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Components and Predictors of Psychological Wellbeing in Young Adults

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Abstract: Psychological wellbeing, which refers to the overall healthy functioning of a person, is a crucial asset. It is a combination of effective functioning and feeling good of one's surroundings. To achieve and maintain psychological wellbeing is very important for any stages of life, especially for young adults. Young adults go through multiple significant transitions in life. The main aim of the current study was to discover the components and predictors of psychological wellbeing of young adults and develop an effective intervention program to enhance their psychological wellbeing. The study was carried out in three different stages. A mixed-method design was implemented to conduct the study. The 42 items Ryff's Psychological Wellbeing Scale was chosen in the first stage for its optimal usability to measure psychological wellbeing. It needed to be adapted for the Bangladeshi population before conducting the study using this tool. So, in the first stage the adaptation took place. The English and Bangla Psychological Wellbeing Scale had a significant positive correlation. In the second stage Bangla Psychological Wellbeing Scale was administered to a 301-representative sample of young adults. The goal of the second stage was to identify the factors related with psychological wellbeing. In the third stage of the current study aimed to create an effective intervention program to improve the psychological wellbeing of the young adults. This study reinforces the six-factor model of psychological well-being by Ryff (1989) in the design of psychological wellbeing program of young adults.

Key words: Psychological wellbeing, Young adults, Psychological wellbeing scale

Introduction

Psychological wellbeing or mental health has been acknowledged as equal footing with physical health for a holistic wellbeing. In recent years, the positive aspects of mental health have been focused on PWB rather than treating or preventing mental health concerns. A new goal in mental healthcare is the promotion of wellbeing (Keyes, 2007; Seligman & Csikszentmihalyi, 2001; World Health Organization, 2011). However, there are currently many definitions of well-being (Dodge, 2010) with the two main concepts being subjective and psychological. Subjective wellbeing (SWB) depends on a hedonic framework where positive experiences situated in the center. It's showed that the satisfaction of life is combination of balancing positive and negative emotions (Biswas-Diener, Kashdan, & King, 2009). The standards that use to judge the SWB of the people were not theorized in this framework. Therefore, Carol Ryff introduced the concept of PWB with the intention to develop theory-based indicators of positive human functioning which consistent with a eudemonic perspective of happiness (Ryff & Singer, 1996).

Psychological Wellbeing

PWB has been described as the cornerstone of mental health. According to the World Health Organization (2011), mental health is "a state of wellbeing in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community". While traditionally, PWB has been defined by a lack of symptom distress (i.e., lack of depression, anxiety, and other symptoms of mental disorders); over time, the term has taken on a more positive definition (Magyar & Keyes, 2019). PWB has been recognized as more than just an absence of distressful symptoms. Recent models of PWB have been designed the basic aspects of positive functioning. Major components of PWB include empowerment; recovery-oriented elements such as hope, self-initiation, purpose in life, individual, environmental and systems-based sources. Subjectively, perceived dimensions of positive functioning are autonomy, environmental mastery, self-acceptance, etc. Recently, researchers have focused increasingly on PWB (Fernandes, Vasconcelos-Raposo, & Teixeira, 2010; Schmitt, Postmes, Branscombe, & Garcia, 2014; Springer, Pudrovska, & Hauser, 2011). Generally speaking, PWB represents the state of individuals whose lives are going well. It represents a combination of feeling good and functioning effectively. PWB is compromised by extreme or enduring negative emotions which interfere with everyday functioning (Huppert, 2009).

Components of Psychological Wellbeing

The basic components of PWB are based on there models: hedonic wellbeing (the pleasant life), eudaimonic wellbeing (the meaningful life), and social wellbeing. Researchers have recently begun to question the potential costs of this distinction between the hedonic and eudaimonic aspects of wellbeing (Biswas-Diener et al., 2009) and have begun to observe the integrating of the theories and components of hedonic and eudaimonic wellbeing into a comprehensive model of flourishing mental health (Keyes, 2005).

Based on these major components, Ryff (1989) reviewed work from developmental, humanistic and clinical psychology. She presented a model of psychological (eudaimonic) wellbeing that is made up of six components: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. This model of eudaimonic wellbeing is develop on the assumption that any individuals take action to function fully and realize their unique talents. These six dimensions of eudaimonic wellbeing includes positive evaluation of self and individual's past life, a sense of continued self growth and development as a person, the belief of one's life is purposeful and meaningful, the possession of quality relations with others, the capacity to effectively manage one's life and surrounding world, and a sense of self-determination (Ryff & Keyes, 1995).

According to Waterman (1984) and Ryff (1989), the word "eudemonia" was mistranslated as "happiness." Carol Ryff's (1989) research shifted the focus away from a subjective to an objective understanding of PWB. Ryff's work is theoretically and conceptually based on a variety of theories, including Jung's (1933) formulation of individuation, Bühler's (1935) basic life fulfillment tendencies, Erikson's (1959) psychosocial stage model, Jahoda's (1959) six criteria of positive psychological and mental health, Rogers' (1961) view of the fully functioning person, Allport's (1966) conception of maturity, Maslow's (1968) concept of self-actualization, and Neugarten's (1973) descriptions of personality change in different ages like adulthood and old age, and as well as other more significant implications of the word 'eudemonia,' such as attaining one's full potential through some sort of hardship. The research of Ryff (1989) led to the development of a new objective PWB measurement (Conway & MacLeod, 2002) that included different components of wellbeing. These components are autonomy, personal growth, environmental mastery, life purpose, positive relationships with others and self-acceptance. This is the scale that has been hailed as the most accurate objective indicator of psychological well-being (Conway & Macleod, 2002).

For the purposes of explanation and clarification, the PWB of Ryff's aims are listed individually below. The psychological skill components and Ryff's PWB components have a connection. PWB components are linked to psychological skills components in a number of ways, for example, a range of methods, such as deep breathing and self-talk, are used to enhance both psychological skills and PWB (Stelter, 2009).

Autonomy means the ability to manage one's own behavior through an internal locus of control (Ryff, 1989; Ryff & Keyes, 1995). A fully functioning person has a high level of internal evaluation, assessing himself or herself primarily on own standards and successes rather than on the standards of others. They are less influenced by the views of others and do not seek acceptance from others (Ryff, 1989). Higher level of autonomy means independence, whereas low autonomy means self-consciousness (Ryff, 1989). They are less influenced by other

people's opinions and more focused on their own convictions. Internal locus of control is a fundamental component of motivation (Weinberg & Forlenza, 2020), and it requires autonomy, greater understanding, self-confidence, and belief, just as it does for athletes. Autonomy is also connected to self-determined motivation in sports engagement in order to achieve this.

Personal growth means develop and extend oneself. Becoming a fully functional person with the capacity of self-actualizing and achieving goals are referred as personal growth (Ryff, 1989; Ryff & Keyes, 1995). To attain optimum psychological functioning, one must continue to evolve as a person in different aspects of life (Ryff, 1989). In the process of personal growth people must continue to grow and solve issues by exploring their horizons. As a result, persons with a high degree of personal growth are linked to ongoing progress, while those with a low level are linked to stagnation. Sportspeople with a development mentality understand that hard work pays off (Dweck, 2005). A development mentality requires an openness to new and diverse experiences. Athletes that are modest yet confident are always aiming for personal improvement and holistic development (Weinberg & Gould, 2010); this people typically use good and bad performances, as well as goals attained attitude to improve their personal growth. Therefore, personal development is one of the closet PWB dimension of eudemonia (Ryff, 1989).

Environmental mastery is well defined as the ability to choose and control present situation through physical and mental activities (Ryff, 1989; Ryff & Keyes, 1995). A high degree of environmental mastery indicates control over own environment, whereas a low level indicates an incapacity of surroundings (Ryff, 1989). A mature person can typically engage and relate to a wide range of individuals in a variety of settings, as well as adapt to different environments on demand. Controlling physiological and cognitive arousal may help athletes gain more grasp and knowledge of their environment, it's also enhanced their interactions with others and it leads to increased self-awareness as well as a better comprehension of the situation and surroundings (Weinberg & Gould, 2007). Environmental mastery is being able to regulate and grab opportunities in complicated environmental and life conditions (Ryff, 1989). The capacity to venture outside of one's "comfort zone" aids in the pursuit of peak athletic performance.

Purpose in life means one's perception of the value of one's existence, and it entails creating and achieving objectives that add to one's appreciation of life (Ryff, 1989; Ryff & Keyes, 1995). Psychological wellness refers that one has a larger purpose and aim in life (Ryff, 1989). Goals are an important component of achieving success and provide direction in life (Miller, 2003). Having a firm sense of purpose is a sign of maturity. Having a clear sense of purpose is a sign of maturity (Ryff, 1989). When athletes strive for a higher goal for themselves, they hold their focus, attention, concentration to achieve realistic and holistic objectives. Goal setting and achievement may be both inspirational and motivating (Weinberg & Gould, 2007).

