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THE DEVELOPMENT OF PSYCHOMETRIC INSTRUMENT–LOBG+ BEHAVIORAL SCALE

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ABSTRACT:

The aim of this study is to develop LOBG+ Behavioral Scale as a valid instrument to measure behavior of an individual using variables named after animals. By associating the variables with common behavior of animals like fun-loving or hardworking, the association could be humorous and insightful to the individual. This provides a therapeutic and non-threatening environment for building rapport and enhances exploration in early stages of counselling process. A quantity research with a snowball sampling was carried out among 334 respondents in order to develop this instrument. The development was constructed based on the models; the Big Five Model, Sidek Color Personality and Leonard Personality index. Common items are relating to the main descriptors of Lion (Decisiveness), Otter (fun-loving), Beaver (Accuracy) and Golden Retriever (Agreeableness). These reviewed instruments are extracted from the literature review to form 40 items of the LOBG+ Behavioral Scale instrument. Content validation was performed by five expert panels indicated CVR of 0.95, indicating its high validity. SPSS analysis derives a Cronbach Alpha of 0.88 indicating its high reliability. The findings indicate that the LOBG+ Behavioural Scale can be used as a valid instrument to measure behavior.

INTRODUCTION

The study is aimed to develop a behavior assessment instrument called LOBG+ Behavioral Scale as an instrument to assess the preferred behavior of an individual in particular on four constructs that are oriented towards leadership, fun, detail and peace-making represented by Lion, Otter, Beaver and Golden Retriever. The acronym LOBG refers to four animal personality types; Lion, Otter, Beaver and Golden Retriever. It was derived from the book by Gary Smalley and Dr John Trend, *The Two Sides of Love* (1992). This book was written to help individuals strengthen their affection, closeness and commitment towards one another – spouse, children and friends. In this book the authors provide a Personal Strength Survey to assess the strength and weakness of an individual personality by linking it to associated behavior of animals. The book introduces four personalities described by four animals –Lion, Otter, Beaver and

Golden Retriever (LOBG). Lions are considered to have leadership and decisive qualities, Beavers are detailed oriented and have perfectionist nature, Otters are social and fun to be with and Golden Retrievers are agreeable and loyal (Smaller & Trend, 1992). The Personal Strength Survey by Gary Smalley and Dr John Trend (1992) has not gone through empirical studies but since the release of the book has gained attention from various organizations and writers to describe personalities and individual differences. One of the reasons for its popularity is that by associating with common behavior of animals like aggressiveness, dominance or fun loving, the personality profile becomes more acceptable as individuals relate to the behavior of the said animals as a way to relate to themselves. Individuals have been primed to see the lion as king (leader) of the jungle as often depicted in movies. In the zoo, individuals often see the otters as just having fun behind the glass wall and often inviting the spectator to play. Individuals see pictures of beavers in science magazines or documentaries meticulously building huge dams. The image of golden retriever is one of loyalty and seldom in conflict with anyone (Smaller & Trend, 1992). From these experiences, individuals form schemas in their brain on the behavior of these animals and these experiences primed their cognition to associate certain behavior with these animals. By this association, the results of the survey when revealed is less threatening especially when individuals see a glimpse of themselves in the behavior of an animal. The effect could be comical and insightful and provide a therapeutic environment for building rapport and enhance exploration in early stages of counselling setting.

Calvary Family Church (CFC) based in Tabuan Laru, Kuching has used the Personal Strength Survey to assess its members since 2007. The survey conducted widely in CFC has helped its members to understand each other personality and strength and weaknesses. It has been used in family programs such as in parenting and marriage enrichment. The knowledge of each other “animal” personality has benefited this faith community by establishing an empathetic understanding of each other – why certain member think, behave and act certain way. In other words, this knowledge has immersed as part of the local culture of this faith community. However, the instrument has not gone through systematic research. This researcher as a member of this church has also used it in counselling sessions and found it to be qualitatively useful to build rapport with the clients especially in the earlier sessions by reflecting the personality of the client empathetically (Qureshi et al. 2020).

