Constructing an Objective Scale to Measure Character of Total Quality Person (TQP)

(Conceptualization of total quality person character grid and pilot testing of a measurement scale)

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Abstract

Educational institutes are nurturing their students' character by adding value to satisfy the societal needs. Students' quality circles (SQC) activities in academia are believed to make a total quality person (TQP) having good and smart characters. In absence of any objective framework to study the structure of total quality person, it is now becoming difficult for the practitioners of SQC to identify its benefits and promote it to produce TQP in academia. This paper has conceptualized a framework called TQP character grid and constructed an objective scale to measure the total quality person index (TQPI) of a person. It has also suggested for future works on scale construction to make an universal TQPI scale for measuring personality character of a person in two dimensions of good and smart.

Keywords:

Students' quality circles, Total quality person, Total quality person character grid, Total quality person index, Total quality person index scale.

INTRODUCTION

Background

Quality is one of the widely talked terminologies these days, carrying different meanings to different people. Chapagain (2012) tried to compile how people understand quality with multi-perspective definitions. Stakeholders are working with different objectives, and they carry different perspectives to define quality differently. Chapagain described quality as craftsmanship, conformance to design, attractive to customers, value for money, standardization, individual's mindset, collaboration, empowerment, and so on. However, widely recognized and in simplest terminology, one can define quality as "satisfaction to customer". A product or service which satisfies its customer is considered a quality product or quality service. The voice of customer's requirements and the features or characteristics of supplier's products should have a perfect match, then it is called quality product. An objectively measuring instrument is necessary to correlate the matching of producer's products with customer's requirements. There are many measuring scales or instruments to measure the physical characteristics of products and services like weighing balance to measure weight, measuring tapes to measure length, thermometers to measure temperature, clock to measure time, selenium meter to measure exposure value for photography, flow meters to measure velocity of liquids, and there are many other measuring instruments available in the market. These measuring instruments play a vital role to verify whether the requirements of customer and products of producers perfectly match to each other or not? If it matches to each other then only the producer can claim that it is producing quality products.

Educational institute on the other hand is different from a manufacturing or servicing industry, it is a man making industry. In other words, the purpose of educational institute is to remodel the character of a person suitable to live in the society, or to produce a person who will poses a personality of a successful person. And, educational institutes have the responsibility of producing citizens who are socially responsive as well as economically competitive to lead a better future. Whole society is the customer of educational institutes, and students as human beings are their products. The personality traits are the character or features of this product, a human being. Personality traits are not physical characters, but are abstract and latent characters or features.

Hence, objectively measuring scale for all characters as needed by the society is not readily available and to claim that we are producing quality people is not appropriate at this stage.

Total Quality Person (TQP) and Students' Quality Circle (SQC)

Gandhi (1999) coined a new terminology "total quality person (TQP)" in the domain of education for defining the quality of the product of educational institute. Borrowing the nomenclature from total quality management (TQM) and quality control circle (QCC), a new movement started in educational pedagogy to introduce students' quality control circle (SQCC) as a component of TQM in education to produce TQP. TQP is described as a person who have an enhanced all four paradigms of human beings, i.e., physical being, intellectual being, emotional being and spiritual being. To concretize these four paradigms of TQP, one simple definition to understand TQP has also been framed. Total quality person (TQP) is defined as a person who has good character to serve the society as well as at the same time has also smart character to compete globally. Since the beginning of this millennium, Students' Quality Circle (SQC) an adapted version of industrial quality control circle (QCC) has been in practice as a co-curricular activity in educational institutes, especially in schooling systems for producing TQP. WCTQEE (2011) established with one of the vision of making every student a total quality person and pride of the human race by providing meaningful education with knowledge and wisdom assumes that if SQC is properly established in educational institutes it will support the educational institutes to produce total quality person (TQP) having good and smart characters.