Having positive relations with others mean interpersonal interactions, as well as belonging to a network of communication and support and these are key components in the formation of trustworthy and long-lasting partnerships (Ryff, 1989; Ryff & Keyes, 1995). Maturity is defined as a calm and serene attitude that reflects and leads to improved relationships and concern of others. As a consequence, excellent relationships lead to an understanding of people, whereas bad relationships can lead to frustration (Ryff, 1989). One of the most important aspects of mental health is the ability to have healthy interpersonal relationships, and illness is frequently marked by impairment in social functioning. The importance of communication in team relationships cannot be overstated (Miller, 1997). Positive interpersonal relationships frequently lead to enhanced knowledge, empowerment, and improved athletic performance in group/team contexts.

Self-acceptance is the most fundamental part of mental health and an essential component of optimum functioning (Ryff, 1989; Ryff & Keyes, 1995). Self-acceptance at a healthy level leads to a positive attitude and increased life happiness (Ryff, 1989). Moderate levels of self-assurance lead to higher accomplishment and acceptability (Weinberg & Gould, 2007), with good feedback from others playing a key role in maintaining self-assurance and belief. Self-acceptance is essential for self-actualization, improved psychological functioning, and growth (Ryff, 1989). As a result, it evolves by accepting the past and present while still keeping a sense of direction for the future.

Predictors of Psychological Wellbeing

There is a study which explored potential relationship of PWB with gender. 185 men and 215 women within an age range of 17 to 50 years were drawn from various colleges and university of Khyber Phutun. Ryff (1989) PWBS (middle version consisting of 54 items) was used as a collecting tool for relevant information. According

to the results, gender is a significant variation in PWB. Men outperformed women on four of six dimensions of psychological well-being like; environmental mastery, personal growth, autonomy, and purpose in life (Maroof & Khan, 2016). In another study it showed birth order was not associated with psychological distress or having a mental health issue at midlife. Basic predictors of PWB, such as employment status, years of education and partnership status in adulthood attenuated the relationship between birth order and mental wellbeing (Stannard, Berrington, & Alwan, 2019).

Khumalo, Temane, and Wissing (2011) investigated the relationship between socio-demographic variables in an African context using two models: the General Psychological Wellbeing model (GPW) and the Mental Health Continuum model, both of which conceptualize and measure well-being as a holistic, integrated, and complex construct (MHC). The research was carried out on an African sample in South Africa's North West Province. A total of 459 Setswana-speaking people from rural and urban regions completed the GPW and MHC questionnaires. The researchers ran descriptive statistics, correlations, cross-tabulations, and regression analyses. The findings suggest that socio-demographic factors have a role in defining comprehensive PWB in a Setswana-speaking population in South Africa. Higher PWB was linked to urban life, employment, education, and marriage. The highest difference in PWB measures was accounted for by the environmental context (rural or urban), followed by job status. Age and gender were not shown to be significant predictors of happiness.

The study of Oskrochi, Bani-Mustafa, and Oskrochi (2018) was used to create a unified data set of two nationally representative surveys, the British Household Panel Survey (BHPS) and the Understanding Society Survey (USS), which used the 12-item General Health Questionnaire to measure PWB and associated factors (GHQ-12). The dependent variable was the GHQ-12 score for the head of the household, and its connection with numerous independent demographic and financial status factors was studied. Following the evaluation of growth curve features using linear, curvilinear, and higher-order polynomial models, a variety of variance-covariance structures were examined to determine the error covariance structure of the longitudinal data. Natural splines and B-splines were used to enhance the fit of some variables, and the random intercept and random slope were permitted to vary among individuals. The final model revealed that the perception and anticipation of future financial condition, as assessed by GHQ-12, were the most relevant factors impacting self-reported PWB, as well as issues meeting household spending. Gender, age, marital status, number of children living at home, highest qualification, and employment position all had a role. However, unlike prior studies, it did not find that income size was important. These findings add to the growing body of evidence that financial worries have an influence. These results show further indepth evidence of the impact that financial concerns have on self-reported measures of PWB.

Young Adults and Psychological Wellbeing

Young adulthood (YA) is a stage between adolescence and adulthood. Transition may be described as a qualitative restructuring of one's inner life and conduct on the outside (Elias & Noordin, 2010). For many young people, the move from secondary school to university is a big life shift that will be difficult, especially if it means leaving home and taking on new responsibilities (Robotham & Julian, 2006). This is compounded by the increased workload and time strain that new university students encounter as a result of having to adjust to changes in a variety of life domains, such as dealing with a new social milieu (student stress will be linked to social issues). Increased stress may be attributed in part to the lack of a person's typical support network of friends and family (Robotham & Julian, 2006), which may explain why the transition from high school to university necessitates substantial life changes in numerous areas (Robotham & Julian, 2006). As a result, the idea of adaptability to transition was applied in this research.

It may be difficult for graduate students to adjust to new social and educational situations, which can be stressful. Life in graduate school may be considerably more stressful due to the extra pressure of coping with various cultural values, language, and high self-expectations, in addition to academic obligations and a lack of social support systems (Constantine, Okazaki, & Utsey, 2004. As a result, graduate students are more likely to have adjustment issues, bodily ailments, and psychological discomfort (Constantine et al., 2004). Apart from academic pressures, graduate students may face difficulties as a result of numerous roles, different patterns of advising relationships, insufficient social support, or financial limitations as a result of their transitions (Goplerud, 1980).

Psychological well-being is a critical resource for overcoming obstacles and efficiently navigating through life (Ryff, Keyes & Hughes, 2003). PWB's abilities and views are essential for effectively participating in relationships with others, managing one's environment, and self-actualization (Ryff, 1989). PWB has a

favorable relationship with physical health indicators (Ryff & Singer, 2006). PWB is thus critical for people of all ages, particularly students making the move to university (Bowman, 2010).

PWB is critical for university students in order to adjust to university life successfully (Bowman, 2010). The fundamental structure of happiness has virtually always centered on the balance of good and negative effect, as well as life satisfaction (Bradburn, 1969). Short-term happiness has been stressed in PWB discussions rather than the ability to face life's obstacles, such as having a sense of purpose and direction, creating meaningful relationships, and reaching self-realization (Ryff & Keyes, 1995).

In Bangladesh, youth is the most viable and potential human resource and frustration is an identified problem of youth in Bangladesh. Different studies show that frustration is one of the leading causes of drug addiction (Chowdhury & Sarker, 2002). Therefore, the large population of YAs in Bangladesh requires ensuring PWB for their better and prosperous future. So, therefore the aim of this study was to develop an intervention program specifically for addressing the PWB of YAs in Bangladesh.

The construct of PWB depends on various aspects. Ryff and Keyes (1995) found considerably strong positive correlations between the variables "purpose in life" and several indicators of PWB, as well as negative correlations with indicators of psychological distress, in a sample of 1108 adults. Zika and Chamberlain (1992) obtained similar results amongst 194 young women. So therefore, Ryff six-factor model was also used in this study to investigate the predictors of PWB.

Method

The main purpose of the present study is to find out the components and predictors of PWB in YAs of Bangladesh. For this multipurpose nature, the study was divided into three stages: I) Adapting an instrument of measuring PWB, II) Identifying the factors related to PWB, and III) Piloting an intervention tool. The procedures involved in these three distinct stages related to study purpose are outlined in the layout of the research design.

Research Design

This research has been conducted using a three stages mixed-method design. In the first stage, the Ryff's PWBS-42 was chosen as it was found to be the best measure for PWB of YAs (Conway & MacLeod, 2002). Using the 18-item PWBS or others PWBS, researchers discovered that daily discrimination is associated with lower wellbeing. On the other hand, adults have better wellbeing when they recall having supportive and affectionate relationships with their parents as children (An & Cooney, 2006). Furthermore, multiple studies have found that education is related to better wellbeing (Ryff et al., 2003). So therefore, 42-item scale (van Dierendonck, Díaz, Rodríguez-Carvajal, Blanco, & Moreno-Jiménez, 2008) is statistically sounder than other PWBS measurements.

