WORK IN PROGRESS REPORT

Conceptualizations of Mental Health Across Europe: Comparing Psychology with Science and Engineering Students

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There is a lack of consensus on the conceptualization of mental health, with models emphasizing negative aspects, positive aspects, or both. The models are mainly theory-based and may not fit in with the population's opinions. The aim of this ongoing study is to investigate the conceptualizations of mental health in Europe from psychology, science, and engineering students' perspectives in an explorative way through semi-structured interviews. Their conceptualizations of mental health are investigated qualitatively by thematic analysis to compare seven European countries. Results can be used to improve mental health questionnaires and interventions across Europe by enhancing the fit with students' conceptualizations.

Editor's Note

This work in progress report (WiP) was developed by the 2013–2014 cohort of the Junior Researcher Programme (JRP), a service supported by the European Federation of Psychology Students' Associations (EFPSA). During the course of the JRP calendar, the six research groups that are initiated via the European Summer School submit the WiPs of their research to the Journal of European Psychology Students (JEPS). The WiPs are short methodology papers that outline steps undertaken by research groups in developing and carrying out a research project in the context of low-resource, independent, student-driven, cross-cultural research. The WiPs are submitted prior to project completion to enable the authors to improve their research according to the comments resulting from the peer-review process. WiPs also support the dissemination of methods used by student-driven, independent research projects, with the hope of informing others carrying out such work.

The 2013–2014 cohort was inducted into the JRP at the European Summer School 2013, held in Voeren, Belgium.

Introduction

Historically, mental health has been primarily defined in negative terms (e.g., dysfunctioning, illness) and equated to being free of psychopathological symptoms (Maddux, 2002). With the emergence of positive psychology as a scientific discipline, attention in psychological research has been directed to building and maintaining psychological strengths in addition to preventing and treating psychopathology (Maddux, 2002; Seligman & Csikszentmihalyi, 2000; Slade, 2010). Many scholars have suggested including aspects such as autonomy, environmental mastery, purpose in life, and self-actualization into the definition of mental health (e.g., Jahoda, 1958; Ryff, 1989a). In line with this, studies have shown that negative and positive aspects of mental health form two related, but separate dimensions of mental health, rather than two ends of the same continuum (e.g., Huppert & Cooper, 2014; Keyes, 2002). This indicates that positive aspects of mental health are complementary to negative aspects and are more than merely the absence of psychopathology. Therefore, a broader and more complete conceptualization of mental health, including both negative and positive aspects, is suggested (Slade, 2010).

A call for a broader view on mental health is also increasingly visible in global and nationwide policies. For instance,

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the World Health Organization defined mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2001d, p.1). In the UK, the National Health Service Confederation (2011) showed that mental health and well-being were considered as emerging priorities on the public health agenda by health and government leaders. However, the lack of shared understanding of the mental health construct counteracts the efforts towards improving public and mental health. This lack of consensus may be the result of health care policies that are mainly theory-based and expertise-driven, and often overlook the perceptions of the lay members of the public (Huppert et al., 2009).

In fact, there is evidence that public involvement can improve the quality and impact of health care policies by complementing the views of experts and professionals (e.g., Davidson, 2005). Theorists and researchers (e.g., Hicks, Tinkler, & Allin, 2013) consider subjective perceptual indicators as fundamental for decision-making at the societal level, in conjunction with more widely used objective indicators. Therefore, subjective indicators obtained through public conceptualizations may constitute a powerful way to increase consensus on the definition, components, and day-to-day implications of mental health, and therefore improve European mental health policies and interventions.

The aim of the present study is to investigate conceptualizations of mental health in Europe and compare perspectives of psychology students with those of science and engineering students. The main reason for comparing these two majors is the exploration of different perspectives as a result of science and engineering students' lack of psychological background. The study seeks to understand how people conceptualize mental health, whether negative aspects, positive aspects, or both, are included, and to what extent these conceptualizations fit in with existing theoretical models of mental health. Data will be collected in seven European countries (Austria, Czech Republic, Italy, the Netherlands, Serbia, Turkey, and the United Kingdom). As it concerns an ongoing project which was initiated in July 2013, the subsequent report gives an overview on planned activities and milestones, but does not include results yet.

