo ug mas madali kay nasabtan naman namo kay sa magpataka ra kami ug himo, Oo mas mopabor ko na adisir magrabajo kung kinahanglanan na jud kay sayang man ang oras tapos dili diay kinahanglanon dajon." (This is my second time to enroll this because I did not make it before... for me it is good if we study with actual learning, that is, learning by doing, because it is fast for us to understand, I preferred research type of teaching and learning thru experiences and I preferred also that our teacher presence should be there anytime so that we can be directly guided.).

The former response indicated that she preferred research and learning by doing as she was satisfied and easily understood the topic with the approach and she preferred that his teacher presence should be available anytime.

Students 7: "Nabagsak sa exam ugsa nabagsk ako sa una, kuman ang ako gusto ipasabot jud sa ako ang topic, kanang tenamban-tamban para makasabot jud ang studyante. Mopabor pud ko na naa ko sa ako mga classmates samtang nagtoon ko. Ganahan pud ko nan research, wala pud ko preference sa environment bahala unsa ra naa available, sa environment no preference ko, pero mas gana jud pud kung air-conditioned ang room tapos with soft-chair and pillow kay comortabli ra jud. Para nako mas ganahan ko na mag-inusara samtang magtrabaho sa mga tasks kay walay disturbance, tapos pag-mag trabaho ko sa ako tasks kanang dili ko ma pressure it depends on ra kung may vacant ko na time ug kanang ganado ko mag work. Gana pud jud tong learning by doing kay actual jud nga experience ba, di jud ta kalimot giunsa paghimo." (I was failed because of examination, if ever I wish that teaching style is a lecture, the teacher should explain well the topic so that I can understand. I am favored to study with my classmates, and I like research type, I don't have any preferences with regards to the learning environment as long as the room is air-conditioned with a soft chair and pillow, and I preferred to study alone, then learning by doing or by experiential learning because we can always remember what we did.).

The foregoing response of one of the learners indicated that she favored to be with her classmates during her studies and she preferred research as an approach in teaching and learning by doing and she does not have any preference as to the learning environment as long as the classroom is air-conditioned with soft chair and pillow and she preferred to do her tasks alone as she believed that what she deserved to learn would be retained forever. Student 8: "Gi request namo ni nga subject kay graduating na kami, tapus ang gusto namo na style of teaching, kanang ipasabot jud sa amo kung unsa ang gamit ani nga subject, dili nang mag lecture-lecture tapus mag exam tapus pag di mopasar sa exam bagsak dajon, para dili kami mabagsak na sab. Para nako kanang self-face ra kung kanus-a bitaw mi gusto magtrabaho sa tasks kay dili kami ma pressure, tapos kanang research kay real jud na situation ba, tinuoray jud na pagtuon, bahin sa environment bahala bisan unsa, ganahan pud ko na kanang ako ra magtrabaho para makabalo jud ko total anytime magpatudlo raman ko kung maglisud nako, tapos ako ra magboot kanus-a ko ganahan mag trabaho kay naa man pud lain nga trabahoon, time management jud kailangan." (We requested the subject because we are graduating students...we preferred that subject must be taught well for us to really grasp the concept regardless of what method was employed by the concerned teacher and regardless of the environmental condition. As long we would not be pressured and we learn a great deal, its fine with me.). The last student's response indicated that she preferred research with self-face as an approach as she felt more comfortable. She explained that she does not want deadlines to avoid pressures and does not mind where learning takes place. Based from in-depth interview with the students, they pointed out that their failing grades determinants in practical statistics were: absenteeism; accident and standardized test. Subsequently, one (1) out of the eight (8) students' response that the reason of her failing grade in practical statistics is absenteeism, and another student reason out that certainly the root cause of her failing grade is the vehicular accident, and the rest of the six (6) students has the