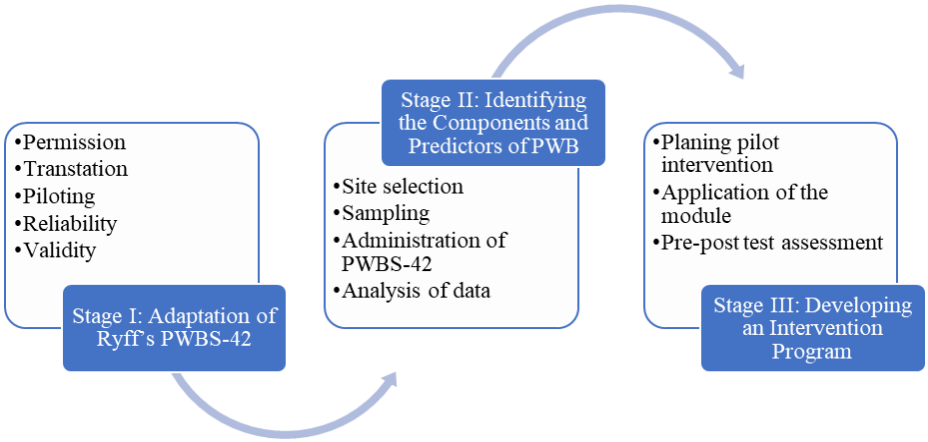

Figure 1. Three staged research design of the study

There are several versions Ryff's PWBS: 84 items (14 per dimension), 54 items (9 per dimension), 42 items (7 per dimension), 24 items (4 per dimension) and 18 items (3 per dimension). The 42-item version was chosen for

its comprehensiveness, as it was neither too long nor too short. It was adapted and validated into Bangla and its psychometric properties were assessed. The second stage involved administration of the Bangla Psychological Wellbeing Scale (BPWBS) to a representative sample of YAs for identifying the components and predictors of their PWB. Finally, in third stage a pilot intervention program was developed and assessed for its efficacy. At every stage distinct methodology was followed to reach the specific goal of the stages.

Adaptation of Ryff's PWBS-42 into Bangla

The adaptation process comprised of several steps starting from permission of the author as depicted in Figure 1: starting from seeking permission from Dr. Carol Ryff, the author of the PWBS through translation process to examining psychometric properties.

Description of Ryff's PWBS-42

The Ryff's PWBS-42 is a modified version of the original instrument, which had 120 items (20 per dimension) and was designed by psychologist Carol D. Ryff on the basis of his six-factor model of wellbeing. The original wellbeing scale now has five shorter versions: 84 things (14 items per element), 54 items (9 items per element), 42 items (7 items per element), 24 items (4 items per element), and 18 items (14 items per element) (3 per element). The 42-item PWBS assesses six subscales with seven items each to assess the six dimensions of wellbeing: autonomy, environmental mastery, personal growth, positive connections with others, purpose in life, and self-acceptance, as do various shorter versions.

The Autonomy sub-scale looks at a person's sense of autonomy and independence from rules. "I am affected by folks who have strong ideas," for example. The Environment Mastery subscale assesses one's confidence in one's ability to cope with life's challenges. "In general, I feel in control of the situation in which I live," for example. Personal Growth is a sub-scale that assesses a person's willingness to try new things and progress. "Life has been a continual process of learning, changing, and growing for me," for example. The Purpose in Life subscale looks at one's sense of meaning and purpose in life. "I like developing future ideas and trying to make them a reality," for example. The sub-scale Positive Connections with Others looks at how satisfied you are with your relationships with others. "I sometimes feel lonely since I have few close friends with whom to discuss my worries," for example. Self-acceptance is a sub-scale that looks at how one feels about oneself. "For the most part, I am proud of who I am and the life I lead," for example. All 42 questions featured a six-category response structure, ranging from "strongly disagree" to "strongly agree." There were 42 articles in all, with 20 PWB items carrying good content and 22 PWB items including negative content. Prior to analysis, items with negative content were reverse-scored, with higher scores indicating better wellbeing.

Reliability and Validity of Ryff's PWBS-42

Ryff's PWBS began with 120 items and has subsequently grown to include 84, 54, 42, 24, and 18 items, all of which are organized around the same six components of eudaimonic wellbeing: self-acceptance, good interpersonal relationships, autonomy, environmental mastery, life purpose, and personal development. The PWBS's reliability and validity are hampered by the fact that different countries utilize different combinations of the original 120 items, as well as sociodemographic variance.

Longer scales offer stronger internal consistency, while shorter scales have higher factorial validity, according to Meeks, Vandenbroucke, and Shryock (2018). There is no agreement on the best version of the PWBS to use or which populations to use it on. In a multigenerational sample from a research of wellbeing linked to theatre audience engagement (N=581), the 42-item version of the measure was evaluated for reliability and factor loadings. The participants' demographic characteristics were comparable to those of the Ryff development sample. The study revealed that older and middle-aged groups had similar internal consistency (), with the youngest (and smallest) group having somewhat poorer dependability; average alphas for the three groups were 0.71, 0.78, and 0.77, respectively. The scales performed quite well in the 6-factor model, albeit not optimally; NFI=.777, CFI=.836, RMSE=.063, PClose=.000, CMIN/DF= 3.089. Using a single component hierarchical model did not enhance fit. The findings show that the Ryff scales are consistent across age groups, but that there may be factor solutions that go beyond Ryff's initial six factors (Meeks et al., 2018).

In a Japanese study, the internal consistency, structural validity, and convergent/known-group validity of the 42-item (PWBS-42) were studied (Sakuraya et al., 2020). The PWBS-42 is made up of six 7-item subscales that measure autonomy, environmental mastery, personal growth, good interpersonal connections, life purpose, and self-acceptance in eudaimonic PWB. In 2008, 2102 community residents in Tokyo aged 30 and above were given a questionnaire as part of the Midlife in Japan (MIDJA) research. Internal consistency dependability was measured using Cronbach's alpha. The structural validity of the study was investigated using exploratory factor analysis (EFA). To assess convergent validity, the Japanese PWBS-42 subscales were linked with measures of life satisfaction, negative affect, negative adjectives, positive affect, positive adjectives, self-esteem, and perceived stress. The responses of 1027 people (505 men and 522 women) were examined (valid response rate = 56.2%). Cronbach's scores ranged from 0.70 to 0.78 for five of the subscales, while the one for life purpose had a lower value.

EFA came up with a five-factor model. The first two variables were made up of negative and positive items from the environmental mastery, purpose in life, and self-acceptance subscales. Items from the subscales of positive interpersonal connections, autonomy, and personal progress make comprised the third, fourth, and fifth components, respectively. As expected, life satisfaction, negative and positive affect/adjectives, self-esteem, and perceived stress were significantly related with all subscales of the Japanese PWBS-42. The subscales of the Japanese version of the PWBS-42 exhibited adequate levels of reliability and support for convergent validity in the Japanese population. Items from three subscales (environmental mastery, life purpose, and self-acceptance) loaded on two factors together, differing somewhat from the theoretical 6-factor model. This information may be interpreted in light of Japan's interdependent self-concept, which implies that these three aspects are connected.

Abbott, Ploubidis, Huppert, Kuh, and Croudace (2009) investigated Ryff's PWBS's effective measurement range. It uses a restricted information estimate technique to apply normal item response theory (IRT) methodology for ordinal data utilizing factor analysis processes. The information was gathered from 1,179 women who took part in a midlife follow-up of a national birth cohort study in the United Kingdom. Six aspects are included in the PWBS: autonomy, good interpersonal relationships, environmental mastery, personal growth, life purpose, and self-acceptance. Standard errors of measurement for estimated scores on each dimension were determined using scale information functions. The addition of method variables from item wording distinguished construct variance from method variance (positive versus negative). According to the IRT analysis, the PWB reliably assesses wellbeing in the center of the score distribution, i.e., for women with average wellbeing. At increasing levels of wellbeing, score precision decreased, and poor wellbeing was detected more consistently than high wellbeing. A second-order wellbeing factor that was loaded with four of the characteristics had better measurement precision and scoring accuracy across a wider range than any single dimension. Items that may distinguish at high levels of wellbeing should be included in future developments of wellbeing measures.

Seeking Permission from Dr. Carol D. Ryff

In order to seek permission Dr. Carol D. Ryff, the director of the Institute on Aging, University of Wisconsin-Madison, Madison, United States was contacted through email and permission to adapt her PWBS to Bangla was obtained. In the process of translation creating comparable instruments in more than one language includes not just translation of the test items and test materials but other different changes are also very important. For example, changes in the items format and testing techniques can have an impact the interpretation. Different issues relating to test translation should be considered to have instruments that are suitable for comparisons between more than two cultures. As indicated by (Ercikan, 1998) a decent translation should reflect the importance of the original item, yet attempt to keep up a similar pertinence, natural interest, and commonality of the item content. Otherwise, what the item measures might get changed. The current scale was translated in the Bangla language utilizing the strategy of forward and back translation (Brislin, 1980)

Translation Procedure

The 2nd step of adaptation included the forward translation of the items of the main scale into Bangla followed by consultation with 5-member expert panel for viability, back translation by another panel of 3 experts and piloting of the final Bangla version of Ryff's PWBS-42. With the consultation of the 5 expert panel an edited Bangla version was developed and this edited Bangla version was given to another three experts for back

translations (Bangla to English). After compiling all the feedbacks from both expert panels, a pilot study of the final draft was implemented to see the correlation between the English and Bangla version.