In her book *The Dolphin Parent* Dr. Shimi Kang (2015) wrote on the preferred parenting style to develop motivation in children. Kang uses animal analogy such as aggressive “tiger parents”, permissive “jellyfish parents” and nurturing “dolphin parents” to describe parenting styles that the readers could associate with the behavior of the said animals. Another author, Yale Law Professor, Amy Chua (2011) wrote a controversial book *In Battle Hymn of the Tiger Mother* describes her parenting style as a “tiger mom” where she parent with an iron hand. Her reader immediately associates with her determination and aggressiveness to develop the skills and discipline into her children like the behavior of a tiger. In view of the interest in the use of animal behavior to describe personality in a non-threatening manner in counselling setting and a way to understand other models, a quantitative research was carried out through an Instrument Development Course’s assignment of the Universiti Malaysia Sarawak (UNIMAS) Master of Science Counselling program (Wong et al, 2018). The instrument consisting of 40 items is able to establish the four behaviors constructs of Lion, Otter, Beaver and Golden Retriever through statistical

analysis. However, the reliability of this pilot study based on Alpha Cronbach value was found only to be 0.60 which is considered relatively low. One contributing factor from the discussion was that the instrument relied on a dichotomous rating scale (Yes/No) responses rather than a Likert scale. In addition, the sampling basically consists of UNIMAS engineering students and as such were not as representative of the general population.

LITERATURE REVIEW

The Four Personality Temperaments

Temperament refers to the way individuals differ in terms of their emotional and behavioral responsiveness (Wenzel, 2017). Temperament is visible from the early childhood and remains quite stable throughout his or her development. The concept of temperament dates back 2,000 years ago to the “father of medical science”, Hippocrates. Hippocrates stated that the differences of personality were related to the individual’s predominant bodily fluid (humors) which are yellow bile, blood, black bile and phlegm (Strelau, 1998). Galen later expounded on Hippocrates’ theory and developed the first typology of temperament named according to the humors; yellow bile - Choleric, blood - Sanguine, black bile - Melancholic, and phlegm - Phlegmatic (Strelau, 1998). Modern medicine science rejects this typology. However, modern personality theories adopt this concept under different names to group personalities into categories (Psychologia, n.d.). Hans J. Eysenck was one of the first psychologists to use psycho-statistical method called factor analysis to analyze personalities (McLeod, 2017). He found that behaviour could be represented by two dimensions which are Introversion/Extroversion and Neuroticism/Stability. The combination of both dimensions in different degrees form a variety of characteristics and grouped into the four personality types maintaining the ancient names; Choleric, Melancholic, Phlegmatic and Sanguine (McLeod, 2017). Florence Littauer, a self-help author and public speaker continued the research on the four temperaments and developed an assessment tool named the Personality Plus. The following personality profiles are as explained by Littauer, (2000).

Sanguine people are usually popular and fun to be with. They are very sociable, loves to tell stories and mingle around with people. They have the talent to remember interesting details which make them good at making jokes. They are emotional and most of the time they are very genuine at expressing them. They have a childlike attitude which makes them appear cheerful and carefree. They live in the present and like to explore new things. In terms of career, they are usually creative, always ready to offer themselves for new tasks and can be inspirational to others with their optimistic attitude. In group settings, Sanguines have the tendency to talk too much and monopolize a conversation as they felt they have the upper hand in making things more interesting. They love having people listen to their stories instead of the other way around. Sometimes this leads them to interrupt and answer on behalf of another person. Sanguines can be quite unorganized. They tend to forget things which are not of their interest (Littauer, 2000). Melancholy or Melancholic people are usually deep thinkers and loves to analyse every single thing or event in their lives. They are a group of talented people, creative, and knowledgeable in the fields they pursue. They have the tendency to be interested in arts, poetry and have a philosophical way of thinking. They are idealistic but in the same time meticulous in the things they do. Although Melancholics are seen as people who are serious and focused a lot on achieving their goals, they are actually very sensitive to others and are willing to sacrifice for others benefit. In terms of career, they are seen as problem solvers,

value perfectionism, patient and very structured in their work. Melancholics are respected for their analytical abilities. However, these traits could sometime backfire when analytical becomes overthinking. They overthink about how bad things will turn if they could not do it perfectly. This in turn leads them to be easily depressed and have low self-esteem. Melancholics also have the tendency to procrastinate doing something because they want to do it right and perfect (Littauer, 2000).

