An Evaluation of a Psychotherapeutic Service for Engineering Students: The Role of Race, Gender and Language

Nazeema Ahmed

Abstract—Mental health in higher education has received increasing attention over the past few decades. The high academic demands of the engineering degree, coupled with students' mental health challenges, have led to higher education institutions offering psychotherapeutic services to students. This paper discusses an evaluation of the psychotherapy service at the University of Cape Town. The aim was to determine (i) the efficacy of the service; and (ii) the impact of race, gender, and language of the therapist on the students' therapeutic process. An online survey was sent to 109 students who attended psychotherapy. The majority expressed favorable experiences of psychotherapy, with reports of increased capacity to engage with their academic work. Most students did not experience the gender, race, or language of the psychologists to be barriers to their therapy. The findings point to a need for ongoing psychological support for students.

Keywords—Psychotherapy, efficacy, engineering, education.

I. INTRODUCTION

THERE is worldwide concern about the number of students graduating from higher education institutions, especially from engineering degree programs [1], [2]. Much of the literature has been influenced by the work of Tinto [3], [4] in the USA and Yorke [5], [6] in the UK, who explore the factors which enable persistence and those which cause students to prematurely leave their degree programs. In addition to the wide range of interacting personal and social factors as well as institutional practices which impact on the retention and performance of students [7], mental health challenges faced by higher education students further impacts on students' capacity to persist with their degree programs. Mental disorders have increased in both number and severity [8]. In an attempt to address this, higher education institutions offer various forms of psychological interventions which have been proven to be effective treatments for students [9]. Even a four-session brief psychodynamic intervention has been found to be effective with students, resulting in them being significantly less depressed and anxious, and presenting with less symptoms following the psychotherapeutic intervention [10].

Many forms of therapy exist, all aimed at shifting a person's way of being in the world to one that is more adaptive and better functioning. A popular form of therapy is psychodynamic psychotherapy, based on psychoanalytic theories about how the mind works. It is used for the treatment of mental or emotional dysfunction. Psychodynamic therapy usually involves face-to-face meetings with a therapist once or twice a week, and it is often time-limited (around 15 sessions) but may be open-ended. Psychotherapy involves structured talk rather than drug therapy. The therapist is usually trained in psychoanalysis which covers a range of psychoanalytically oriented therapies [11]. The therapy is aimed at exploring aspects of the self that are not fully known, and the way in which it is manifested in the therapeutic relationship is explored [12].

It is estimated that one third of all South Africans have mental illnesses, and that 75% of them will not receive any form of treatment [13]. There are specific challenges which university students face which contribute towards them developing mental illness, the lack of adequate mental health services being one of many factors [13]. The Institutional Reconciliation and Transformation Commission report of the University of Cape Town [13] found that the capacity of the central student counselling center was not sufficient to deal with the demands of the students. The report concludes that the university needs to improve its systems to provide mental health services to students.

The demands of the undergraduate and postgraduate engineering degree, coupled with students' mental health challenges, resulted in the development of a faculty-based psychotherapy service at the University of Cape Town's Faculty of Engineering and the Built Environment. In the strained economic climate, the efficacy of this type of intervention for engineering students needed to be established in order for funding to be secured and the service to be maintained. This research aimed to determine the efficacy of the psychotherapy service being offered. The research was conducted towards the end of two intense years of higher education student protest action, where one of the demands included better access to mental health services on campus. In 2017, an investigation was held probing the reasons behind the increase in suicide rates amongst its students, with a record six students dying due to unnatural causes in one year. A university mental health policy has since been developed as the mental health concerns of students formed part of the student demands during these years [14].

II. LITERATURE REVIEW

Since psychotherapy is governed by few common standards, it is considered difficult to generalize about its effectiveness. Furthermore, the cost of psychotherapy and the

Nazeema Ahmed is with the Faculty of Engineering and the Built Environment, University of Cape Town, Cape Town, South Africa (e-mail: Nazeema.ahmed@uct.ac.za).

duration of the treatment has resulted in a growing need to prove its efficacy. The first significant meta-analysis of brief psychotherapy efficacy studies was that of Smith et al. [15] who analyzed 475 published reports on controlled studies of psychotherapy and counselling. They concluded that psychotherapy always had a positive effect, with the average client being better off than those receiving no treatment. The average length of the treatment was 17 sessions [16]. Landman and Dawes [17] then chose a sample of the psychotherapy outcome studies analyzed by Smith & Glass [18] in an attempt to address the concerns raised about the methodological quality of the studies. They however too found positive outcomes as a result of psychotherapeutic interventions.

Saunders [19] argues that psychotherapy is efficacious and effective as an intervention. He found several studies confirming the efficacy of psychotherapy treatments [20], [21]. Several other researchers have reported that there is overwhelming evidence that psychotherapeutic interventions are effective, these research findings being aptly summarized in the paper of Shedler [12]. He highlights that not only do patients receiving psychodynamic therapy improve, but they also maintain the gains over time.