Chapagain (2006) defined SQC as a small group of voluntary students of same educational institute who meet regularly in their study place for a particular period to identify, analyze and solve their problems for their self and mutual development. He identified that students enhanced eleven types of personality like self-confidence, self discipline, interpersonal relationship, empathy, social responsibility, time management skills, scientific and time management skills, communication skills, creativity and lateral thinking habits, working habits in a team and broader vision during the process of SQC activities. The research was done using subjective information from students who presented their cases stating what benefits they get from the SQC case study exercises. There is no empirical research done till now on this subject of SQC and its benefits. Chapagain (2005a & 2005b) developed some quantitative methodologies to evaluate the character attributes of students using Kano's methodology to understand the customer's voice required for educational institutes. However, he has not been able to objectively measure the personality traits required to be a total quality person. Educationists and quality professionals from many countries are involved on SQC promotion at academia in their respective countries. In an absence of objective scale for measuring personality required to be a TQP, it has been difficult for educational institutes to measure the benefits of SQC implementation at their institute and convince to the society that their products are really a quality product.

In this paper, the author has suggested a conceptual model of Total Quality Person Index (TQPI) with two dimensional character of good and smart to be a TQP. Besides, the author has also tried to develop an objectively measuring scale, a psychometric instrument to measure the character of a person as an instrument to identify his or her TQPI. The TQPI instrument is aimed to be a valid, reliable and practical psychometric scale.

TQPI CONCEPTUAL MODEL

Personality traits: Good and Smart Character

Personality refers to individual differences in characteristic patterns of thinking, feeling and behaving. Character is derived from a Greek word that means "to mark" as on an engraving. Sometimes, it is said that the character of a person are inbuilt inside a person's nature and cannot be changed or nurtured. However, it is the responsibility of educational institutions to remodel a person's nature to make him or her total quality person (TQP) to satisfy the societal needs. The author believes that nurturing a person's character is possible through the practice of Students'

Quality Circle and likes to define a total quality person's character as a manifestation of certain personality traits called good and smart that dispose one to habitual courses of action.
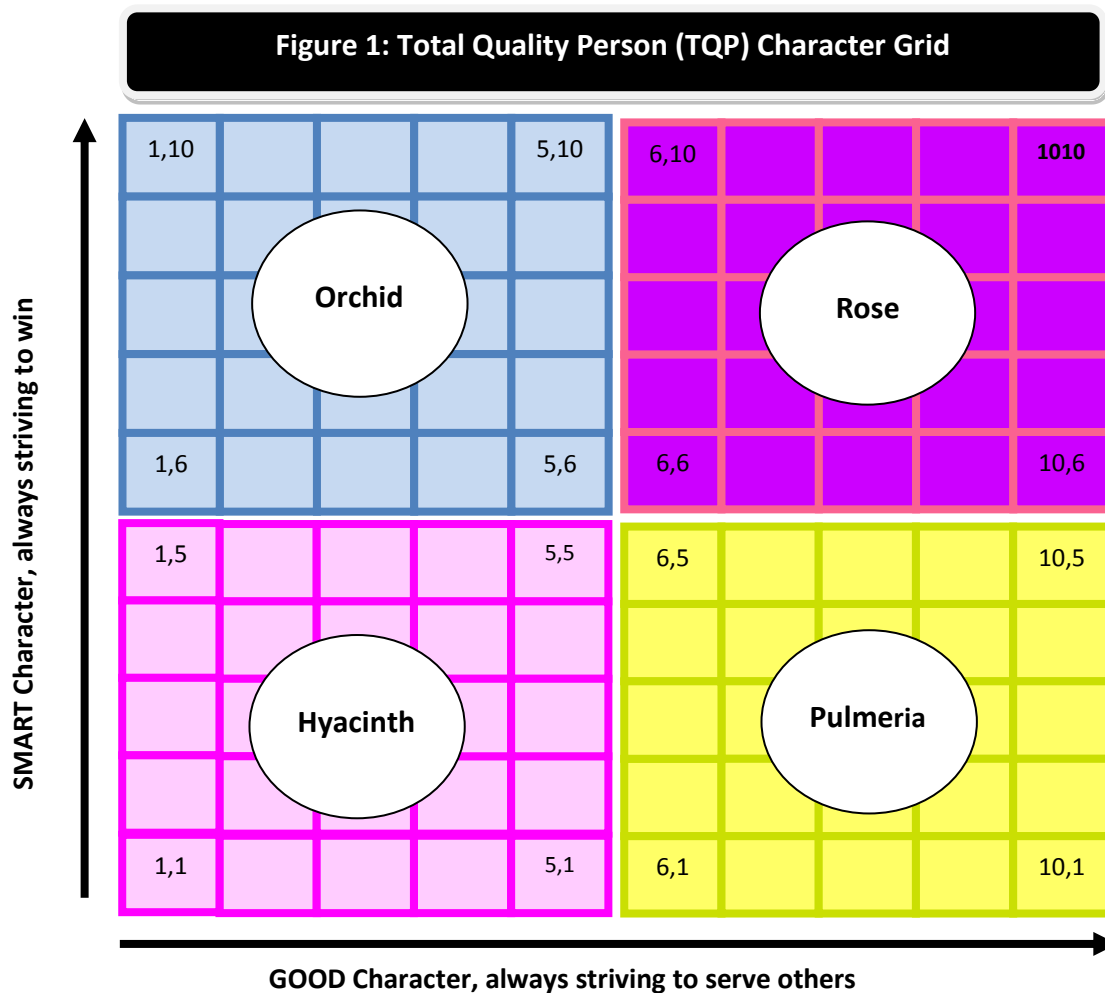
The pioneering psychologist Gordon Allport began applying the principles of scientific taxonomy to study the character traits, developing a "cohesive theory of personality" as a generalized, rather than specific manifestation. Allport (1936 & 1966) collected more than four thousand words from dictionary that describes traits of a person and classified them into three major types of traits- cardinal types, central traits and secondary traits and initiated the discussion on the study of personality traits. Then, applying factor analysis, Cattel (1946 & 1993) clustered Allport's more than four thousand traits and identified sixteen key personality traits, which he believed are the basis of all human personality. Cattel's 16PF, an objective personality testing instrument is widely used in business and research even these days. Eysenck (1947) working independently of Allport and Cattel, hypothesized that two personality dimensions, which he identified as extraversion and neuroticism, give rise to the infinite variety of personality manifestations. Later on many scientists working in personality traits theory have come out consensus with five core factors of traits to study personality, which are extensively used to study the personality traits of individual. Hogan (1997) in the book "handbook of Personality Psychology" has provided the details of these researches. The Big Five traits are also referred as Five Factor Models (FFM). Through researchers disagree on what exactly those five traits are called, but many researchers liked the term OCEAN (Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism). However, these popular 16 PF and Big 5 factor model of personality can't support to measure the character or personality traits of students which will be developed after the implementation of SQC in educational institute. The developed instruments are not capable of measuring good and smart character, which WCTQEE believes will be developed in students who continuously and sustainably practice SQC in their study periods. It is not only difficult but also controversial to correlate the 16 PF, Five Factor personality model and WCTQEE's good and smart (GS) model of personality.

