**Learn from the Experts:**

**The Impact of Patient Involvement on Students in Mental Health Education: A Mixed-Methods Systematic Review**

Master's Thesis

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APA: 7th Edition

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July, 2024

**Abstract**

The application of patient involvement in mental health education is growing, yet there remains a need for a comprehensive understanding of the impact on students. As a response, this mixed-methods literature review aims to explore how patient involvement benefits students' knowledge, attitudes, and competencies.

A mixed-methods design was employed to review qualitative and quantitative studies. The sources were derived from databases PubMed, PsycInfo, PubPsych and Scopus. Data extraction followed the Joanna Briggs Institute integrated approach. Qualitative data was thematically analysed, while quantitative data was qualitised to a coherent synthesis. All studies were published between 2003 and 2020. Two qualitative and seven quantitative studies were selected, based on their eligibility and quality. Data derived from students' points of view were assessed.

Ten themes that map the positive impact on students were displayed in the final synthesis. In light of knowledge, the themes (1) comprehension of mental illness, (2) comprehension of clinical context, (3) humanity and holism derived. Considering attitude, the following themes emerged: (4) increased reflectiveness towards own profession, (5) openness towards patient, (6) questioning academic approaches, (7) negative attitudes. Considering competencies (8) enhanced reflective practices and (9) clinical skills were found. One overarching theme appeared: (10) Stigma.

Findings highlighted that patient involvement is an effective intervention that improves students' knowledge in several regards Attitudes of mental health students got less judgemental and increasingly positive. It also equipped students with numerous competencies, useful for later practice. Taken together, this review offers deep insights into the great potential of patients delivering nuanced expertise in mental health education, enhancing students' preparedness for future mental health care.

*Keywords*: patient involvement, mental health education, mixed-methods literature review, students, impact, knowledge, attitudes, competencies, stigma

# 1. Introduction

## 1.1 Patient involvement

The involvement of patients became an important element in the delivery of mental health-related educational programs (Scanlan et al., 2019). The global increase in common mental disorders, along with the widespread *service user movement* during the late 80s brought about numerous changes to mental health education (Campbell, 2005; World Health Organization, 2017). Patients not only gained increasing attention in policy, but also were considered as valued contributors to the delivery and training of mental health students (Campbell, 2005). Similarly, the World Health Organisation has explicitly advocated for patient involvement in 1991, leading many nations to pass laws enhancing patients’ power in mental health services and education (World Health Organization, 1991; Omeni et al., 2014). As a result, patient involvement in education for several mental health disciplines expanded.

*Patient involvement* (PI) describes the active participation of individuals in academic settings, who have been diagnosed with a mental disorder (Towle et al., 2010). As patients who experienced a life with a diagnosable disorder and closely monitored the provision of intimate and detailed treatment on themselves, they are considered as experts (Accreditation Council for Continuing Medical Education, 2019). As experts, they are thus provided with the opportunity to step into a participatory role as an educator or stakeholder, which enables them to share their unique expertise with mental health care students (Snyder & Engström, 2016). Specifically, their primary function centers around sharing their unique expertise in areas such as “teaching, assessment or curriculum development” (Towle et al., 2010, p. 65). Even though several other prominent terms of PI are interchangeably utilized, such as ‘consumer-participation’ or ‘expert by experience’, this study makes exclusively use of the overarching term PI in the following (Towle et al., 2010; Kerry et al., 2023).

## 1.2 Utility of Patient Involvement

### *1.2.1 Patients*

PI can entail several potential benefits when correctly applied. On the one hand, the positive impact on patients themselves has been demonstrated (Sacristán et al., 2016; Ward et al., 2021). It takes patients' meaningful opinions and perspectives into account, according to the principle “nothing about me, without me” (Sacristán et al., 2016, p. 631). As a result, patients

have the opportunity to dispel negative attitudes. Ward et al. (2021) for example report that to traditional power imbalances, resulting from perceived knowledge differences between patients and health services can be addressed and diminished (Ward et al., 2021). Patients further felt able to encounter stigma towards specific disorders and thus challenged the pre-existing assumptions (Ward et al., 2021). Encountering the stigmatizing attitudes about mental health is empowering to patients, as they report of feeling able to make a difference to students (Ward et al., 2021). In line, Towle et al. (2010) additionally report cases of patients whose self-esteem was raised and their feeling of empowerment increased. Thus, PI is an opportunity bearing great potential for the self-esteem of patients.