There is a group of researchers who have questioned the validity of psychotherapy [22]-[24]. Epstein [23], [24], in his book, "The Illusion of Psychotherapy", argues that psychotherapy is probably ineffective and harmful. Epstein's [23], [24] argument is that robust evidence for the efficacy of psychotherapy does not exist and furthermore he notes that it has not been found to be more effective that other treatment modalities. He is of the opinion that meta-analyses themselves are pointless because all research studies are flawed, and hence one cannot determine the effects of psychotherapy [23], [24].

Those who conclude that psychotherapy is effective have turned their attention to which specific mental or emotional disorders may best be treated with which type of therapy. Bachar's [25] research for example concluded that there is evidence for the effectiveness of psychotherapy particularly in treating psychiatric disorders such as obsessive-compulsive disorder, depression and anxiety. Advantages of those receiving psychotherapy persisted a year later compared to those who did not receive it. Interestingly they found that the empathy of the therapist and their encouraging the patient to reflect, were key factors in therapeutic success.

In addition to the matching of types of therapies with different disorders, some have turned their attention to the impact of demographic factors on the therapeutic relationship and success. Wintersteen et al. [26] looked at the gender and racial matching between therapists and patients and found that gender-matched dyads were more likely to complete treatment amongst adolescents. They found that racial matching predicted greater retention. Jones et al. [27] reported better symptomatic improvement and satisfaction with therapy when patients had female therapists. Owen and Wong [28] too found that the gender of the therapist impacts on the well-being of patients with some being better at treating men and others

better at treating women. Flaskerud [29] on the other hand found that the therapy process and outcome were not influenced by a client-therapist ethnicity, language or gender match.

III. RESEARCH QUESTIONS

Given the overwhelming evidence of the efficacy of psychodynamic psychotherapy, one may ask why the need to determine efficacy of the work being done in our Faculty. The nature of the therapeutic modality is one which protagonists argue it is not an exact science with an exact methodology and, in addition, the people presenting for therapy are complex in their personality structures, backgrounds, demographics and several other factors. The same holds for the therapist. Furthermore, Shedler [12] notes that there are profound differences in the manner in which therapists' practice even though they may be under the same banner of a psychodynamic psychotherapy intervention. The individual style and personality of each therapist will influence the way in which the therapy unfolds and the interaction between the patient and the therapist [12].

In light of the current climate at the University of Cape Town's Faculty of Engineering and the Built Environment, the aim of this research was to determine (i) the efficacy of the short-term psychotherapeutic intervention offered to students; and (ii) the impact of the race, gender and language of the psychologist on the therapeutic process, as experienced by the student.

IV. RESEARCH METHODOLOGY

All students who were seen by a clinical psychologist during the course of one academic semester in 2018 comprised the sample for the research. The clinical psychologists compiled a summary of the demographic data of the students presenting for counselling, noting their age, gender, race, presenting problem and duration of treatment. The second part of the research involved sending students (who gave informed consent to participate in the research), a brief quantitative and largely qualitative online survey at the end of the academic year. The quantitative questions included the gender and race they identified with, their home language, and the number of sessions they had with their therapist. The qualitative questions explored their experience of the therapeutic process; suggestions for improvement of the service offered; and the extent to which the therapy sessions had an impact on their academic performance and the way they approached their work. The Faculty-based staff complement included four white, female clinical psychologists and two mixed race, female clinical psychologists.

Since the findings of the survey were likely to lend itself to determined categories as suggested by the items, the analysis focused on the key themes arising from each qualitative question. Strauss and Corbin's [30] first phase of open coding was used to open up the data and explore some of the categories arising.

V. FINDINGS

A total of 109 students were seen for psychotherapy, with only slightly more males than females presenting. The predominant race group was African Black students, followed by students of Mixed race. Most students presenting were in their 3rd and 2nd year of study with the primary presentations being Depressive and Anxiety Disorders. Referral of students came largely from academic or administrative staff members. A total of 65 (59.6%) students responded to the survey and some of the findings are discussed below.

A. The Therapeutic Experience

Student's feedback on the therapeutic experience was overwhelmingly positive. Several felt it allowed them to have a better understanding of themselves, and offered alternative ways of engaging with their challenges.

…it helped me do much better in my academics in the second semester and I was better able to handle whatever future decisions I had to make.

It was very rewarding. I was struggling with depression and having access to a therapist (especially J) has helped me beyond words to get through this year.

Several students made reference to the relief they felt as a result of attending the psychotherapy sessions.

I found the process really helpful. At times I could not talk to anyone, not even my closest friends... we were brought up being told a man keeps everything inside… but eventually I opened up and it was like a butterfly through metamorphosis the way I broke out of my cocoon for much more emotional and psychological freedom.

An interesting finding is the extent to which students commented on the non-judgmental nature of the engagement, the authenticity of the psychologist, and their attentive listening skills.

G is so helpful, understanding…just someone who would listen. I didn't feel like her client, or someone she is getting paid to see. …felt like she deeply cared.

I always thought that J was going to tell me things I … heard before from other support structures. What J was for me was something that I never thought I needed. An ear to hear me out and help fill in …. what I knew was right for me but disregarded it. My experience with her allowed me to be myself again, find the pieces of me which I had lost.