Here, it is understood that a person who believes whole heartedly to the social values and behaves accordingly, who can be taken in confidence for his commitment and dedication, who is pleasant and smiling all the time, who listens to understand other's view and who is ever ready to serve the needy people is a person with *Good* character. And, a person with who has self confidence, who always likes to learn and share new knowledge, who has a strong desire of excelling, who is capable of leading others, and who likes to develop skills and teach acquired skills to other people is a person with *Smart* character. In this world, majority people are either very smart or very good but few people have both smart as well as good character. Total quality people are those who have both smart as well as good character. Moreover, good and smart characters can be understood as two sides of a coin. Both sides of a coin should be genuinely stamped to get its social value in the market.

Total Quality Person (TQP) Character Grid

Blake and Mouton (1964) suggested a managerial grid as a framework to identify two types of behaviour of leadership; Concerns for Production (task) and Concerns for People (relationships)". In order to provide a framework for describing management behaviours the two variables "task concern" and relationships concern" are plotted on a grid (graph) showing nine degrees of concern for each variable from 1 indicating low level of concern to 9 indicating high level of concern. They suggested five positions on the managerial grid represent five different managerial behaviour patterns or which can be said as five different leadership styles. These are named as impoverished style, country club style, authoritarian style, status-quo style and the team style. Some managers may have task oriented behaviours and some may have relationships oriented behaviours. But to be a successful leader, one should have both task as well as relationships oriented behaviours and attitudes. Objective scales are also developed to self assess individual for determining the positioning of his or her leadership.

Similarly, unless a person is not nurtured with both characters- good as well as smart characters at the same time, the person may not be a successful one in the society, or in other words will be of less value for the society. Similarly, good and smart characters also can be explained by two dimensional character model as propagated by Blake and Mouton. The framework can be illustrated by a Total Quality Person (TQP) Character Grid as shown in figure – 1.