same reasons and it was because of standardized test. Noted that standardized test is the common determinant of the students' failing grades. But then, they persuaded that they have their learning preferences, as to: socialization, teaching style, classroom setting, learning environment, and learning method. Categorically, out of the eight (8) students, four (4) of them preferred to study alone, two (2) liked to study with their classmates and two (2) desired to study with their teacher. In teaching methodology, out of eight (8) students, four (4) wished that their teacher use lecture type and the other four (4) liked to undergo research in the learning process but no one chose the solving problem method. For learning environment, four (4) respondents had no preferences; three (3) liked outdoors, and one (1) wished to have an air-conditioned room. Likewise, for a classroom setting, five (5) wished to study with quite an environment, only one (1) wished to study with soft chair and pillow, and the other two (2) had no preferences. Lastly, for learning methods, five (5) preferred learning by doing things, three (3) by understanding. The responses indicated below and subsequent pages present the responses of the students to their shortcomings in practical statistics. Table 2 presents the distribution of the students' shortcomings in practical statistics as revealed during the interview with them.

Based on students' responses, analytical results showed that students have enumerated four basic shortcomings, these were: Financial instability; Health problems; On-the-Job Training; and Conflict scheduled of classes. Noticed that students' shortcomings are related to personal and school management problems. After months of accomplishing the tasks as to the checklists provided (see Appendix 2) in practical statistics from January 17, 2019, to April 30, 2019, the teacher followed up their accomplishments. Thereby students' performance where evaluated and to considered also their shortcomings on how it hindered their transformative experiences. Thus in performing judgment, decision makers acting as practice-intuitive that rely on a variety of procedures. These include rules of thumb, heuristics, and propositional knowledge structures of a more schematic nature. These procedures draw, among other sources, on the decision makers' subjective information and comprehension of events, situations, and personalities from one's own histories, and are applied to current tasks (12). Thus, this study wished to determined students' shortcomings in practical statistics from their transformative experiences to interpret results on how their performances are affected.

The following are detailed responses of the students that embraced their shortcomings in the subject. Student 1. "Pasensya na Sir, wala pa jud ko maka submit tanan sa ako accomplishments ako pa e encode, conflict mangud ako time sa klase Sir mao nga na busy pa ko." (I am sorry Sir, I was not able to submit all my accomplishments because I am still preparing my reports, and it is because I have a conflicting schedule of classes, that made me busy.). Consequently, the response of one of the learners indicated that his shortcoming is about his conflict of the schedule of classes and so, he would not be able to comply with all the tasks. Student 2. "Kinahanglan lagi nako nga matapus ang OJT Sir kay required man, mao nga wala pa pud nako mahuman akong tasks sa practical statistics." (I need first to finish my OJT Sir, then, next, I will be a focus on my tasks in practical statistics.). The next students' response indicated that she needs to finish first his on-the-job training (OJT) this contemplated to be her shortcoming.

Student 3. "Wala pa jud nako matapus tanan nga tasks Sir kay tagbahin ko ra ako oras sa OJT ug sa practical statistics, sagdi ra Sir kay maggahin rako ug oras para ma submit ko na ang ako portfolio sa practical statistics". (I need to manage my time Sir in both OJT and practical statistics, do not mind too much Sir I will give some other time to finish my tasks in practical statistics and submit all my reports, as possible.). It is indicated that former student shortcoming is about his on-the-job training (OJT) as she explained that she needs time management to comply with both the OJT and practical statistics assignments.

Student 4. "Hangtud karon wala pa jud ko maka submit maski isa sa ako accomplishments portfolio Sir kay sakit lagi ako Ulcer Sir, walay gana ilihok". (Until to this time, I was not able to submit my portfolio even one among the accomplished tasks, because I am suffering from my peptic ulcer.).

The foregoing response of one of the learners indicated that her shortcoming is health problems, it is her peptic ulcer hindered her to finish her tasks.

Student 5. "Gumikan sa On-the-Job Training nako Sir, maglisud jud ko ug bahin sa akong oras kay gikinahanglan pud jud nga mo served ko nan 8 hours a day" mao nga every Saturday ug Sunday ra jud nako matrabajo ang ako tasks sa practical statistics, pero okay ra Sir kaya ra man pud nako e handle". (The OJT is my reason why it is hard for me to finish my tasks in practical statistics but I can handle this Sir, during Saturday and Sunday.). The next student response indicated that his shortcoming was his OJT intervention that made her hard up on accomplishing her tasks.