Forward Translation

After getting the permission from Dr. Carol Ryff, an initial translation of the scale from English to Bangla was done from the researcher. All the 42 items of 6 subscales from the original English scale were translated into Bangla. In the process of translation, instead of literal translation, more focus was giving on preserving the meaning of the original item.

Viability of Forward Translation by the Expert Panel

In order to verify the appropriateness of the primary translation of the scale, a panel of five specialists was formed and items were modified according to true sense and the culture difference. The expert panel of the intended process included three therapists holding Ph.D. in psychology and two experts with MPhil in Educational Psychology. Every one of them was local people and was informed about the construct estimated in the test and furthermore with the standards of adaptation. In a research test translation is just one of the means in the advancement of test adaptation. With a forward translation plan, a solitary translator, or ideally, a group of interpreters translate the test from the source language to the objective language (Hambleton & Li, 2005). For this reason, the solitary translated measure was given to five qualified and experienced interpreters who substantiate the primary translation of the Ryffs' PWBS-42 from English into Bangla by showing their agreement in a three-point scale (3 appropriate, 2 need modification and 1 not appropriate). All expertise had 98-100% agreement on the primary translation with necessary feedbacks for modifications indicating face validity of the Bangla scale. Consequently, adequate comments were identified and incorporated accordingly for the 1st draft Bangla rendition. At that point, this draft form of BPWBS was considered to be ready for back translation.

Back Translation by Bilingual Experts' Panel

In backward translation, after adapting a test from the source language to the target language, different translators take the adapted test (in the target language) and translated back to the source language (Hambleton & Li, 2005). In this step three bilingual experts, who had not previously seen the original version of the measure, back translated the translated version of the measure again into English language. The backward translation expert panel consisted of three expertise. Among them two expertise hold masters in Psychology and one expertise hold masters in English Literature. All of the experts had sound command in both English and Bengali dialects. Based on their feedbacks few items were modified and rephrased to retain the fundamental substance of the original scale. This 2nd draft Bangla version was cross-checked with the original English version and reviewed by the both panel of expert for the translation inaccuracies. Then a final draft of BPWBS was prepared for pilot testing. All the 42 items of 6 subscales were included in the BPWBS.

Pilot Testing

The final draft of BPWBS was piloted for usability, ease of administration and English vs Bangla correlation of the scale on a small group of sample. A total number of 27 participants (15 females and 12 males, mean age 22.11 years) were selected conveniently from student population. First Bangla questionnaire was given to the participants using standard instruction. After completion of their responses, researcher examined the results independently and checked the difficulty level of the items, the clarity, exactness, and contents of the questionnaire. With a gap of seven days English version of the scale was given to the same participants. In this step the English-Bangla correlation was looked to see whether the translation was viable and have content validity (see Table 3 in Result section). A significant correlation between the English version and the Bengali version was found. Other feedbacks and suggestions which were given with respect to the wording and concept of the scale have been taken into account. After making consensus by the experts the single and final adaptation of the BPWBS was completed.

Time Frame of Scale Adaptation

This portion of the research started in January 2020. The final BPWBS-42 was finished by the end of February 2020.

Determining the Psychometric Properties

The BPWBS was ultimately administered on a larger sample to determine the psychometric properties of the adapted scale. Item-total correlation, alpha value for subscales and factor analysis were analyzed to determine the statistical value of the scale.

Data Analysis

Statistical Package for Social Sciences (SPSS) version 20 was used for data analysis for the psychometric properties that include test-retest reliability, internal consistency, item-total consistency, subscale consistency, congruent validity, and construct validity were carried out.

Identifying the Components and Predictors of PWB

The BPWBS was administered on a large representative sample of YA to identify the factors related with PWB. Survey method was used to collect data. The BPWBS was distributed along with a demographic questionnaire among the participants to get their responses.

Study Sample

The survey of the second part of the study comprised 301 YA, 149 males and 152 females, ranging in age from 18 to 25 years. Generally, students enrolled in undergraduate and graduate programs from 9 different educational institution of Dhaka city were the target population for data collection. Because Dhaka is the capital of Bangladesh and has more educational options, students from all over the country come to study at various educational institutions in Dhaka city, and are thus thought to represent young people from all over the country. Two secondary colleges, five-degree colleges under National University, and two universities were conveniently selected.

Table 1. Gender distribution and age range of the sample

Institution	Male	Female	Age range
College (59)	56	3	18-24
DU (27)	13	14	23-25
JNU (60)	47	13	18-25
National University (155)	33	122	18-25
Total (N=301)	149	152	18-25

Among respondents 59 (19.6%) were from two colleges, 155 (51.5%) were from five-degree colleges under the National University, and rest of the 87 (28.9%) were from two public universities. There were 11 (3.6%) upper middle class participants, 217 (72.1%) medium socioeconomic level participants, 66 (21.9%) lower middle class participants, and 7 (2.4%) lower class people among the 301 total participants.

Sampling Technique

Purposive sampling technique was used for this study. Inclusion criteria of the sample was participants only form educational institutions (students), only YA (age limit 18 to 25years)

Instruments Used

Basically, two measures were used to collect intended data. One being the demographic questionnaire for identifying related components of PWBS and the other is the BPWBS. These two instruments were compiled in a single set of questionnaires and provided to the participants with appropriate instructions and consent form.

Demographic Questionnaire

A questionnaire was structured to survey demographic factors, including age, sexual orientation, level of instruction, establishment, conjugal status, birth order, living status, socio-economic status, physical and mental health. Selected demographic questionnaire was used to determine the predictors of PWB.

BPWBS

The BPWBS involved six subscales with seven items each to quantify the six components. Descriptions of the sub scales are given in introduction section (see page 4. Examples of items for each sub scales are given below.

1) Autonomy: "I am not afraid to express my opinions, even if they differ from the great majority of people's opinions." 2) Environmental mastery: "I feel I am accountable for the situation in which I live in general." 3) Personal development: "I believe that fresh experiences that challenge how I think about myself and the world are essential." 4) Positive interpersonal relationships: "Most people regard me as loving and warm." 5) Life's purpose: "I have a sense of direction and a cause to live every day." 6) Self-acceptance: "In general, I am confident and pleased with myself."

The response categories for these topics are on a six-point scale, ranging from 1 ("Strongly disagree") to 6 ("Strongly agree") ("Strongly agree"). Averages were calculated for the six subscales; higher values imply more evident PWB. The reliability coefficient for each of the six subscales, as well as the entire instrument, was more than 0.70. (Ryff & Keyes, 1995).

There was a significant positive correlation ($r = 0.6$, $p < 0.05$) between English and Bangla PWBS-42 which indicated high parallel form reliability. Also in case of item-total consistency Cronbach's alpha was 0.939 suggesting highly consistent with BPWBS score. Finally, Cronbach's alpha of all the subscales were above 0.70. According to the expert agreement over content of the adapted version and the result of factor analytic procedure ensure the content and construct validity. So therefore, BPWBS-42 is highly reliable and valid tools for measure PWB. For details see the result section (page 43-56).

Data Collection Procedure

After conveniently selecting the above mentioned nine educational institutions from all around Dhaka City, two research assistants along with the researcher were involved for the data collection procedure. The research assistants were given 3 days training on the research purpose, ethics and how to conduct the data collection process. These research assistants were psychology graduates' students and had prior knowledge of Ryff's scale. During training sessions, they practice the administration process several times under the supervision of the researcher. After completing the training, researcher and two research assistants went to selected institutes and asked permission from the relevant authority for permission to conduct the research. The participants were approached graciously with an invitation for participation in the study. Those who agreed were included for data collection process. In order to take information consent at the beginning, each respondent was briefed about the general purpose of the study and were requested to cooperate with the researcher. After initial briefing, questionnaires were delivered to them. It took around 15 minutes to fill up the questionnaire. Research assistants were present in the room while the participants were filling up the questionnaire. If any of the participants needed any help, the research assistants provided that. The whole process of data collection took around three months. Once the target numbers of responses were completed, data collection was ended. None withdrew themselves nor refused to response.

Time Frame of the Survey

Data collection procedure started in March 2020 and by the end of May 2020 targeted number of 300 respondents was reached from the entire selected study site.

Data Analysis of Survey

The collected data were cleaned, coded and entered into the computer software. The Statistical Package for Social Sciences (SPSS) version 20 was used for data analysis. Demographic statistics were used to see the distribution of respondents of survey part of the study. One-way ANOVA and t-test were also applied to find out the factors related to PWB.