The non-judgmental space allowed me to see value and worth in allowing me to acknowledge my opinions (even if it is unpopular and serves no-one but ourselves) and realize that tough times require you to reach for resources to support yourself...

A few students had less favorable experiences of the process, but still found it beneficial.

…it was difficult but liberating and informative. Emotions that were buried for years surfaced and these were put into perspective to help understand my emotional state and needs at the time. At times the sessions felt mechanical but were better than no sessions at all.

B. The role of Language, Gender and Race

The majority of students felt that language, race and gender did not pose a barrier to their therapeutic process.

I felt like she could understand me in English and I understood her as well, so the difference in race group/language had no negative influence to our sessions. (Black, Sotho-speaking student with a White, English-speaking psychologist).

Several students alluded to other qualities of the psychologists which were more important than their demographics.

Race, gender or language didn't play a role at all. If the person is truly understanding, caring and willing to truly listen, the process will be successful. (White, female student with Mixed Race, female psychologist).

She helped me a lot and never at any moment did I feel uncomfortable, I never looked at her as a White person, or as an English speaking person, or as a woman, but as someone who is there to help me. (Black, male, English-speaking student with White, female, English-speaking psychologist).

Of interest is one student who spoke about the challenge of speaking to a person of his own race group.

…black adults are a bit difficult to share with given that most of my experiences with them have been in the form of me subordinating to them in a very conservative and patriarchal setting. Culturally, most issues I have are considered taboo or the fact that I feel a certain way is also considered taboo making it hard for me to open up to black people of my parents' generation. (Black, male student with White, female psychologist).

Of the 65 students who completed the survey, nine students felt that race played role in their therapy and six students felt that language played a role in their experience of their process.

I liked the female person but I would have preferred a black person who I could speak with in my language (Sotho or Zulu or Xhosa are fine). This is only because it would have been easier to open up initially.

I would have like to have a psychologist who was my race because of cultural reasons and they would understand better.

A black person would have understood some of the things about black funerals without me having to explain so much.

C. Improvements to the Therapeutic Service

Students requested more sessions as well as a deeper exploration into their presenting issues. The latter is largely avoided in the short-term psychotherapy model, as it is considered preferable to contain students sufficiently so that they can focus on their academic studies.

I wish I would continue my sessions with Widaad, we only had six sessions. I would have liked more.

The psychologist was very helpful however I feel the time we were given allowed very little intimacy.

I think meeting more than once a week would have been great.

Number of sessions can be increased as well as the number of psychologists.

Some students alluded to the temporary contracts of the psychologists due to financial uncertainty and their struggle with this reality.

W explained to me that she was leaving and won't be there in 2019 so if I continue with sessions I'll be referred to another psychologist. I think it's not a good idea to change psychologist since I had already gotten comfortable with talking to her. I feel like this is going to take me back in terms of progress because I have to start from scratch learning to be comfortable talking about my problems with someone new. I think psychologists should be permanent or have long period contracts.

It was very sad when G left, and I wasn't ready to go see someone else and build a relationship from scratch. It's tiring to keep opening up and telling people your problem. So making sure you keep your psychologist can be something that we as students will greatly appreciate. But overall I love the way you are running this whole ship. Lastly, getting more psychologist is crucial as I eventually got told that I have to go to group therapy as I have run out of psychologist sessions quota. Most of us are struggling to even open up to one person, opening up to a group of strangers is something that most of us will not even consider. That said, I know the politics of the faculty and I understand that you are doing the best you can, and we will forever be grateful. Make the sessions a little longer and flexible.

In our last session, when G said that contact/the 'relationship' would be terminated I felt a bit like the rug had been pulled out from under me. That might be too strong an analogy. I know that these are psychologists in private practice and there is only so much funding that the university has, but it still didn't feel good that I would not be able to email G even.

Increasing funding to allow more staff and more sessions for students.

VI. Discussion and Conclusion

The overwhelmingly favorable experiences of students' therapeutic experience highlight the value of a Faculty-based psychotherapy service. The quality of the therapeutic alliance is key to ensuring that an effective intervention is offered. This research shows the benefits for students' mental well-being which impacts on their capacity to better attend to their academic work.

Some students felt that therapists of the same language and race group would have been preferable. This highlights the need for more diversity in the staff complement, although it is unlikely that we are able to meet all the students' diversity needs. South Africa has 11 official languages and the university has a large complement of international students who speak a range of languages and come from varied cultures. There is also an assumption that racial or language

matching will lead to better therapeutic outcomes.

The limitations of this research include the fact that it only measured the immediate impact of the therapy on the students, and the long-term gains of the therapy were not determined. The alleviation of the presenting problems was not tracked and this may be helpful in future efficacy research on student populations. It is however worth remembering, as Shelder [12] highlights, that psychological health is not only about the absence of symptoms, but it is also about the development of inner capacities and resources that will allow individuals to live with a greater sense of freedom and possibility. The current research findings highlight the importance of duty of care that higher educational institutions have towards students. It also suggests that ongoing funding of these initiatives may go a long way to enabling the persistence of students in higher education and allow for their improved mental well-being.

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