Several previous studies show consistent differences between Eastern and Western countries in the conceptualization of mental health and factors contributing to it, with Western countries reporting, for example, more individualistic aspects as compared to Eastern countries (e.g., Lu, Gilmour, & Kao, 2001). However, most of these studies have employed quantitative methods with pre-defined measures, which were restrictive in terms of revealing people's free and broad associations with the characteristics and descriptions of mental health. A few qualitative studies appear to capture definitions and experiences of mental health better. For example, Ryff (1989b) interviewed American adults to examine their conceptualizations of psychological well-being and her results highlighted the importance of interpersonal relationships

as a key component which was not previously considered as an indicator in quantitative measures. Recent cross-cultural studies using open-ended questionnaires found that European, Australian and South African lay adults had shared as well as differing beliefs about the nature of happiness (Delle Fave, Brdar, Freire, Vella-Brodrick & Wissing, 2011), which is not to be confounded with, but is an aspect of mental health as a larger concept. However, the authors note that these studies were conducted with single-item measures, indicating the need for more robust qualitative designs with multiple questions.

Thus, the present study adopts a qualitative approach and explores psychology, science and engineering students' conceptualizations of mental health through semi-structured interviews. Whereas earlier studies examining the conceptualizations of mental health cross-culturally have either focused solely on positive aspects (e.g., happiness), or on negative aspects (e.g., mental illness), the present study will allow participants to freely draw associations with both positive and negative aspects. The first study aim is to compare psychology with science and engineering students' conceptualizations, gaining insight into the differences and similarities between persons with and without a background in psychology. The second aim of the study is to examine the similarities and differences in conceptualizations across Europe, with data collected from seven European nations.

Method
Participants
Participants from Austria, Czech Republic, Italy, the Netherlands, Serbia, Turkey, and the United Kingdom take part in the study. From each country, a minimum of five psychology and five science and engineering students participate, resulting in a total sample of at least 70 participants with an equal distribution of men and women within each country.

As most of the previous research has been done on adult populations, the current study aims at students, between the ages 18–30. Another reason for choosing this target population is that young adults are at particular risk of mental health problems. Exploring their conceptualizations of mental health could facilitate the adaption of interventions and recruitment strategies to their needs.

The choice of these two areas of study has the aim of achieving sufficiently homogeneous samples across different countries and education systems on the one hand, and on the other hand allowing comparisons between students with a background in psychology and students lacking psychology education, independently from their country. Participants with a major in natural sciences or engineering (e.g., biology, chemistry, physics and mechanical engineering) are regarded as non-experts in psychology. Inclusion criteria are being between the ages of 18 and 30 and following a bachelor or master major in natural or engineering sciences or psychology; PhD students are excluded. In order to isolate cultural differences in conceptualizations of mental health, only participants who were born and raised in the mentioned European countries and have not been living abroad for more than one

year are recruited. These countries were selected because of their diverse geographical locations and cultures and the fact that the researchers are from these countries, enabling them to connect to the language and culture needed to reveal cultural differences. To avoid interviewer biases, persons directly known to the interviewer are excluded.

Previous mental health problems of the participants are not investigated and not included in the exclusion criteria, given the assumption that mental health problems are present in the over-all population and are among the many possible experiences of life that can potentially influence a person's idea of mental health. The exclusion and inclusion criteria mentioned have the scope of obtaining a homogeneous sample across countries, composed of university students with similar age and curricula of study. This population is an interesting target for this kind of research, since it constitutes the potential users and professionals of the mental health system in the near future.