Choleric people are natural born leaders. They are a group of people who are dynamic, active and always seek changes in their life. They have strong spirits and are also firm with their own stand. Choleric people are usually unemotional which means they can be very objective in their way of thinking. They do not lose hope easily; hence they have a “can do anything” attitude in any task given. It leads to an image that Choleric people are confident and independent in nature. In the workplace, Choleric people are the ones to set the objectives of projects. They are good at organizing and are able to see a task from the bird’s eye view. Choleric people are driven, goal oriented and result oriented. With an optimistic attitude, they are comfortable in facing challenges and objections from others. Choleric people are always busy with their activities. They feel that they must work to achieve certain goals and will feel guilty when they do nothing. This may lead them to become workaholics. As a born leader, Choleric people have the need to always be in control with their environment, activities and with the people around them. However, too much controlling may lead them to have difficulty dealing with others as they tend to become impatient and want things to be done their way. They have an urge to correct others’ mistakes but would not want to admit their own flaws (Littauer, 2000). Phlegmatic people usually have a more reserved personality. They do not like to be in the spotlight although they have many talents or capabilities. Phlegmatic people like to take things easy, usually are satisfied with their lives and would not trouble themselves with unnecessary stress. They are calm, patient, balanced and have a consistent way of life. They are easily liked by others because of their sympathetic and kind nature. They may seem quiet compared to the other personality types but they are also a group of very smart people. Most of the time, they would keep their emotions to themselves. In career wise, Phlegmatic people can be a good middle person as they can easily blend in with others. They would prefer to be agreeable to others rather than confronting with conflicts among their co-workers. They have the ability to simplify their work and deal with work pressure. As laid back as Phlegmatic people can be, they tend to fall into a routine way of life. They are easily comfortable with the things they already have which could make them unmotivated to try new things or push their boundaries. Phlegmatic people have difficulty making their own decision as they tend to give away that responsibility to others. As they like to take things easy, they can sometime appear lazy and like to procrastinate. They love to think that things will work out eventually even if they did not put much effort into it. These characteristics sometimes make Phlegmatic people appear like they do not care much and they take things for granted (Littauer, 2000).

Table 1: The Four Temperaments Correspond with the LOBG

Four Temperaments	LOBG
<i>Phlegmatic</i>	<i>Golden Retriever</i>
<i>Melancholic</i>	<i>Beaver</i>
<i>Sanguine</i>	<i>Otter</i>
<i>Choleric</i>	<i>Lion</i>

Big Five Personality

Before the development of the Big Five Personality came about, there were few researchers that contributed to understanding the various types of personality. Psychologists Gordon Allport and Henry Odbert in the early 1930's were already showing interest in words that may describe certain behavior, trait and personality of individuals. In 1940's the research was then expanded by Raymond Cartell and he developed the Sixteen Personality Factor Questionnaire (16PF) to measure traits (Psychologist World, 2018). This was then further research by Robert McCrae and Paul Costa and together they came up with the Five Factor Model (FFM). The idea was to describe and group personality in five broad factors. This FFM intrigued psychologist Lewis Goldberg and he referred it as the Big Five factors of personality and developed inventory of descriptive statements of the traits that relates specifically on personality. The Big Five personality can be defined as openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Psychologist World, 2018). Openness to experience can be explained as open to adventures, fresh ideas and the appreciation of art and cultures and do not mind intense experiences. Individual high on the openness scale can be described as unpredictable and lack focus. Extraversion is characterized as outgoing, sociable, enjoys the attention of others and a crowd pleaser. They are the social butterfly and the live of the party (Cherry, 2018). The two factors correlate with the other personality that loves fun, excitement, unpredictability and peers are very important to them. Conscientiousness individuals tend to be very organized and self-disciplined. They dislike unpredictable events and prefer structured plan. They are also very focus, reliable, hardworking and goal oriented (Cherry, 2018). They are often described as task oriented, result driven and make sacrifices to get things done. Agreeableness can be characterized as the peace maker, very cooperative and is likable by people around them. They are trusting and helpful (Cherry, 2018). They are loyal, love peace and are very compliant and sensitive towards the needs of others. Neuroticism can be characterized as person that has emotional instability, worries a lot, anxious and frustrated when things do not go their way (Cherry, 2018). They can be rude, quick tempered and overbearing as they worry too much and is too result oriented. They cannot see the details and processes and most of the time only focus on result.