Developing an Intervention Program

Finally, the current research had an intention to develop an effective intervention program to enhance the PWB of YA. A pre and post-test study was designed and carried out to fulfill the purpose. A personal information form and BPWBS were provided to the participants of the intervention program to measure any change in their state of PWB. No psycho-education or other knowledge related to PWB was provided before the intervention took place. Due to unprecedented pandemic lock down virtual intervention strategy was opted as an alternative to in-person workshop.

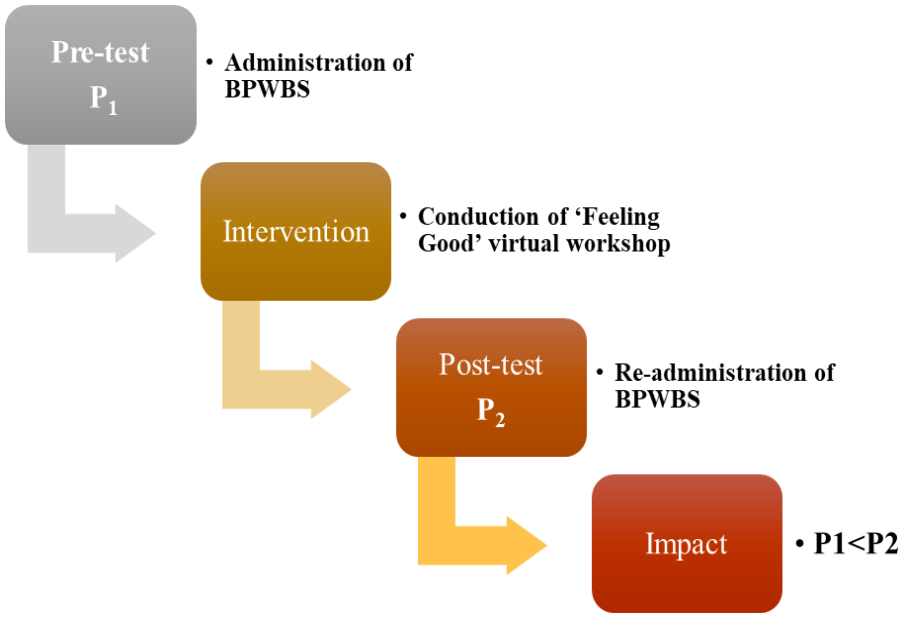

Figure 2. Measureing the efficacy of the intervention program

Participants for Intervention Workshop

Participants were selected on a convenient basis from different educational institutions all around Bangladesh. The small number of participants (16) comprised from different public college and university. The age range of these participants was 18 to 25 years old and 5 of them were male and 11 participants were female. By the time this point of the research was reached, Bangladesh was under lockdown due to Covid-19. So, some changes had to be made in planning. There were no opportunities to physically move from places to places in order to carry out the research. To overcome this hurdle, the researcher utilized the online platforms for accessibility. Facebook advertisements were used for promoting the workshop. Interested students messaged or called the researcher to attend this free workshop. The sampling was done completely on a convenient basis due to the sudden limitation of a global pandemic.

The Intervention Program- "Feeling Good"

The intervention module named "Feeling Good" has been developed based on the six components of Ryff's PWBS to promote emotional health and overall functioning of YAs. This module was held in three sessions. Transformation of the group depended on experience, sharing and learning.

Workshop Method

The workshop sessions were conducted online and Zoom app was used to deliver the participatory workshop.

Workshop Time and Duration

The total duration of the program was three weeks in three sessions. Each session was consisted of three hours.

Objective of Intervention

The intervention program was designed to provide psycho-education and practice material for different aspects of PWB.

Expected Outcome of the Intervention

The expected outcome was that participants will improve their state of PWB.

Informed Consent

All the participants were given definite information about the nature, reason, and conceivable future usage of the study verbally over phone. The goal was that they could settle on an informed decision with respect to their interest in the research. A written form of informed consent was composed, likewise arranged, and given to the participants to sign through email. The second part of this intervention study comprised of participation in online sessions. Informed consent was taken for participation in the sessions of the intervention program and used for research purposes.

Procedural Outline of the Three Intervention Sessions

Objectives of the *1st session* was to increase self-acceptance. For excepting the multiple aspect of self, including good and bad qualities and to increase the feeling of continued development to realize his or her potential. In the first session facilitator greeted the participants and asked them what brought them in the session. Then the facilitator discussed about self-acceptance, personal growth and after the discussion facilitator took the participants through a procedure. Facilitators asked the participants to find a place where they would be comfortable and wouldn't be disturbed. Then facilitators told them to think of 5 characters that they regard unconditionally. These could be family members, friends, pets, childhood toys. As long as they were someone whose opinion they respect. After that the facilitator asked the participants to think about a situation of anxiety and step into that worry. Participants described it using all the senses and then came up with a totally honest description of how they feel: "I really feel worried about . . . it makes me feel shaky and sick." Then facilitator asked the percipients to think about the significant character of their life and will tell them to surround themselves with these characters. Afterwards, participants were asked to imagine the characters saying to them "Be kind to yourself, care for yourself, nurture yourself, be kind, nurture, care for." Facilitator repeated these words and asked the participants to accept those nurturing and compassionate thoughts. After finishing the task facilitator checked the participants' feelings and thoughts. To enhance the positive feelings of self as a personal growth facilitator asked the participants to think about any sign such as: touching nose, ear lobe, etc. Then facilitator asked the participants to revisit the exercise and while doing the exercise they would add their body sign as an anchoring. In this session participants experienced a way of self-acceptance and as a personal growth they practiced anchoring to make the skill more relevant.

Objectives of the *2nd session* were to increase the goals in life and identifying beliefs that give life purpose and to increase the sense of mastery and competence in managing the environment. In the second session facilitator greeted the participants and asked them any thoughts and learning from the previous session. Then the facilitator discussed about the meaning of purpose of life and environmental mastery. The facilitator asked the participants to pick one area/state that the participants want to work on such as, time management, daily exercise, eating healthy, etc. Then the facilitator asked the questions to the participant: What's your purpose to do the specific task? When you are doing the specific task that you are? What's important for you? How are you doing your

task? What do you do that help you to manage the task? Where do you like to start? With these logical level questions facilitator explored the purpose of a specific task of the participants' life. Then the participants did an open discussion on their environmental mastery, how they would make their specific task more effective with the use of surrounding opportunities

Objectives of the *3rd session* were to increase self-determination and independent for resisting social pressures and to increase warm, satisfying, trusting relationships with others. In the third session facilitator greeted the participants and asked them any thoughts and learning from the previous sessions. Then the facilitator discussed about the meaning of autonomy and positive relationship with others. After that the facilitator went through a procedure with the participants. Facilitator asked the participants imaging the future before them as an ever-expanding straight line/triangle, full of color and possibilities.

They would spend few moments in future and they would think what they might achieve autonomously in their life. Then they looked back their present. They thought about what skills, opportunity do they had then. They saw it, felt it and heard it. From the present state they thought where they want to start. Then participants imagined themselves moving forward, overcoming any possible blocks that might get in their way, and picking up additional resources, until they meet and exceed their original outcome. Again, participants came back to the present and thought about a small step which they can take then. After that maintaining positive relationship among the group members, one participant gave positive feedback to another participant; another participant gave positive feedback to another new participant; like this it rolled. After that facilitator asked their feelings and discussed how this feedback activity can incorporate in maintaining positive relationship with others.

Piloting the Intervention Program

To determine the efficacy of the intervention program "Feeling Good" in bringing change in PWB of YAs, a pilot study was designed. Single pre-post-test measure was used following the design given in table 2.

Table 2. Measureing the efficacy of the intervention program

Pre test ($P_{1)}$	Intervention ($T_{1)}$	Post test ($P_{2)}$	Effect
Administration of Bangla PWBS	Conducting 'Feeling Good' virtual workshop	Re-administering Bangla PWBS	$P_1 < P_2$

Procedure

In order to conduct the intervention program "Feeling Good" on line a WhatsApp group was created to do smooth communication with all the participants. Zoom platform was used to conduct the workshop. One week prior to the first session, the questionnaires BPWBS and personal information form were sent to each of the participants through email to measure their state of PWB before giving the intervention as a comparative baseline. Almost everyone returned their responses within a day or two.

The intervention module 'Feel Good' were conducted in group via Zoom meeting by researcher. A total of three sessions were conducted and a gap between each session was one week. Each session was of three hours long. The sessions were interactive. Group discussions, different activities and question-answer sessions were facilitated by the researcher. All the sessions were recorded after informing the participants and collect their informed consent.

In the post-test phase, once again BPWBS was provided to each of the participant through email. One week after the last session of intervention the post test was sent to respond and well received accordingly. No additional feedback or any other information was provided unless related to the research. As the intervention sessions were basically a part of a workshop or training which contributed to the knowledge and understanding of PWB. It was tried to provide as little information outside of the sessions.