Figure 1: Total Quality Person (TQP) Character Grid

Orchid 1,10 ... 5,10 1,6 ... 5,6	**Rose** 6,10 ... 1010 6,6 ... 10,6	
Hyacinth 1,5 ... 5,5 1,1 ... 5,1	**Pulmeria** 6,5 ... 10,5 6,1 ... 10,1	

SMART Character, always striving to win

GOOD Character, always striving to serve others

The TQP character grid has one hundred (10X10) minor grids, as shown in figure 1 to positioning graphically total quality person index (TQPI) of a person. In an extreme, a person who has TQPI of 1X10 has excellent smart character but has minimum good character. On the other hand, who has a TQPI of 10X1 has excellent good character but has minimum smart character. A person who has a TQPI of 10X10 has excellent both in good as well as smart character, on contrary a person who has a TQPI of 1X1 has minimum in both good and small character. Collectively, a person can be classified by his or her individual TQPI into four major types (Figure 1). The author proposed to symbolize these types with typical flower names. However, flowers, all are beautiful, lovely and useful as human beings are.

1. **Peoples scoring Low in both smart as well as good character scales:**
   These people are represented by **hyacinth**; a beautiful but very sensitive and week flower and has no fragrance of its own. They are popularly known in Nepal as *Ghante* Phool. TQPI of these people falls within the quadrant on grids in between 1X1, 1X5, 5X5, 5X1. In general,

these people needs to be coached more to enhance both of their good as well as smart characters to make them a total quality person.

2. **Peoples scoring low in good but high in smart character scales:**
   These people are represented by **orchid**; a beautiful and strong flower available in varied colours but has no fragrance of its own. They are popularly known as *Sunakhari* in Nepal. TQPI of these people falls within the quadrant on grids in between 1X6, 1X10, 5X10 and 5X6. In general, these people needs to be coached more to enhance their good character to make them a total quality person.

3. **Peoples scoring high in good but low in smart character scales:**
   These people are represented by **pulmeria**; a beautiful flower with excellent fragrance of its own especially at night time but is weak and small in size. They are popularly known as *Chameli* in Nepal. TQPI of these people falls within the quadrant on grids in between 6X1, 6X5, 10X5 and 10X1. In general, these people needs to be coached more to enhance their smart character to make them a total quality person.

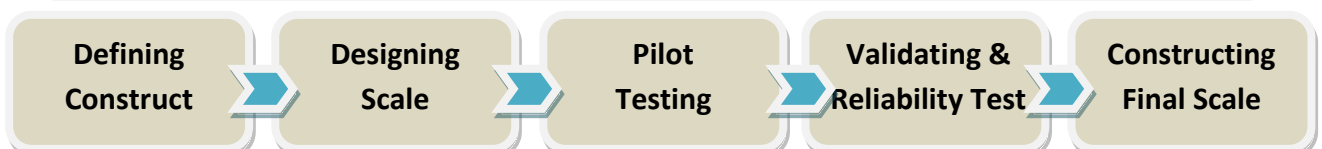4. **Peoples scoring high in both good as well smart character scales:**
   These people are represented by **garden rose**; a beautiful and strong thorny flower in varied colours and has excellent fragrance of its own useful for decorations and worships. Popularly known as *Gulaph ko phool* in Nepal. TQPI of these people falls within the quadrant on grids in between 6X6, 6X10, 10X6, and 10X10. In general, these people are self motivated to enhance their smart and good characters to make themselves a total quality person having TQPI of 10X10.

First and foremost, a valid and reliable objectively measuring psychometric instrument is necessary to identify the two dimensional total quality person index (TQPI) of individual. The measurement on that TQPI scale helps to identify the positioning of individuals on the TQP Character Grid. Then, the educational institute can benefit to identify TQPI positioning of students before and after their SQC participation to identify objectively the real benefits of SQC implementation.

TQPI SCALE CONSTRUCTION

The purpose of scale construction is to design a questionnaire that provides a quantitative measurement of an abstract theoretical variable. A scale uses a moderately large number of questions or items to measure a single construct. Using more than one variable in a scale is also possible as concurrent scales and sub-scales. Clark & Watson (1995) and DeCoster (2000) have provided basic guidelines for scale construction methodology. Here, a concurrent scale with one latent variable related to good character and other latent variable related to smart character of an individual are developed. Effective scales must possess both validity as well as reliability. The construction of total quality person index (TQPI) scale adopts the process of construction in five stages as shown in figure 2.