Table 2: The Big 5 Personality Corresponds with the LOBG

Big 5	LOBG
<i>Conscientiousness</i>	<i>Beaver</i>
<i>Extroversion</i>	<i>Otter</i>
<i>Agreeableness</i>	<i>Golden Retriever</i>
<i>Emotional Stability</i>	<i>Lion</i>

Colour Personality

Colour Personality Inventory (IPW) is a test which details individual inventory according to the dominant traits of every personality through the personality colour. It is developed by Sidek Mohd Noah in 1997. This inventory classifies personality into four colours, namely Gold, Green, Blue and Orange. These personality colours have dominant characteristics which delve into the individual strength and positive traits (Sidek, 1997). The individuals with Gold colour personality are known to be responsible. They are usually faithful and practical, while obeying strictly to the rules. Other than that, they are also highly reliable as they are meticulous and systematic. Individuals with Green personality is known to be inquisitive as they are always curious and eager to learn. They are

also thinkers and analytical. While the Blue personality individuals are known as the peace-seekers. These individuals are usually empathetic and are able to relate to the others easily. They are amiable, poetic and romantic. Individuals with Orange personality are adventurous and spontaneous. They tend to seek for thrills and are very much open-minded. Routines and systems bored the Orange personality individuals.

Table 3: The Color Personality Corresponds with the LOBG

IPW	LOBG
<i>Gold</i>	<i>Lion</i>
<i>Green</i>	<i>Beaver</i>
<i>Orange</i>	<i>Otter</i>
<i>Blue</i>	<i>Gold Retriever</i>

LPI Personality

Dr Leonard Yong, an Educational Psychologist and a retired Professor of the University of Malaya's Department of Educational Psychology & Counselling have developed the LEONARD Personality Index (LPI). The LPI is a valid and reliable instrument that originated from research at University of Malaya. LPI have four core personalities of Decisive, Analytical, Relational and Neutral with another personality called Openness which is a variable to be combined with the other four to measure the degree of creativity or openness to new ideas. This can be represented as an LPI pyramid with the four core personalities at the base with the Openness at the apex of the pyramid. The four personalities of LPI correspond with the LOBG personalities as can be seen by the table below. Decisive individuals are born leaders who seek challenges like the Lion personality. Analytical individuals set high standards on themselves and others similar to the Beaver personality. Relational individuals love fun and excitement not unlike the Otter personality. Neutral individuals have inclination to stability, loyalty and harmony similar to the Golden Retriever personality.

Table 4: The LPI Corresponds with the LOBG

LPI	LOBG
<i>Decisive</i>	<i>Lion</i>
<i>Analytical</i>	<i>Beaver</i>
<i>Relational</i>	<i>Otter</i>
<i>Neutral</i>	<i>Gold Retriever</i>

METHODOLOGY/MATERIALS

Research Design

This research adopted a quantitative approach methodology with a simple random sampling. Content Validation of experts is used to determine validity of adequacy of items in instrument. Data collected are used to determine reliability in Statistical Package for Social Science (SPSS).

Participants

Simple random sampling was conducted through the use of a LOBG+ Behavioral Scale survey in Google Forms. A total number of 334 samples were participated in this research.