Time Frame

This part of the research started in August 2020. By the mid-September 2020 the data collection procedure was completed.

Data Analysis

Paired t test has been conducted to see whether there is any significant difference between the pre and post scores of the participants. Significant difference means these six components are the predictors of PWB in YAs.

Ethical Considerations

This research was affirmed by the ethical advisory committee of the Department of Educational and Counseling Psychology, University of Dhaka. The accompanying area presents a portion of the significant issues mulled over in keeping up the moral principles of the current research.

Wellbeing of the Participants

The research was not involved in any sort of distressing subject matter. In spite of that, the chance of encountering trouble was plainly written in the consent form and depicted to the respondents prior to requesting their investment. Any type of emotional and psychological support was offered if the study caused any distress in the participants.

Right to Withdraw

The respondents' entitlement to pull out from the research was unmistakably expressed and kept up all throughout the research. In any case, they were made it clear that they could withdraw from the study at any given point in time while the data collection was taking place. They can further ask to withdraw their data or request to not use them in the study if they want.

Confidentiality and Privacy

As the assortment of touchy and individual data is one of the significant worries for any research, the confidentiality and privacy of the participants were given high importance. All conversations and data collection were led in a protected spot affirmed by the respondents. The collected data were kept in a safe online and offline space where only the researcher has access.

Results

The present study investigated the components and predictors of PWB in YAs. For that purpose, the research was divided into three stages and results are presented accordingly. In the first stage, psychometric properties of BPWBS would be presented. In the second section of the result will focus on components and predicators that have been identified for the PWB of YAs. Finally, in the third section the outcome of intervention program will be addressed.

Psychometric Properties of the BPWBS

In order to find out the psychometric properties of the BPWBS-42 parallel form reliability, Cronbach's alpha, internal consistency, subscale correlation and factor loading were calculated using the 20th version of the Statistical Package for the Social Sciences (SPSS) software. The obtained psychometric properties are presented in the following sections.

Reliability

Reliability refers to the attribute of the scale that confirms consistency (Bartko & Carpenter, 1976). If the scale delivers similar scores for a participant each time, the scale has good reliability. Initially, the English-Bengali correlation was looked to see whether the translation was reliable or not (Table 3). And a significant correlation between the English version and the Bengali version was found indicating high parallel form reliability.

Table 3. Correlation between Ryff's English and Bangla PWBS-42

Version	Mean	SD	r	Sig.
English	174.52	18.54	0.62	0.001
Bengali	176.33	19.91		

The next section presents the internal consistency as measured by item-total consistency and subscales consistency. Results are presented in table 4 through 6 subsequently. Cronbach's alpha for the total scale was 0.939. It indicates that all items are highly consistent with total the BPWBS score (Table 5). Deletion of none of the items would have increased the alpha value. Therefore, all items were retained as consistent to be reliable.

Table 4. Mean (SD), range and alpha value of the BPWBS

Mean	SD	Range	Alpha value
148.69	25.00	84-222	0.939

Table 5. Item-total statistics of the BPWBS

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	145.11	583.942	.727	.934
2	145.23	586.675	.737	.934
3	145.24	604.741	.305	.937
4	145.08	598.411	.515	.935
5	145.23	586.675	.737	.934
6	145.13	597.322	.491	.936
7	145.12	604.156	.362	.937
8	145.20	597.902	.474	.936
9	145.25	602.448	.393	.936
10	145.11	585.005	.770	.934
11	145.23	596.417	.491	.936
12	145.04	592.998	.543	.935
13	145.10	604.987	.334	.937
14	145.20	605.618	.347	.937
15	144.97	597.313	.461	.936
16	145.11	583.942	.727	.934
17	145.23	586.675	.737	.934
18	145.24	604.741	.305	.937
19	145.10	613.627	.200	.938
20	145.20	605.618	.347	.937
21	145.15	620.763	.060	.939
22	145.11	583.942	.727	.934
23	145.23	586.675	.737	.934
24	145.24	604.741	.305	.937
25	145.07	588.115	.629	.934
26	145.23	586.675	.737	.934
27	145.21	607.168	.289	.937
28	145.10	604.987	.334	.937
29	145.20	605.618	.347	.937
30	144.97	597.313	.461	.936
31	145.11	585.005	.770	.934
32	145.23	596.417	.491	.936
33	145.04	592.998	.543	.935
34	145.12	604.156	.362	.937
35	145.20	597.902	.474	.936
36	145.25	602.448	.393	.936
37	145.08	598.411	.515	.935
38	145.23	586.675	.737	.934
39	145.13	597.322	.491	.936
40	145.07	588.115	.629	.934
41	145.23	586.675	.737	.934
42	145.21	607.168	.289	.937

Table 6 shows mean scores and Cronbach's alphas for the subscales. All the subscales have acceptable range above 0.70 (Cronbach, 1951).

Table 6. Mean, SD, range and Cronbach's alpha for the 6 subscales

Subscales	M	SD	Range	Cronbach's α
Autonomy	25.19	4.94	13-37	0.76
Environmental Mastery	24.36	5.40	15-40	0.84
Personal Growth	24.86	4.65	11-35	0.75
Positive Relations	25.18	5.66	12-38	0.85
Purpose of Life	24.33	5.91	12-40	0.79
Self-acceptance	24.78	5.06	10-36	0.72

Table 7. Item factor loadings on corresponding factors

Items	Autonomy	Environmental Mastery	Personal Growth	Positive Relations	Purpose of Life	Self-acceptance
1	**.820**	-.088	-.289	.309	-.188	-.046
2	.339	**.779**	-.005	-.526	-.036	.014
3	.220	.371	**.764**	-.006	.341	.145
4	-.590	-.336	.015	**.646**	-.026	-.151
5	.039	.079	-.005	-.526	**.736**	.014
6	.414	-.623	-.059	.047	-.174	**.734**
7	**.507**	-.571	.152	.195	-.052	-.008
8	-.591	**.520**	.312	-.022	.330	.213
9	.333	.077	**.828**	.366	-.641	.404
10	-.851	-.065	-.295	**.550**	-.068	-.042
11	-.636	-.535	.380	-.110	**.830**	.188
12	.014	.053	-.104	.285	-.540	**.768**
13	**.815**	.455	.572	.279	-.060	-.021
14	.187	**.623**	.328	.004	-.094	-.090
15	-.351	-.563	**.829**	.229	-.152	.493
16	.020	-.088	-.289	**.709**	-.188	-.046
17	-.839	.079	-.005	-.526	**.836**	.014
18	.220	.571	-.564	-.006	.341	**.845**
19	**.812**	.258	.361	.246	.005	-.175
20	.187	**.623**	.028	.004	-.094	-.090
21	-.088	.393	**.697**	.180	.077	.436
22	-.820	-.088	-.289	**.709**	-.188	-.046
23	-.239	.079	-.005	-.526	**.836**	.014
24	.220	.571	-.564	-.006	.341	**.845**
25	**.648**	.024	-.016	.226	.253	-.379
26	-.839	**.779**	-.005	-.526	-.036	.014
27	.210	.410	**.820**	.025	.498	-.662
28	.215	.455	.572	**.779**	-.060	-.021
29	.187	-.623	.228	.004	**.694**	-.090
30	.351	.563	.029	.229	-.152	**.793**
31	**.851**	-.065	-.295	.250	-.068	-.042
32	-.636	**.635**	.380	-.110	.230	.188
33	.314	.053	**.710**	.285	-.540	.000
34	.507	-.571	.152	**.820**	-.052	-.008
35	.591	-.520	.412	-.022	**.833**	.213
36	.333	.077	.028	.366	.641	**.704**
37	**.590**	-.336	.015	-.546	-.026	-.151
38	-.839	**.679**	-.005	-.526	-.036	.014
39	.414	-.623	**.659**	.047	-.174	-.034
40	.648	.024	-.016	**.823**	.253	-.379
41	.339	.079	-.005	-.526	**.736**	.014
42	.210	.410	.020	.025	.498	**.662**

Validity

Validity of a scale refers to its accuracy to measure something, which it has been created for (Messick, 1987). Our scale has been developed to measure psychological well-being. If it measures psychological wellbeing accurately it has validity. This section presents different types of validity for the adapted scale. Experts in the field were consulted for ensuring the content validity of the scale. The main question to determine the *content validity* is whether the questionnaires are fully representative of what it aims to measure. 98 to cent present agreement among the experts on the content of the adapted Bangla scale was found, which indicates that the content were valid. To test the *construct validity* factor analytic procedures were performed on the items of the Bangla scale. A principal component analysis with varimax rotation was implemented using all items. Table 7 depicts all items that loaded on the respective factors at or above 0.50. Six factors were extracted by this analysis, each with an eigenvalue greater than 1. It is apparent from the results that the structure is similar to the original English scale in terms of the number of factors composing the scale. Fair representation of all aspects of the construct it aims to measure the construct validity of the BPWBS.