Figure 2: TQPI Scale Construction Process

| Defining Construct | Designing Scale | Pilot Testing | Validating & Reliability Test | Constructing Final Scale |

Defining Construct:

First of all, two latent variables of the personality traits of TQPI, i.e., "Good" character and "Smart" character of an individual are defined each with five variables for constructing a concurrent TQPI

scale. It is defined after discussing with four experts who are master trainers of SQC, who had working experience of SQC implementation in Nepal. All these variables are broken down deeper with small unit of variables to further understand each of the variables clearly.

Good character

Five different sub-characters were categorized under good character.

1. Believer of social and ethical values (respecting seniors, observing state rules and speaking truth)
2. Committed and dedicated (working for quality, working selflessly, working for others)
3. Pleasant looking (positive thinking, ever smiling, pleasing others with jokes)
4. Compassionate (feeling others' pain, supporting others, listening others)
5. Societal Service (working voluntarily, servicing disadvantaged people and non-attachment with position and money)

Smart character

In the same manner, five sub-characters were categorized under smart character.

1. Self confidence (taking risks , discussing for rationality and hard working)
2. Learning and sharing attitude (striving to learn new knowledge, reading books of different subjects and writing for others)
3. Desire to excel (working extra than given responsibilities, striving for continuous improvement and working to get some returns)
4. Desire to attract others (adopting new fashions, living neat and clean and striving to lead others)
5. Desire to develop skills (working for self satisfaction, learning multiple skills and providing useful trainings).

Designing Scale:

In the second stage, long list of sixty questions (items) were written in a simple, straight forward and appropriate language. Language is very important essence in evaluating anybody's thinking, feeling and behaviour. Hence, items were written in Nepali language, a national language of Nepal to test and validate scale in Nepalese environment. In writing items for scale construction five sub-characters which were defined for good and smart characters above were further divided into three micro components of character each. Thus, fifteen micro-components for good character and fifteen micro-components for smart character were identified. Then, negative and positive questions were developed for all these thirty micro-components. Thus, sixty items with thirty items for good character and thirty items for smart character were developed as a primary list of item pool. Validity of the scale is done primarily by two independent school teachers. They were asked to check the items if the wording and content of the items represent the actual meaning of defined characters.

Then, a response format was decided for items. The response for items by respondents (subjects) was designed as a standardized forced choice dichotomous response format. For all items responses was collected through two options- either (a) or (b). All sixty items then were randomly listed as a questionnaire or a scale schedule for a pilot testing.

Out of these sixty items, thirty items reflected thinking, feelings and behaviour of a good person and another thirty items reflected that of a smart person. Averaging the respective item scores of good and smart characters of an individual, TQPI index was calculated. TQPI is represented as **"Average good score X Average smart score"**, and may be shown in a grid to identify his or her quadrant positioning.

Pilot Testing:

In the third stage of scale construction, a pilot test was carried out with the developed questionnaire. For administering the questionnaire at large scale, the venue of 8th National convention on SQC was choosen, where about 500 student and teacher participants were gathered at one place. Clark & Watson (1995) has suggested administering questionnaires to about 300

subjects as a minimum sample for pilot testing. 400 questionnaire sheets were randomly distributed to heterogeneous participants at the convention, students and teachers from different regions of the country. And, they were asked to respond within 10 minutes, and it was clearly told to them that they need not identify themselves in their responses. Volunteers collected all questionnaires after 10 minutes from individual subjects. All data collected from 400 subjects were then entered into the Microsoft Excel spreadsheet with appropriate scores for individual items.

Validating and Reliability test:

A scale has validity if it properly represents the theoretical construct it is meant to measure. For scale validation purpose, few subjects who were in constant contact with the author since last five years were identified. The author knew well about their thinking, feeling and behaviour. The author can assume relative scores of these identified subjects on the scale of good and smart characters. The questionnaire with preliminary item pool developed to construct scale was given to these five subjects for their responses. They were requested to provide their identification while filling up the questionnaire. They were also informed that their respective scores will be used only to validate the scale and will not be disclosed among others.