Instruments

The original version of LOBG Scale was developed by Gary Smalley and Dr John Trend (1992). The Scale consists of four variables namely, Lion, Beaver, Otter and Golden Retriever which correspond to a set of behaviour commonly associated with these animals in particular on orientation towards decisiveness, fun-loving, accuracy and agreeableness. The LOBG+ Personality Inventory instrument consists of two sections; Section A: Demographics Information - The first section contains the demographic information of the participants. This information indicates to what extent the sample is representative of the population being studied in terms of age, gender, race, religion, marital status and education background. Section 2: Personality Profile - This is the main section to profile the LOBG+ Behavioral Scale of the individual. The item generation pool of the instrument are derived from the literature review of three commonly accepted studies on the personality constructs namely the Big Five Personality of Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism, the four Sidek's Color Personality of Gold, Green, Blue and Orange and the Leonard Personality Index of Openness, Decisive, Analytical, Relational and Neutral. Insights from the Personal Strength Survey from Gary Smalley and Dr John Trend (1992) who are the originator of this study are considered. Item generation started by extracting commonalities in the adjectives or phrases in the items describing the constructs of the abovementioned instruments from literature. Special attention and emphasis are given to those items that describe the observable behavior of Lion, Beaver, Otter and Golden Retriever, specifically, the decisiveness, the fun-loving, and the accuracy and agreeableness behaviour of these animals respectively. These commonalities are extracted to derive 40 items of which 10 items are designated for each construct of Lion, Beaver, Otter and Golden Retriever. The 40 items are grouped into 10 sets and in each set are four consecutive items representing Lion, Otter, Beaver and Golden Retriever respectively. Each item is scored based on a 5 point likert scale. Five expert panels were appointed to perform the content validation of the instrument.

Data Analysis

Two form of data analysis are carried out using descriptive data analysis and inferential data analysis. Descriptive data analysis is used to explain the demography data of age, gender, race, religion, marital status and education background in frequency (n) and percentage in table from Section A of the instrument. These demographics indicate the degree that the samples are representative of the Malaysian population. Each respondent was assigned a LOBG+ Behavioral Scale of Lion, Otter, Beaver or Golden Retriever based on his highest score among the four constructs. Descriptive data analysis is then carried out on the distribution of the Lion, Otter, Beaver and Golden Retriever individuals among the samples. Inferential data analysis are analysed from the data collection from Section B of the instrument using Statistical Package for Social Science (SPSS) to find the reliability of the instrument using Alpha Cronbach test.

RESULTS AND FINDINGS

Descriptive Statistics

Table 5: Descriptive Statistics for Demographic Variables

Demographics	Frequency	Percentage
Age		

<i>Below 18</i>	3	0.8%
<i>18-25</i>	88	26.3%
<i>26-35</i>	46	13.9%
<i>36-48</i>	72	21.7%
<i>48+</i>	125	37.3%
Gender		
<i>Male</i>	108	32.2%
<i>Female</i>	226	67.8%
Religion		
<i>Muslim</i>	61	18.26%
<i>Christian</i>	221	66.17%
<i>Buddhist</i>	36	10.78%
<i>Hindu</i>	1	0.30%
<i>Others</i>	15	4.49%
Ethnicity		
<i>Malay</i>	51	15.27%
<i>Chinese</i>	224	67.07%
<i>Iban</i>	24	7.19%
<i>Bidayuh</i>	9	2.69%
<i>Indian</i>	1	0.30%
<i>Others</i>	25	7.49%
Marital Status		
<i>Married</i>	192	57.50%
<i>Single</i>	131	39.20%
<i>Divorced</i>	9	2.69%
<i>Widowed</i>	2	0.60%
Educational Background		
<i>Secondary</i>	44	13.30%
<i>Technical/ Diploma</i>	70	21.10%
<i>Bachelor</i>	164	49.10%
<i>Master</i>	37	11.10%
<i>Others</i>	18	5.40%
Working Status		
<i>Student</i>	78	23.50%
<i>Employee</i>	149	44.60%
<i>Employer</i>	60	18.10%
<i>Not Working</i>	46	13.80%

Table 6: Descriptive Statistics for Demographic Variables of Respondents (LOBG+)

Age	Frequency	Percentage
<i>Lion</i>	63	18.86%
<i>Otter</i>	31	9.28%
<i>Beaver</i>	117	35.03%
<i>Golden Retriever</i>	123	36.83%

Validity

Construct and content validity were performed to review the items respectively. Exploratory Factor analysis was also conducted with SPSS. Literature review of

three commonly accepted studies on the personality constructs namely the Big Five Personality of Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism, the four Sidek's Color Personality of Gold, Green, Blue and Orange and the Leonard Personality Index of Openness, Decisive, Analytical, Relational and Neutral indicate validity on the four LOBG+ Behavioral Scale construct.