Factor Analysis of BPWBS

Ryff's components of PWB (autonomy, environmental mastery, personal growth, positive relations, purpose of life, and self-acceptance) were tested in the context of Bangladesh. As the factor loadings depicted in Table 7 confirms the six components.

Identifying the Components and Predictors of PWB

Demographic Statistics of the Sample of the Study

Table 8. Selected demographic statistics of study sample

Demographic Variables	N=301
Age	
Mean, (SD); Range	21.89, (2.25); 18-25
Gender	
Male	149 (49.5%)
Female	152 (50.5%)
Level of Education	
Higher Secondary	59 (19.6%)
Honors	195 (64.8%)
Masters	47 (15.6%)
Marital Status	
Unmarried	283 (94%)
Married	18 (6%)
Birth Order	
Only	7 (2.3%)
Eldest	111 (36.9%)
Middle	89 (29.6%)
Youngest	94 (31.2%)
Living Status	
With Parents	50 (16.6%)
Hall/Mess/Flat	239 (79.4%)
With Spouse	7 (2.3%)
Alone	5 (1.7%)
Socioeconomic Status	
Lower Class	7 (2.3%)
Lower Middle Class	66 (21.9%)
Middle Class	217 (72.1%)
Upper Middle Class	11 (3.7%)
Illness	
Physical Illness	35 (11.6%)
Mental Illness	49 (16.3%)

Here Table 8 presents the selected demographic information of the participants. The observation of the selected demographic information (Table 8) of the participants indicates fair representation of YA of both the genders. Such as, the mean age was 21.89 years (SD = 2.25), ranging from 18 to 25 years old. The male to female ratio was 49.5% to 50.5% (152 female to 149 male). Maximum (64.8%) participants were doing their Honors, 19.6% were in Higher Secondary, and 15.6% completed or were in their Masters program. Birth order were almost equally distributed among elder (36.9%), middle (29.6%), and youngest (31.2%); only a tiny fraction (2.3%) was only child. Maximum (79.4%) respondents were living either in a residential hall or mess/flat. 16.6% lived with their parents, 2.3% with their spouse, and 1.7% were living alone. Representation from middle class was higher (72.1%) than lower middle class (21.9%), lower class (2.3%), and upper middle class (3.7%). A small fraction of the participants was suffering physical (116%) and mental (16.3%) illness.

Predictors of PWB for YAs

To identify the predictors related to PWB, answers of the following questions were investigated:

i. Whether there is any significant gender difference in PWBS score?
ii. Whether there is any significant difference of PWB between younger age group (18-21 years) and older age group (22-25)?
iii. Whether there is any significant difference of PWB between two sets of birth order (either only child or eldest child and either middle child or youngest child)?
iv. Whether there is any significant difference of PWB between two sets of socio-economic status (either lower or lower middle class and either middle or upper middle class)?
v. Whether there is any significant difference of PWB between married and unmarried people?
vi. Whether there is any significant difference of PWB between physically ill and fit people?
vii. Whether there is any significant difference of PWB between mentally ill and fit people?
viii. Whether there is any significant difference of PWB among different levels of education?
ix. Whether there is any significant difference of PWB among students from different institutions?
x. Whether there is any significant difference of PWB among students of different living conditions?

A t-test was applied to find out the answers of question i, ii, iii, iv, v, vi and vii. No statistically significant difference was found in terms of total scores. The corresponding table is presented below (9).

Table 9. t-scores of different measures

Measures		N	Mean	SD	t score	Degrees of Freedom	Sig.
Gender	Male	149	149.77	27.10	0.74	299	0.46
	Female	152	147.64	22.80			
Age	18-21	122	149.51	25.24	0.47	299	0.64
	22-25	179	148.14	29.90			
Birth Order	Either Only or Eldest	118	148.37	24.71	-0.18	299	0.86
	Either Middle or Youngest	183	148.90	25.26			
Economic Status	Either Lower or Lower Middle	73	150.23	25.11	0.60	299	0.55
	Either Middle or Upper Middle	228	148.20	25.01			
Marital Status	Unmarried	283	148.76	24.93	0.19	299	0.85
	Married	18	147.61	26.86			
Physical Illness	Yes	35	150.09	24.31	-0.35	299	0.73
	No	266	148.51	30.16			
Mental Illness	Yes	49	143.86	24.64	1.48	299	0.14
	No	252	149.63	25.01			

One-way ANOVA was applied to test the questions viii, ix and x. No statistically significant difference was found among different levels of education, students from different institutions, and living condition as well applying one-way ANOVA (Table 10). Yet there was an upward rise of score in terms of level of education.

Among the respondents 59 were HSC students (146.07 ± 25.10), 195 were Honors students (148.34 ± 24.63), and 47 were Masters students (153.47 ± 26.30).

Table 10. ANOVA scores of different measures

		Sum of Squares	Degrees of Freedom	Mean Square	F score	Sig.
Level of Education	Between Group	1502.79	2	751.39	1.20	0.30
	Within Group	186111.09	298	624.53		
Institution	Between Group	1075.24	3	358.41	.571	0.64
	Within Group	186538.64	297	628.08		
Living Status	Between Group	350.43	3	116.81	.185	0.91
	Within Group	187263.45	297	630.52		

So therefore, the findings indicates that gender, age, birth order, socio-economic status, marital status, and physical or mental health don't have any significant impact on PWB of young adults. Similarly, no significant impacts of different level of education or educational institution or living status were found on PWB of young adults.

Developing an Intervention Program

Demographic Statistics for the Intervention

Table 11 presents the selected demographic information of the participants of the second study focused on intervention module. The mean age was 22.56 years (SD = 2.15), ranging from 18 to 25 years old. The male to female ratio was 31.3% to 68.8% (11 female to 5 male). Maximum (43.8%) participants were doing their Honors and Masters. 12.5% were in Higher Secondary.

Table 11. Demographic statistics of study sample for intervention module

Demographic Variables	N =16 (%)
Age	
Mean, (SD); Range	22.56, 2.16; 18-25
Gender	
Male	5 (31.3%)
Female	11 (68.8%)
Level of Education	
Higher Secondary	2 (12.5%)
Honors	7 (43.8%)
Masters	7 (43.8%)
Marital Status	
Unmarried	13 (81.3%)
Married	3 (18.8%)
Birth Order	
Only	2 (12.5%)
Eldest	5 (31.3%)
Middle	4 (25.0%)
Youngest	5 (31.3%)
Living Status	
With Parents	11 (68.8%)
Hall/Mess/Flat	3 (18.8%)
Alone	2 (12.5%)
Socioeconomic Status	
Lower Middle Class	4 (25.0%)
Middle Class	9 (56.3%)
Upper Middle Class	3 (18.8%)

Birth order were almost equally distributed among eldest (31.3%), middle (25.0%), and youngest (31.3%); only a fraction (12.5%) was only child. Maximum (68.8%) participants were living with their parents. 18.8% lived in either hall or mess/flat and 12.5% were living alone. Representation from middle class was higher (56.3%) than lower middle class (25.0%) and upper middle class (18.8%). No one was suffering from any physical or mental disorder.

Impact of Psychological Intervention

A statistically significant difference in autonomy, personal growth, positive relations, and self-acceptance of the participants between pre and post intervention was found (see Table 12). All the measures mentioned increased in the post intervention phase which confirms the effectiveness and impact of the intervention. Table 12 shows the pre and post test scores.

Table 12. Mean, SD, range, and t-scores for pre and post test scores of the 6 subscales

Subscales	Mean (SD)		Degrees of Freedom	t score	Sig.
	Pre Test	Post Test			
Autonomy	28.44 (5.44)	31.06 (2.96)	15	-2.22	0.04*
Environmental Mastery	25.50 (4.35)	25.94 (3.53)	15	-0.45	0.67
Personal Growth	30.56 (6.09)	33.00 (5.73)	15	-2.42	0.03*
Positive Relations	31.06 (5.14)	35.75 (4.48)	15	-3.49	0.00*
Purpose of Life	29.81 (7.98)	32.44 (6.02)	15	-1.40	0.18
Self-acceptance	29.38 (6.39)	34.94 (6.23)	15	-4.14	0.00*

* $p < .05$

Discussion

In Bangladesh, youth are the greatest viable and prospective human resource, and youth frustration is a well-documented issue (Uddin, 2020). PWB is crucial in life transitions because it indicates the ability to overcome problems, adjust to new situations, maintain relationships, and grow (Uddin, 2020). Limited research could be linked to exploration of the components and determinants of PWB targeted to the young population who face multifaceted challenge of the emerging life. The current study focused at the components and predictors of PWB in YAs of Bangladesh. This study used a three-stage mixed-method design to achieve that goal. The psychometric properties of the BPWBS were provided in the first stage. The second portion of the report concentrated on the components and predictors of young people' PWB that have been found. Finally, the final section discussed the outcome of the intervention program. Each of them is discussed in chronological order.