Involving patients in educational settings is also seen as a promising tool that can support patients' way of recovery. According to Newton-Howes et al. (2020), it facilitates the recovery-process, potentially diminishes discrimination, and promotes social inclusion. Another study by Ward et al. (2021) investigated the impact on patients and demonstrated that patients indeed benefitted from their role of being an educator. Specifically, patients who played an active and involved key role in education labeled their experience as worthwhile, as they could return a part of the help that they received back to health services. Another highlighted benefit displays, that patients could finally create a recovery-oriented narrative that supports their positive stance toward their individual future (Ward et al., 2021). Due to the benefits PI can provide, patients increasingly express the wish to be included in educating settings (Lester et al., 2006). Taken together, PI offers patients several opportunities to encounter negative attitudes and in turn feel empowered by PI.

### *1.2.2 Educators*

On the other hand, educators can profoundly benefit from PI. According to previous research, patients have the crucial potential to provide expertise that the usual academic staff cannot offer (Gordon, 2023; Towle et al, 2010). Meehan and Glower (2007) moreover highlight the benefits a patient can provide educators with. Patients are considered unique experts, as they obtain first-hand experiences about mental illness, which exceeds the capacities of traditional academic staff. Specifically, patients are able to contribute to the educational environment by equipping institutions with essential, specific information and insights into their experiences. Such expertise can be used to revise the academic guidelines and foster the possibilities to meet

educational needs (Accreditation Council for Continuing Medical Education, 2019). Moreover, patients can provide useful feedback on students' performances (Accreditation Council for Continuing Medical Education, 2019). Consequently, patient-informed approaches may enhance the possibilities for students to meet their educational goals, which benefits educators simultaneously.

### *1.2.3 Mental Health Students*

In addition to patients and stakeholders, PI is considered of great value for students themselves. One benefit refers to the attitudinal change among students. Happell et al. (2014) for example, investigated the impact of PI on students' attitudes and found that their unconscious understanding was challenged, and they felt pushed out of their comfort zone. A literature review by Repper and Breeze (2006) also concluded that PI can enhance empathetic understanding and enhance students' communication skills. Another recent study by Grandón et al., (2023) also investigated the effectiveness of PI for students. Particularly 244 students from several educational programs, such as psychology, social work, or nursing participated. It was found that PI indeed reduced stigmatizing beliefs as well as the wish to distance socially from impacted patients (Grandón et al., 2023). In turn, this effect was also associated with higher levels of closeness, intimacy, or trust.

Not only attitudinal changes can be elicited by PI, but also student's skills important for practice can be enhanced (Eijkelboom et al., 2023). By being taught by a patient over a long time, students can also become acquainted with asking for and receiving feedback from patients, which portrays an important skill in later practice. This not only increases necessary feedback skills needed in later practice but also improves students' performances in educational settings. Throughout the construction of longitudinal relationships in the frame of education, students learn how to gain a person-centered stance, so that empathetic sensation is stimulated (Eijkelboom et al., 2023).

Moreover, students gain insightful knowledge about the diversity of patients. As patients typically portray a broad spectrum of identities, as they differ in for example nationality, socioeconomic status, language, or culture, students are also able to grasp the meaningfulness of treating a patient as a person with different needs, preferences, and perspectives. Patients who may be underrepresented in practice, due to personal circumstances, such as poverty, find space

to communicate their experiences (Eijkelboom et al., 2023). Thus, the ability to broaden educational insights and to prepare for later care is profoundly enhanced by PI.

All in all, PI enables a valuable challenge to broaden students' perspectives on clients and the tailored treatment process. Thus, the educational environment bears the meaningful opportunity, that equips the student with necessary competencies. Numerous possible benefits for students can be offered by PI.