A scale has reliability (precision of measurement) if repeated measurements under the same circumstances tend to produce the same results. For scale reliability purpose, Cronbach's alpha value is calculated for total scale as well as concurrent scales of good and smart characters. Clark and Watson (1995) have argued that although minimum standards of alpha value 0.8 and 0.9 for basic and applied research, respectively were recommended, it is not uncommon for contemporary researchers to characterize reliabilities in the alpha value of 0.60s and 0.70s as good or adequate. In other words, here, if alpha value of the scale is more than 0.7, then it may be inferred that the scale has a significant level of reliability with adequacy. A simple MS excel spreadsheet program was used to calculate the Cronbach's alpha value.

As a preliminary scoring of the pilot test, respective good and smart scores of all subjects were calculated and their positioning in the TQP character grid of individual subject was identified. These results are sent to all subjects or respondents who have provided their communicating address. Total number of subjects with their percentage positioned in each four quadrants of TQP character grid were identified and observed the overall position dispersions of subjects in four quadrants.

Constructing Final Scale:

Conclusions were drawn at this stage after analysing the validity and reliability of the scale construction. future works were identified to develop a valid, reliable and practical scale to measure objectively the TQPI of a person.

<center>RESULTS AND DISCUSSIONS</center>

Sample distribution

The pilot testing of the questionnaire which included all 60 Items constructed for computing TQPI was conducted with moderately large and heterogeneous sample. The sample was heterogeneous with respect to subject's age, educational status and geographical region. Students were from standard 5 to 12, age in between 11 to 18 and were mixed in gender. Whereas teachers were adults have at least college graduate age raging from at least 20 years and above. Students and teachers were gathered from different parts of Nepal, few from the metropolitan capital and adjourning parts of the country, called here as Kathmandu Valley and many were from other sub-metropolitan or rural parts of the country, called here as outside Kathmandu Valley. The distribution of the heterogeneity is shown in Table 1.

Out of 400 questionnaires distributed, 291 (72.75%) questionnaires were found useful for analysis which had valid responses to all sixty items. Table 1 depicts that the sample were heterogeneous with students representing 72.69 percents and teachers representing 13.40 percent, remaining were unidentified subjects with respect to their age and educational status. And, geographically the subjects from metropolitan area were 33.69 percent; from other parts were 54.64 percent and other subjects did not mention their residence. Thus, it satisfied the assumption that the initial items should be tested in a heterogeneous environment.

Questionnaires distributed	400 NOS	Completely filled Questionnaires	291 NOS (72.75%)
AGE DISTRIBUTION			
Students		222	76.29 %
Teachers		39	13.40%
Unidentified		30	10.31%
PLACE DISTRIBUTION			
Kathmandu valley		98	33.68%
Outside Kathmandu valley		159	54.64%
Unidentified		34	11.68%

Table 1: Heterogeneity of Sample for pilot testing

Validity of the construct

The six subjects coded here as "A, B, C, D, E and F", who think, feel and behave differently were identified to validate the scale developed for pilot testing. Person "A" was a very humble and always seen eager to serve others but she was always hesitant to compete with other colleagues. Person "B" was always found to argue with others to convince and believes in individualism rather than team work. Person "C" was observed introvert always hesitant to go in front of others did not take any decisions proactively and also seen hesitant to give voluntary service to others unless somebody really pressurized. Person "D" was always smiling, never became fatigue, seen always working with commitment and dedication as well as ever ready to work voluntarily for servicing others. Person "E" was a simple person having limited ambition, ready to follow others and try to serve others whenever necessary. And, person "F" was extrovert in nature and had a strong desire to upgrade in his life and also always seen working hard to serve the society in his capacity. The TQPI calculated by averaging the good and smart items for these five identified person in pilot testing is given in Table 2.