Adaptation of Ryff's PWBS-42

The study of PWB is becoming increasingly important as human civilization undergoes substantial changes. These modifications may have various effects on PWB depending on the culture. However, other aspects of PWB, such as the desire for healthy interpersonal relationships, a meaning of purpose in life, and personal progress, may be cross-culturally resistive (Lent, 2004). According to confirmatory factor analysis, the BPWBS, like the original PWBS, has six major factors: autonomy, personal growth, environmental mastery, purpose in life, positive relationships with others, and self-acceptance.

The psychometric features of the BPWBS-42, including Cornbach alpha, internal consistency, subscale correlation, and factor loading cast potential evidence on its reliability and validity. There was a major positive correlation ($r = 0.6$, $p < 0.05$) between English and Bangla PSWS-42 which indicated high parallel form reliability. Also, in case of item-total consistency Cronbach's alpha was 0.939 suggesting highly consistent with BPWBS score. Finally, Cronbach's Alpha of all the subscales range above 0.70. This conclusion matched the findings of a number of earlier research, which revealed strong factor correlations between the three subscales in a variety of settings (Abbott et al., 2009; Kafka & Kozma, 2002). It is to be taken into consideration that the study was not conducted on a nationally representative sample while interpreting findings. Future research with Bangladeshi representative samples might give more relevant information on Ryff's PWBS factorial structure, and indirectly, about PWB as a subordinate factor of good relations, autonomy, environmental mastery, personal

growth, life purpose, and self-acceptance. According to the literature (Clarke, Marshall, Ryff, & Wheaton, 2001; Ryff & Keyes, 1995), structural models of wellbeing employing different modalities can generate significantly diverse results. Consequently, the results of self-administered scales are more reliable than those of pre-test telephone surveys. This also explains why there are seemingly contradictory findings in the literature. Self-administered questionnaires were employed in research that revealed lower factor correlations, whereas telephone or in-person interviews were utilized in studies that found less evidence for the multidimensionality of Ryff's PWB (Kafka & Kozma, 2002; van Dierendonck, 2004). In a study the six dimensions of PWB were judged differently enough to consider independent constructs, and confirmatory factor analysis of the underlying structure supported the supposed six factor model with a single component (Clarke et al., 2001). According to the expert agreement over content of the adapted version and the result of factor analytic procedure ensure the content and construct validity. Therefore, BPWBS-42 can be taken as highly reliable and valid tools for measure PWB of YAs of Bangladesh.

Identifying the Components and Predictors of PWB

Factor analysis from the priory gathered data shows that each of the 42 items of PWBS-42 has factor loading over 0.5 on at least one of the six component factors of autonomy, environmental mastery, personal growth, positive relations, purpose of life or self-acceptance which confirms all six of them as components of newly adapted BPWBS-42. Gender, age, birth order, socio-economic position, marital status, physical disease, and mental illness were all shown to be non-significant predictors of PWB in a comparative analysis of the current survey data (Table 9). The current findings confirmed prior findings that age and gender had no significant relationship with happiness (Khumalo et al., 2011). In line with Myers and Diener's (2016) claim that "knowing someone's age offers no indication to the person's average level of wellbeing," (p. 11), the current investigation discovered no significant differences in PWB between age groups. When Ryff (1995) looked at the potential of differences in PWB between age groups, he discovered a varied pattern of substantial age differences, but no clear trend. This absence of a clear age trend, as well as statistically negligible changes in the manifestation of happiness throughout a lifetime, can be attributed to a variety of variables, including personality traits and shared, unchanging living circumstances (Horley & Lavery, 1995). To find whether any difference lies in the different levels of education, students from different institutions, and living condition one-way ANOVA (see Table 8) was applied. The *F* score in each of the variable measured was not statistically significant corresponding to their degrees of freedom. These findings were differing from the previous studies where urban living, employment, education and marital status associated with higher PWB (Khumalo et al., 2011). In conclusion all of the following variables that gender, age, birth order, socio-economic status, institution, living status, level of education, marital status, and physical or mental health is not the predictors of PWB according to the result from the study. This finding is consistent with previous research findings that found that coping strategies (Freire et al., 2016), communication (Miller, 1997), having more positive relationships with family, significant other, and friends (Chow, 2007), optimism (Burris et al., 2009), resilience and empathy (Vinayak & Judge, 2018) were more significant than demographic predictors of PWB (Harding, Lopez, & Klainin-Yobas, 2019).

Developing an Intervention Program

It is possible that by applying different types and level of intervention PWB score of participants can be enhanced. The researchers evaluated the relevant, existing literature on PWB, including the theoretical concepts, principles, and methodologies that were created by Ryff (1989), based on the 6-factor model PWB by Ryff (1989). (1989). All of the information gathered has aided researchers in developing the software, which is divided into six (6) sub-programs. All of these sub-programs, which are based on Ryff's PWB paradigm (1989). These findings would have a significant influence on the relevant body of knowledge linked to psychology in general and PWB in particular, both theoretically and practically. For such an influence to be more significant, the program's content authenticity must be validated before to implementation, otherwise the consequences will be fictitious. The "Feeling Good" intervention module was created with the goal of evaluating the efficiency of an intervention program based on the promotion of PWB in Yas. The findings of this study demonstrate that this intervention was successful in boosting PWB, particularly in terms of personal development. This is consistent with a preliminary assessment of the PWB program (Ruini, Belaise, & Caffo, 2006), which found that this method improved PWB significantly, indicating that the PWB program might have substantial therapeutic implications (Ginsburg, Riddle, & Mark, 2006; Muris, van der Pennen, Sigmond, & Mayer, 2008) According to the results of the assessment, there is a significant change between pre-test and post-test scores in the Autonomy

(p = 0.04), Personal Growth (p=0.03), Positive Relationship (p =0.00), and Self-acceptance (p =0.00) subscales (table 10).

The current study has some limitations. The first limitations are there is no control group in this experiment. If there is a control group which will not get any intervention and the results show significance difference in improvement due to intervention between control groups and experimental, we can more strongly claim the effectiveness of intervention. There are strengths and limitations of psychological interventions. There exist different levels of interventions primary, secondary and tertiary. Effects of intervention of multiple levels on the current study sample remain a future possibility. The intervention process was done during the pandemic COVID-19. To avoid social contact zoom was chosen as the platform to go to conduct the process online. There are multiple drawbacks with online intervention programs. With all kinds of variables like the internet speed, environment of the student being intervened and the intervener are some of the important ones. These all must be strictly maintained to make sure of a standard intervention program. It opens further possibility to see what could be done better ensure all the surrounding matters in the future to have better result through intervention and also possible face to face encounter maintaining safety regulations.

This research backs up the concept of seeing young adults as a period of opportunity and good growth, allowing for the adoption of modern systemic theories of development that emphasize on the individual's relationship with their environment (Lerner, Li, Valdesolo, & Kassam, 2015). The focus on the organism-context as a unit of study (Overton & Ennis, 2006) is based on the idea that human development involves mutually influencing connections with the environment (Brandtstadter, 2006) that, when mutually advantageous, form adaptive development rules (Heckhausen, 1998).

Because of the flexibility that defines this period of human development, connections with our environment are of particular relevance in the study of well-being and good functioning among young people (Lerner et al., 2015). Promotion of well-being in young adults can aid in the achievement of positive outcomes while also functioning as a buffer against bad outcomes such as psychological illnesses (Park & Peterson, 2003 As a result, wellbeing not only serves as a key indicator of positive development, but it can also be used to ensure optimal mental health (Park & Peterson, 2003) and to identify beneficial adjustment pathways between adolescents and their environment, resulting in a higher likelihood of achieving positive changes during the transition to adulthood (Lerner et al., 2013). To validate the efficacy of PWB intervention in improving PWB and reducing YA distress, more study with bigger samples and longer follow-up is needed.

Conclusion

This research backs up the concept of seeing young adults as a period of opportunity and good growth, allowing for the adoption of modern systemic theories of development that emphasize on the individual's relationship with their environment (Lerner, Li, Valdesolo, & Kassam, 2015). The focus on the organism-context as a unit of study (Overton & Ennis, 2006) is based on the idea that human development involves mutually influencing connections with the environment (Brandtstadter, 2006) that, when mutually advantageous, form adaptive development rules (Heckhausen, 1998).

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Recommendations

To validate the efficacy of PWB intervention in improving PWB and reducing YA distress, more study with bigger samples and longer follow-up is needed.

Scientific Ethics Declaration

The authors declare that the scientific ethical and legal responsibility of this article published in EPESS journal belongs to the authors.

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