Content validation by five experts was used to measure the adequacy of the items to measure all facets of the LOBG+ Behavioral Scale construct. Score from the five experts were tabulated with a high Content Validation Ratio (CVR) of 0.93.

Exploratory Factor Analysis (EFA) were conducted on the sample collected to identify underlying relationships between the measured variables. Ten factors were identified with strength on the first four. Principle axis factoring was used on the four identified factors rotated on Varimax with Kaiser normalization using SPSS. The 4 components were found to converge after 15 iterations based on an absolute value of 0.3 and above. Loadings above 0.3 were found with the highest in Lion (100%) construct follow by Beaver (80%), Otter(50%) and Golden Retriever (40%). Based on EFA results coupled with construct and content validity results for LOBG+ Behavioral Scale, it should be concluded that LOBG+ is valid to be used in Malaysian context.

Table 7: Extraction & Rotation Method

	1	2	3	4
VAR00001	.322			
VAR00002				.296
VAR00003		.324		
VAR00004			.621	
VAR00005	.204			
VAR00006		.650		
VAR00007				
VAR00008				
VAR00009	.700	.901		
VAR00010				
VAR00011				
VAR00012				
VAR00013	.421			
VAR00014		.615		
VAR00015				
VAR00016				
VAR00017				.270
VAR00018	.394			
VAR00019				
VAR00020				
VAR00021	.637			.239
VAR00022		.396		
VAR00023			.368	
VAR00024				
VAR00025	.384			.518
VAR00026		.269		
VAR00027				
VAR00028				

VAR000029	.476			
VAR000030				
VAR000031				
VAR000032				
VAR000033	.476			
VAR000034		.438		
VAR000035			.397	
VAR000036				
VAR000037	.222			.476
VAR000038		.397		
VAR000039			.679	
VAR000040				

*Component 1 = Lion, Component 2 = Beaver,
Component 3 = Golden Retriever, Component 4 = Otter.

Reliability

The findings of the research show LOBG+ Behavioral Scale has an Alpha Cronbach score of 0.89, indicating high reliability index.

Table 8: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.89	.89	40

Development of LOBG+ Behavioral Scale

The results of the sample size of 334 respondents represented mixed demographics of gender, age, religion, marital status and work status. The samples are analyzed by SPSS to have a Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of 0.869. Generally, a KMO of 0.50 indicates the adequacy of the samples for research.

Table 9: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.869
Bartlett's Test of Approx. Chi-Square	4857.888
Sphericity df	780
Sig.	.000

Communalities which measured the degree an item correlates with all other items were extracted from SPSS. Principal component analysis was extracted with values of 0.468 to 0.712. It is generally accepted that values above 0.40 would indicate an ability of an item to load into factors. Based on data collected from the adequacy of samples and communalities of items having ability to be loaded into factors, validates the hypothesis that LOBG+ Behavioral Scale has a possibility to be developed as an instrument in Malaysia.