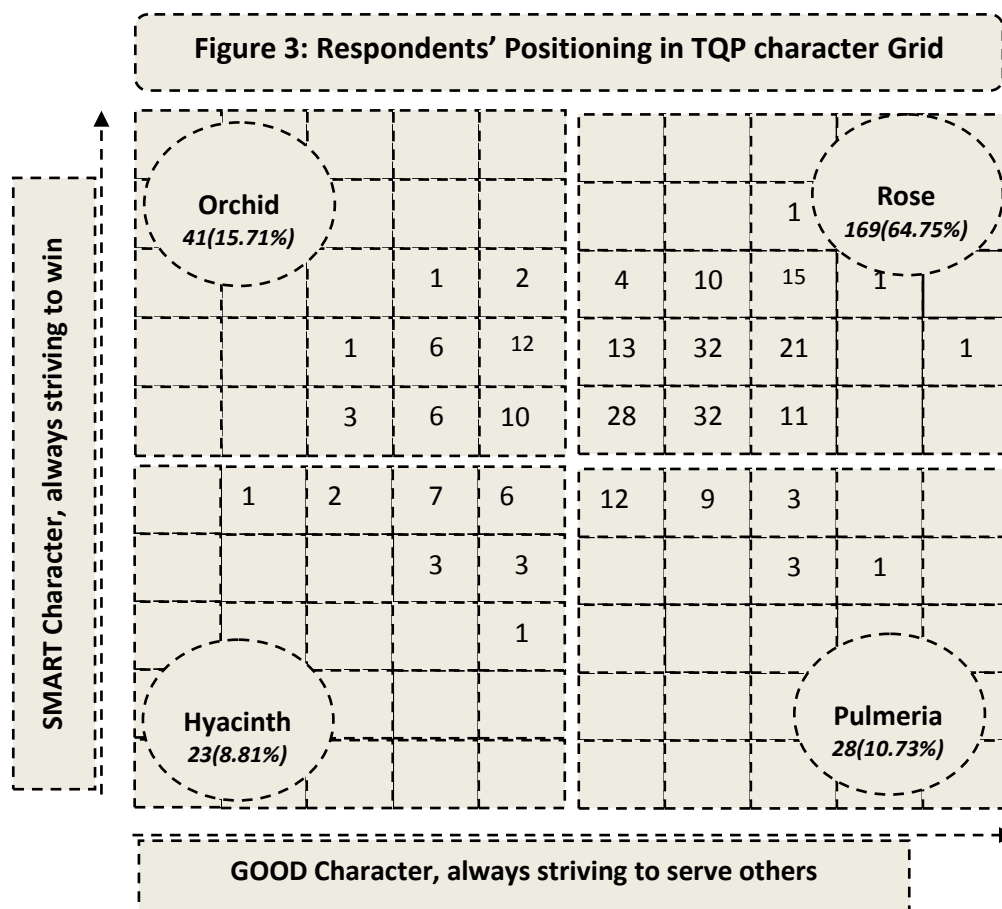|	SCORES OF SUBJECTS					
	A	**B**	**C**	**D**	**E**	**F**
GOOD Character	9	5	4	8	7	6
SMART Character	4	7	3	6	5	8
TQPI	9 X 4	5 X 7	4 X 3	8 X 6	7 X 5	6 X 8
POSITIONING IN TQPI CHARACTER GRID	**Pulmeria** *(Scoring High Good and Low Smart)*	**Orchid** *(Scoring Low Good and High Smart)*	**Hyacinth** *(Scoring Low Good and Low Smart)*	**Rose** *(Scoring High Good and High Smart)*	**Pulmeria** *(Scoring High Good and Low Smart)*	**Rose** *(Scoring High Good and High Smart)*

Table 2: TQPI of Validating Subjects

The above table depicts that TQPI of subjects A, B, C, D, E and F match with their individual's nature or their respective characters. In the initial stage, items were constructed with theoretical definitions of good and smart characters, and as the TQPI computed with the observed value on these scale

matched with their individual's character, it is concluded that the designed scale represented quite satisfactorily for which it is meant to measure.

TQP Character Grid

TQPI of 261 subjects, students as well as teachers who have provided their identification while filling up the questionnaire were calculated through averaging the good and smart scores from the constructed scale with all 60 initial primary pools of items. The dispersion pattern of these scores in the TQP character grid is graphically presented to draw some inferences on their respective positioning in the grid. The total number of subjects who were positioned as per their score intersection in the grid is shown in the figure 3, below.