### 1.3 Policy Background

The service user movement elicited a major change in general policy on an international level (Campbell, 1985). During the last twenty years, this change has slowly been mirrored in guiding principles for education, stipulated by accrediting bodies (Campbell, 2005; Logan et al., 2022). Consequently, PI became an inevitable and necessary requirement in some disciplines that educate mental health professionals (Happell et al., 2014). Examples requiring specific standards for PI are Australian programs of social work, occupational therapy or psychology (Logan et al., 2018, Logan et al., 2022). The Australian Occupational Therapy Council for instance explicitly asks for the inclusion of PI: "The perspectives of consumers/service users/clients inform the design, delivery, and evaluation of the program" (Logan et al., 2022, p. 704). Next to that, the Nursing and Midwifery Council in the UK, which also considers mental health nursing emphasises the encouragement of patients in educative nursing curricula as well (Commissioning Board and the Department of Health, 2012). Such guiding principles in mental health education or general policy are especially salient in countries with a noticeable emphasis on consumerist policies, ascribed by to the former service user movement (Lewis, 2014). However, research shows that other countries also implemented significant and meaningful requirements for PI in educational settings (Horgan et al., 2020). Thus, there remains a lot of variety in implementing PI in practice.

### 1.4 Ways of Implementation

PI is a versatile concept. On the one hand, the official expectations for the implementation of PI differ (Source from above). On the other, several possibilities to apply PI exist. Common methods include participating in educative elements such as decision-making, or course advisory committees, the assessment of students, research, producing learning materials,

teaching or lecturing (Happell et al., 2014; Sacristán et al., 2016; Scanlan et al., 2019; Logan et al., 2018). Further, teaching or participating in committees can become a possible element of PI (Happell et al., 2014). As a result, placing PI needs to incorporate several guidelines and possibilities, so that the degree to which patients are considered in educational settings varies greatly between educators.

Several concepts that map those varying possibilities of PI provide eligible guidelines. Goss & Miller (1995) for example conceptualise patient involvement as a *5- level continuum*, which can serve as a reference for educators. By moving the hierarchy of the level upwards, the partnership between patients and educators is enhanced. Whereas level one encompasses no PI, level five describes a joint working relationship, including decision-making processes, common development of projects, and assessment of clinical health students (Goss & Miller, 1995). Nevertheless, the application of the continuum gives rise to question the usability of the continuum. According to Logan et al. (2018), the descriptive instructions on execution are merely insufficient.

In contrast, the *Spectrum of Involvement* conceptualized by Towle et al. (2010) serves the purposes of broad and sufficient application. It incorporates fundamental elements of the *Cambridge Framework* by Spencer et al. (2000) and the *Ladder of Patient Involvement* by Tew et al. (2004). As a result, a taxonomy was created by Towle et al. (2010), which is demonstrated in Table 1. The framework comprises six different levels of PI and in ascending order, the PI gets more active. Each level of PI is moreover evaluated by five attributes, to which each level can be fulfilled and executed. This model aims to enable a clearer basis for the communication of the patient's role and its possibilities (Towle et al., 2010). Therefore, it is going to be used as the underlying framework of the current study.

***Table 1***

*Towle's spectrum of involvement, including the level of Patient Involvement alongside of six attributes*

| Level of PI | Attributes | | | | |
|---|---|---|---|---|---|
| | Duration of contact with learner | Patient autonomy | Training for the patient | PI in planning the encounter | Institutional commitment |

| | | during the encounter | | and curriculum | to PI in education |
|---|---|---|---|---|---|
| 1) Paper-based or electronic case or scenario | None | N/A | N/A | None | Low |
| 2) Standardised or volunteer patient in a clinical setting | Encounter-based | None | None | None | Low |
| 3) Patient shares his or her experience with students within a faculty-directed curriculum | Encounter-based | None- low | Brief, simple | None | Low |
| 4) Patient-teacher(s) are involved in teaching or evaluating students | Variable | Moderate | Structured, extensive | Low-moderate | Low-moderate |
| 5) Patient-teacher(s) as equal partners in student education, evaluation and curriculum development | Moderate-extensive | High | Extensive | Moderate-Extensive | Moderate |
| 6) Patient(s) involved at the institutional level in addition to sustained involvement as patient-teacher(s) in education, evaluation and | Extensive | High | Extensive | High | High |

| | |
|---|---|
| curriculum development for students | |

*Note.* N/A = not applicable

The proposed frameworks conceptualising PI in educational settings highlight different degrees and elements of PI, as well as provide a clear foundation for common understanding. The extent to which educators implement PI varies. Even though a diverse spectrum of opportunities for educators exists, the individual implementation as such needs to benefit all stakeholders, namely patients, educators as well as students. The taxonomy of Towle et al. (2010) of PI is used in the following as an underlying framework for further assessment of PI.