Table 10: Communalities

	Initial	Extraction
VAR000001	1.000	.620
VAR000002	1.000	.594
VAR000003	1.000	.475
VAR000004	1.000	.628
VAR000005	1.000	.532

VAR00006	1.000	.712
VAR00007	1.000	.583
VAR00008	1.000	.649
VAR00009	1.000	.691
VAR000010	1.000	.680
VAR000011	1.000	.643
VAR000012	1.000	.541
VAR000013	1.000	.540
VAR000014	1.000	.692
VAR000015	1.000	.634
VAR000016	1.000	.595
VAR000017	1.000	.645
VAR000018	1.000	.510
VAR000019	1.000	.650
VAR000020	1.000	.545
VAR000021	1.000	.693
VAR000022	1.000	.481
VAR000023	1.000	.556
VAR000024	1.000	.632
VAR000025	1.000	.680
VAR000026	1.000	.624
VAR000027	1.000	.556
VAR000028	1.000	.612
VAR000029	1.000	.652
VAR000030	1.000	.636
VAR000031	1.000	.613
VAR000032	1.000	.581
VAR000033	1.000	.711
VAR000034	1.000	.468
VAR000035	1.000	.556
VAR000036	1.000	.580
VAR000037	1.000	.545
VAR000038	1.000	.579
VAR000039	1.000	.634
VAR000040	1.000	.673

DISCUSSION & CONCLUSION

This research can be further extended by administering Confirmatory Factor Analysis to the test items to improve on the instrument. From the initial findings from the components matrix and 10 components being identified from the EFA, it appears there may be combinations of two constructs such as Lion Beaver or Otter Golden Retriever. Dr Leonard Yong in his LPI instrument has a total of 26 sub-constructs or secondary constructs which are combinations of two or more of this primary construct (ONARD). One of the strength of LOBG+ Behavioral Scale is in its association with known behaviour of animals which enable a client to relate to his own behaviour in a non-threatening manner making the counselling exercise therapeutic. Using LOBG+ Behavioral Scale as an instrument, qualitative research can be carried out to what extent is that association therapeutic in counselling and are there ways to improve on this association. This qualitative research may be useful in other instruments using animal association such as parenting styles.

Given the findings that LOBG+ Behavioral Scale is valid and reliable, it can be used as a tool for counselling to assess behaviour of an individual integrated with mainstream counselling theory. Research on its association or relationship of the LOBG+ construct with Reality Therapy is one areas that can be studied. In reality therapy the primary need for Love and Belonging is often obtained through the fulfilment of the other needs of Survival, Fun, Freedom and Power. There could be association between Lion and Beaver construct with Power which is an affinity towards achievement and significance. In the same way, Otter may seek Fun and Freedom in their inner search for Love and Belonging. Golden Retriever, on the other hand, fulfils their needs simply by a sense of love and affection towards others. This association may be useful in employing the WDEP techniques of the Reality Therapy if the counsellor understands the LOBG construct of the individual as it relates to total behaviour of the said theory. Intervention (evaluation and planning stage) may be provided in view of this insight about the individual LOBG+ Behavioral Scale.

Research can only be done on how LOBG+ Construct can become predictors of potential relationship issues in counselling in four areas – the Speed of the individual (e.g., how decisive), the Will (e.g. how rigid or flexible), the Accuracy of the individual and whether the individual is oriented towards Task or people. These four conflicts which this researcher coined as SWAT conflicts (acronym Speed Will Accuracy Task) could be a useful assessment tool on identifying relationship problems linked to behaviour identified in LOBG+ . For example, Lions could work at a fast pace as they are result resulted while Beavers may be slower as they are process oriented. At the same, Otters may not find the need to be accurate while Golden Retrievers may be faithful in following rules. Another area of development is to develop LOBG+ Behavioral Scale as a career counselling tool in particular on individual preferences on the nature of the work and the environment of the work. Beavers may prefer to work alone such as in the case of a scientist while Golden Retrievers prefer collaboration such as in marketing. Lions may prefer a highly efficient and functioning environment in enterprises while Otters prefer one that is unconventional that is conducive to creativity and experimentation such as in the Arts and Entertainment. The samples collected have a high concentration of female, chinese and christian demographics. These demographics are not representative of Malaysian population where the majority are male, bumiputera and muslim according to a 2018 report by Department of Statistics, Malaysia. As such, a wider sample is proposed using simple random sampling to obtain a more representative data collection for further development of this instrument. To conclude, the LOBG+ Behavioral Scale is a useful counselling assessment tool that is friendly to the client. This research can be urther expanded to integrate counselling theories, counselling analysis tools and other assessment tools such as for career development.

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