Student 6. "Tag U.T.I ko Sir mao nga dugay ko makahimo sa ako tasks" "gikan pa jud ko Sir na hospital, ako ra ihatag nimo ang ako medical certificate Sir." (Because of my urinary tract infection (UTI), I could not do my tasks in practical statistics as expected. I am just admitted Sir in a hospital, I will give to you later the medical certificate.).

The foregoing student response indicated that her shortcoming is health problems, as she further explained that her urinary tract infection (UTI) hindered her to do her tasks and she was admitted to hospital for medication.

Student 7. "conflict sab lagi sa akong klasi sa lain nga subject, Sir, mao na mag lisud ko basin sa ako oras, tagae lang ko ug panahon Sir ako ra lage trabahoon makasubmit rako sa ako mga accomplishments before end of the semester." (I have my other class schedules in the other subject, this is why It hard for me to handle my time, but don't you worry Sir I will give time to work out my tasks in practical statistics and soon I can submit my accomplishments reports to you before the end of this semester.). The next student response indicated that her shortcoming is conflict scheduled of classes, and she further expressed that she is hard up to accomplish her tasks or assignments because she needs to manage her time.

Student 8. "Walay ika pamsahe Sir, dili ko maka eskwela tungod kay walay kwarta, lisud jud ultimo gani ipalit ug ginamus", "Wala koy extra money para mag research Sir", "Maghanap pa ako ug ikapamasaha Sir", "lisud ning pobre ta Sir oi". (I have no fare going to school that is why I cannot attend the classes now, I cannot even afford to buy a salted fish...)

The last student response indicated that her shortcoming is financial instability, as she expounds that she doesn't even afford to buy a salted fish and that's why she cannot going to school because she has no fare. Eventually, it is observed that projective techniques facilitated transformative experiences in the learning process, not as a teaching strategy but a tool to identify who among the students are compliant and non-compliant of tasks. Thereafter, learning assessment was evaluated based on the students' performance by simply counting their accomplishments, after semester's end. Based on analytical analysis as to the performance of the students using the checklist of accomplishments within the semester (scope of the study) the students' responded by construction and completion.

Then, records showed that Student 1 and Student 2 has accomplished tasks 1-6, & 9. Student 3, Students 5 and Student 7 has completed tasks 1-5, & 9. Student 4, has completed tasks 1 & 3. Student 6, completed task 1 only. In order to give more emphasis and give more detailed information, results are hereby tabulated, see table 3. Based on data, analytical results showed that out of the nine (9) itemized tasks from the teacher's instruction, noticed that students has only performed seven (7) out of the nine (9) items. Students has completed the tasks from items 1, 2, 3, 4, 5, 6, & 9 not to include item 7 & 8 but despite they have still chances to comply hence the semester' is not yet ended.

The results constitute conclusion that projective techniques facilitated transformative experiences among students with shortcomings because all of them are compliant to the task, yet, their performance is not even, see Table 4 reveals the students' individual accomplishment. Based on findings, results displayed that 2 out of 8 students has accomplished 7 out of 9 tasks, 3 accomplished 6 tasks, 1 accomplished 5 tasks, 1 accomplished 2 tasks and 1 accomplished only 1 task. This outcomes further explained that projective techniques facilitated transformative experiences hence, students are compliant of the tasks though their performance was not even. Based on data, analytical results displayed that students 4, 6, & 8 were not able to give their self-portrayed projection, these students has financial instability and health problems, these students respectively only accomplished 1, 2, and 5 tasks out of the 9 within the scope of the study and they even declined to do their tasks in some reasons: one student felt sorry for herself and wishes to retro back to the traditional methods of learning wherein she will continue her learning thru tutorial or lectures which are according to her comfort; another student felt distressed having an ulcer (internal sore); and the last one really need some avenue to cope up the topic, and there were some issues that she is hopeless but despite his frustrations she is grateful with projective technique hence, it is not focused only to subject content but more on personal development.

This study concluded that those students under time pressured by doing their tasks due to OJT interventions and conflict scheduled of classes are more active than those with health problems and financial instability. Therefore, based on analytical results the study has used the projective techniques as an assessment learning to students with shortcomings in practical statistics in interpreting the students' learning preferences, students' shortcomings, students' individual tasks accomplishments, and students self-portrayed projection.