Figure 3: Respondents' Positioning in TQP character Grid

Y-axis: SMART Character, always striving to win
X-axis: GOOD Character, always striving to serve others

Quadrants:
- Orchid 41(15.71%)
- Rose 169(64.75%)
- Hyacinth 23(8.81%)
- Pulmeria 28(10.73%)

Grid values:

					1	
	1	2	4	10	15	1
1	6	12	13	32	21	
3	6	10	28	32	11	1
1	2	7	6	12	9	3
	3	3			3	1
		1				

The figure depicts that maximum number of subjects are positioned in Rose quadrants of the TQP character grid with 64.75 percent, and minimum subjects are positioned in Hyacinth quadrant with 8.81 percent. Similarly, more than fifteen percent of subjects are positioned in the Orchid quadrant and more than ten percent of subjects are positioned in the Pulmeria quadrant of the TQP character grid. The subjects are more or less concentrated in centre portions of the TQP character grid, as can be seen at the figure, a little bit skewed towards higher score.

This TQPI distribution pattern was developed with the scale before conducting its reliability analysis. Hence, it can be taken as a tentative distribution pattern. The final conclusion can be drawn only after conducting reliability analysis or seeing internal consistency of the items. Then, it will be more precise to conclude.

However, it can be inferred that all flowers are beautiful and useful and if all flowers in the world are of the same nature, size, colour, strength and fragrance, this world would have been dull and boredom to live on. Similarly, all people in this world have different characters and personality, so

we live here happily. There are people who score high in their good character but there are also people who score low in it. But, both are beautiful as well as useful. Similarly, there are people who score high in their smart character but there are also people who score low in it. But, both are beautiful as well as useful. It is the variation that nature has created.

Reliability Analysis

The reliability of the scale with inclusion of all sixty items was tested with Cronbach's Alpha value. As TQPI Scale was constructed to objectively measure two concurrent scales, Alpha value was also computed for items designed for both scales, i.e., for both good and smart characters separately. Table 3 below shows the calculated Cronbach's alpha value for (1) all items, (2) items designed for good character and (3) items designed for smart character.

	No. of Items (N)	No. of Subjects (S)	Cronbach's Alpha value	Remarks
All Items	60	291	0.732004	Adequate
GOOD Character	30	291	0.71954	Adequate
SMART Character	30	291	0.457834	Not good

The Table depicts that the internal consistency of total items seems quite satisfactory as Cronbach's Alpha value is 0.732004, which is more than 0.7 and so one can proceed to calculate the score based on these items. However, our intention was to calculate the two dimensional TQPI score which is the intersection of two characters good and smart. The table depicts that the Cronbach's Alpha value calculated with 30 items for good character was found to be 0.71954, which also suggests us to use the items average to compute the score for good character of a person with satisfaction. However, the Alpha value calculated with 30 items for smart character was found to be 0.457834, which does not support statistically to average the items to compute the score for smart character of a person. Hence, further analysis is necessary to precisely compute the score on the smart scale primary designed with thirty items.

FUTURE WORKS

The purpose of the paper was to construct a valid and reliable objectively measuring scale for identifying the score for total quality person (TQP), so that one can always measure the effectiveness of Students' Quality Circle activities, which is supposed to empower young students to become TQP. The author has suggested one conceptual model for the two dimensional measuring scale for TQP. The model is conceptualized as Total Quality Person (TQP) character grid and Total Quality Person Index (TQPI) positioning. A quantitative measuring scale is developed with initial pool of 60 items, 30 each targeted for good and smart characters. The scale satisfactorily showed validity. The reliability of the concurrent scale for good character showed satisfaction but also has place of improvement. However, concurrent scale for smart character did not show reliable and needs further analysis.

The initial scale contains 60 items in total, so it is necessary to review, rewrite and even delete some ambiguous, confusing and redundant items to construct a reliable, valid and practical scale to measure the two dimensional scores TQPI of a person. Future works will be directed toward this objective. The following works will be carried out after acceptance of this conceptualization of the model and preliminary test of the measuring scale.

- The items will be reviewed and rewrite as per the results of analysis conducted and feedback received after the pilot testing.

- The reformed scale will be pretested with another sample and conduct again validity and reliability analysis.
- Confirmatory factor analysis (CFA) or Exploratory factor analysis (EFA) will be conducted to reduce the variables and identify the latent variables. The factor analysis will be done to identify reliable sub-scales in both concurrent (good X smart character) TQPI scale.
- A valid and reliable final measuring scale for identifying the positioning of a person in TQP character grid will be constructed.
- Universal TQPI scale, applicable in all environment and situation will be developed.

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