Materials

In this study, semi-structured interviews are conducted. The interview scheme consists of 11 main questions. Example questions are: "What comes to mind when you think of mental health?" and "Do you know anyone who is mentally healthy and what makes you think that?". Further helping questions are included on the interview sheet to help the interviewer ask for explanation, elaboration of examples to gain a thorough understanding. Demographic questions are included at the end of the interview asking the participant's gender, age in years, current year of study, study major, country of birth, and amount of time the participant lived abroad and where.

Procedure

Participants are recruited via each interviewer's social networks and social media by a call for participants, in particular in university groups, and via snowball method. The interviews are conducted face-to-face. The interviewer briefly explains the general purpose of the study. The cross-country nature of the study is not mentioned to the participant, since this may influence the participant's answers. Participants are instructed to associate freely, and it was explained that the interest is in their own opinion, and that there are no right or wrong answers. Interviews are audio recorded, starting after gaining written consent from the participants. After the interview, the participants receive a small treat to thank them for their cooperation.

Proposed Analysis

Interviews will be analyzed using a thematic approach, as the one described by Braun and Clarke (2006). In line with the explorative aim of the study, the analysis will be carried out in an inductive and conceptual manner, rather than deductive and descriptive. The research team will be divided into three subgroups. Groups A and B will be in charge of the first two phases of the analysis process – familiarizing with the data and generating initial codes. Both groups will work on 35 interviews (50%) each, with two people reading and coding each transcript

until agreement, while a third person in each group will be responsible for the process. The ten interviews of each country will be divided randomly between the two groups. After both groups develop a first coding scheme, the coordinators will discuss the respective findings in order to elaborate one overall coding scheme that fits all 70 interviews. Afterwards, Group C will have the task of checking the coding scheme on a random selection of ten interviews. Inter-rater reliability will be then computed using Cohen's kappa. In case of substantial ($\kappa = 0.61$ - 0.80) or high ($\kappa = 0.81$ - 1.00) inter-rater agreement, the coding scheme will be final. In case of lower agreements ($\kappa <$ .61), disagreements will be discussed until consensus is reached. The coding scheme will be adapted accordingly, and the inter-rater reliability procedure will be repeated until substantial or high agreement is reached. The whole research team will work on the final phases of the analysis process: searching for themes (i.e., main and subthemes, with definitions and sample quotes from the transcripts), reviewing, defining, and naming themes to adequately fit in the over-all story expressed by the data, and lastly to produce the reports. Saturation will be assessed by checking whether in the last 14 interviews (two per country) any new information comes up in addition to the themes developed from the analysis of the first 56 interviews (eight per country).

The choice of this process of analysis has three main advantages. Firstly, the themes will be internally homogeneous and clearly distinctive one from another, because different researchers will be in charge respectively of carrying out a first data reduction and of checking whether this adequately captures all the meaningful elements in the original protocols. Secondly, internal validity will increase, because the extracted themes will be empirically and conceptually grounded in the data. Thirdly, inter-rater reliability will increase, since the coding process will be checked by a second person. Inter-rater agreement – present from the start or obtained through discussion – will be a necessary condition for each theme to be maintained. Also, criteria used for assigning a determined code or theme will be noted in order to assure evidence for the decisions taken in the course of the analysis and their implications. Overall, the 15-point checklist for good qualitative analysis provided by Braun and Clarke (2006) will be followed to ensure the quality of the process, for example a thorough and comprehensive coding process, and consistency between described method and reported analysis.

Ethics

Firstly, ethical proposal of the project was submitted to and approved by the ethical committee of the psychology department of an accredited university in the Netherlands with which the prinicipal investigator is affiliated. This was followed by national procedures of ethical consideration for each participating country. Some universities requested an internal supervisor as a guarantee that the project meets the necessary scientific criteria (Italy, United Kingdom). The included person does not influence the project in any way, but is regularly informed about progress of the project, publications and presentations.

Ethical approval was obtained in each country from the universities where data will be collected.