Conclusion and Recommendation

In the light of the findings, it reveals that students has complex learning preferences and the authors thought that projective techniques as a visual tool could give good insights in the complexity of preferences this results is contemplated to the theory of (Riala, 2015) that learning preferences, if critically analyzed bestowed tangible perspective on why their transformative experiences were hindered. Based on findings, some of the students only do their assignment if needed, majority of which were attributed to time availability constraints, working attitude and their other responsibilities which were detrimental to their academic endeavors. The findings from the study demonstrated that factors contributing to students' shortcomings in statistics include financial instability, health problems, on-the-job training, and conflict of schedule of classes, and students' previous failing grades in practical statistics were due to standardized tests but they did not complain. Through projective techniques, students' transformative experiences were facilitated through ambiguous stimuli in forms of instructions to individually and freely construct their action research participants' demographic profile, survey questionnaire, action research proposal, letter protocol to conduct a survey, letter to participants, documentation on the survey conducted, and presentation of written research, publication, and projection after two years. Analytical results, showed that those students with financial instability and health problems are less active in complying the tasks, and declined to portray their futuristic self-images this results contemplated to the belief of (Wagner, 2010) on facade self and the introspective self which means that this theory has the ability to examine one's own feelings, thoughts, and motives.. This further explained that projective techniques facilitated transformative experiences among students with shortcoming because they are all compliant to the tasks though they are not even by performance wise. Apparently, considering those results, as to the theory of (11) of which the scoring was simplified to relieve them from a sense of overload this study proves that students difficult in passing the practical statistics course is not the teacher's approach, learning environment and school management crisis but their health problems and financial instability.

In this study projective techniques as an approach in teaching is more appropriate for students who are physically and mentally fit. As findings revealed that students 4, 6, & 8 are those students with financial instability and health problems, these students respectively only accomplished 1, 2, & 5 out of the 9 tasks within the scope of the study and they even declined to give their self-portrayed projection, in some reasons: one student felt sorry for herself and wishes to retro back to the traditional methods of learning wherein she will continue her learning thru tutorial or lectures which are according to her comfort; another student felt distressed having an ulcer (internal sore); and the last one really need some avenue to cope up the topic, and there were some issues that she is hopeless but despite his frustrations she is grateful with projective technique hence, it is not focused only to subject content but more on personal development. This study concluded that those students under time pressured by doing their tasks due to OJT interventions and conflict scheduled of classes are more active than those with health problems and financial instability. Therefore, based on analytical results this study has used the projective techniques as an assessment learning to students with shortcomings in practical statistics in

interpreting the students' learning preferences, students' shortcomings, students' individual tasks accomplishments, and students self-portrayed projection.

Based on the conclusions of the study, the following recommendations are forwarded:

- The students' learning preferences, are reflective to their behavioral problems. This concern is personal, a problem like this cannot be resolved by any other party but the subject itself. The students should be given ample time for counseling and directions until they are motivated by times and in moderation.
- Considering the students' shortcomings, two out of the four enumerated reasons are financial instability and health problems. These are personal and family-related issues, however, it would be beneficial if the university has its own program to address these concerns. Then, for the conflict of schedule of classes and the OJT, interventions have to be arranged. These problems can be resolved at the management level. Issues like these need a systematic approach advantageous to both parties concerned. This problem should be given immediate response since it is adversely affecting the students.
- The teacher facilitated the students' transformative experiences by giving instructions and tasks which they can accomplish according to their own perspective. However, lack of concrete educational foundation was an issue. This issue is worldwide. Sadly, sometimes it is misunderstood which resulted in several misconceptions leading to accompanying punishments to the students who were judged them as "idiots". Educators are hereby implored to adhere to the theory of multiple intelligence of John Dewey that reminds every teacher not to "judge" but to "teach". Considering this fact, it is that "Teaching is like rearing our own child, and failing is not a solution".
- Projective Technique as assessment tool in learning is an effective and appropriate tool for students who have failing grades and shortcomings in their transformative experiences. Therefore, the researcher recommends in the duplication of the implementation to similar situations.

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