The ethical application included reasons why the study is conducted and detailed information on how the participants would be recruited and interviewed. All participants will be informed about the nature of the study apart from its international aspect. This is justified by making an attempt to prevent the influence this can have on interviewees. A consent form is signed prior to participation, and informal debriefing follows the interview. All interviews are anonymous and confidential; none of the possible quotations will be mentioned in context with any of the participants' names. The collected recordings will be deleted after the end of the project.

Practical

In addition to the principal investigator, every researcher was assigned a role at the start of the project and is expected to make an equal contribution: communications officer, data analysis coordinator, data collection coordinator, literature coordinator, project coordinator, publication coordinator, and, translation coordinator. The project schedule is to conduct the interviews by the end of January, transcribe and translate the interviews in February, and conduct the qualitative analysis in March and April 2014. So far the project team has managed to follow the schedule.

Since the research is conducted in seven different languages, the researchers face some practical issues. Selection of the most suitable terminology was one of them. At first, terms such as 'mental well-being' and 'mental health' were used interchangeably. Then it was decided to closely examine and compare the meaning of 'mental well-being' and 'mental health' across countries to see which one will best suit the project's aim. This was done by asking friends and acquaintances what they think about the chosen terms. In several countries equivalents of mental well-being elicited primarily positive aspects; and it was also not easily translated into certain languages. After further consideration it was decided that the final interview term should leave it up to the interviewee whether to mention positive or negative associations or both, fitting in with the explorative aim of the study. Therefore the umbrella term 'mental health' was selected, covering both positive and negative factors, which is also more easily translated as it constitutes an established term in all of the participating countries.

In lack of professional translators, an attempt was made to have the interview scheme translated as accurately as possible by having back translations of all translated versions of the original English interview questions. Pilot studies in all countries were carried out to assess whether the questions are interpreted correctly by native speaking participants. No major changes were made on the interview, only some small changes, for example in the word order of some questions that had not been clear to the pilot study's participants.

Skype meetings are scheduled once a month, to discuss the progress and make plans for the near and far future; if necessary, an extra Skype meeting is planned. Tasks are distributed equally according to roles assigned and most communication is done via e-mails. Google Drive is used to store and share all research related documents, which do not include any personal details.

Current Status of the Project

The project is part of the Junior Research Programme of the European Federation of Psychology Students' Associations and started with the European Summer School in Belgium in July 2013, where the interview scheme for the qualitative data collection was developed and the project for the coming year was planned. The research team then started the literature search and the translation of the interviews. Pilot studies were conducted in September and changes were then made according to the feedback. Ethical approval was gained from the university the principal investigator is affiliated with. While starting the ethical processes in the universities of each of the countries, the team submitted a literature review in October. Ethical approvals have been obtained and the team is currently in the data collection phase. To date, all interviews have been conducted in Turkey, three in Italy and eight in Serbia. The previously agreed upon number of interviews per country is ten, but can increase depending on when saturation in the data is reached.

Prospective Discussion

The current qualitative study will provide insight into the conceptualization of mental health. It is innovative in investigating the similarities and differences between psychology and science and engineering students, as well as variations among European countries. However, there are several limitations. First, the translations and the meanings attached to the translated terms may not be the same across all languages. A second limitation is that students are not representative of the wider population in terms of socio-demographic variables and findings are not generalizable to the general population. Additionally, interviews will be carried out in a small geographic area of the countries, which may not be representative for any whole country. Nevertheless, taking these limitations into careful consideration, the study is a first step in providing a broader understanding of mental health which would be of benefit for mental health practitioners, policymakers, psychology education, as well as the general public. Specifically, the findings can contribute to the development of more inclusive and culturally sensitive theories as well as quantitative measures for students.

A full disclosure of the current study is foreseen for July 2014. The researchers hope to present their completed work at the European Conference on Positive Psychology (July) and submit a manuscript for publication by September 2014.

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