### 1.5 Research Gap

Despite the positive impression of benefits, great difficulties in implementing PI are well-articulated. Scanlan et al. (2019) have identified limited patient participation in educational settings, in which patients are primarily subject to holding guest lectures. Bennett-Weston et al. (2023) confirm these findings, as they argue patients rather adopt the roles of a storyteller than actual, equally treated partners. Furthermore, Happell et al. (2019a) investigated the feasibility of PI and found that, several barriers indicated by participants but also patients, which reflects the challenges still existing in the implementation. Rather, the implementation is executed ad hoc, and patients are denied opportunities that go beyond storytelling. Forrest et al. (2000) underline those findings and report, that an equal partnership is rarely observed.

Studies trying to assess PI alongside a given model depicting PI also faced difficulties. The recent study by Bennett- Weston et al. (2022) for example originally aimed for the assessment of PI utilizing the spectrum of involvement by Towle et al. (2010). However, they faced insuperable challenges to fit the studies roughly into the specific, available levels. They encountered the same problem with the *Ladder of Involvement*, conceptualised by Tew et al. (2004), so that they were unable to align each selected paper with a level of any available concepts (Bennett-Weston et al., 2022). To mitigate the challenges faced by Bennett- Weston et al. (2022), this study merely includes papers, which explain their concept of PI. If studies do not

explicitly refer to a specific level of involvement, the wording of the authors is subsequently translated into Towle's spectrum of involvement (Towle et al., 2010).

Despite the recognized importance of PI in public and education, its application in mental health programs as psychology remains underexplored. The literature review by Arblaster et al. (2015) reported weak evidence of PI in mental health programs and called for further, more intense research. In line with these findings, a great deal of research discusses the magnitude of PI on mental health nursing students, doctoral or medical students, while the utility in general mental health, psychological, or therapeutical settings is almost neglected (Gordon, 2023; Happell et al. 2019a). Given the fact that mental health issues gained increasing attention and their prevalence has increased worldwide, investigating the potential of PI in mental health programs is from utmost importance (World Health Organization, 2017). Hence, further research is needed to pinpoint the importance of PI in mental health education.

Adding to that, research into the actual impact of PI on mental health students is limited. On the one hand, previous research lacks the investigation of PIs effects on students. According to a literature review by Repper and Breeze (2006), merely two of thirty- eight papers investigated the effects of PI on students learning. Happell et al. (2019) agree with those findings and argue, that there is a need to pay more attention to PI, specifically in the education of mental health nurses. On the other hand, if studies indeed assess the impact, they heavily focus on investigating stigmatizing or empathetic attitudes (Reeper & Breeze, 2006, Ward et al., 2021). Hence, a broad overview of the impact of PI on several attributes of prospective mental health nurses remains elusive. Thus, a detailed overview beyond the focus on stigma or empathy is needed, namely on several domains in which students need to excel in later practice. Due to the deficit of studies centering around the impact of PI on psychology students for example and the extensive research on mental health nursing, this study also includes, but is not limited to papers focusing on mental health nursing students. Followingly, those results can be generalised to other student populations, such as psychologist or general mental health or social study programs.

**1.6 The Present Study**

This study aims to provide a broad overview of recent research findings, that address the impact of PI on mental health students. As a response, this study makes use of a mixed- method literature review, which enables a comprehensive examination of the potential benefits of PI for

mental health nursing students. Particularly, the impact of PI on students' knowledge, attitudes and competencies are going to be investigated. Gaining such a comprehensive understanding of how PI impacts those students sheds light on the potential of PI for mental health students in enhancing their professionality, and thus provides educators with valuable practices for mental health education.

To encounter one-sided findings but also to broaden the possibilities for the evidential representation of results, quantitative and qualitative findings centering around students' perspectives are comprised. Hereby, gaining broad insights on students' subjective but also objective learnings from PI in mental health education is possible. Moreover, the mixed-method analysis allows to examine the coherence or discrepancy between quantitative and qualitative results (Aromataris & Munn, 2020).

Overall, this study presents the impact of PI in educational settings on students' perspectives. In particular, the following research questions are going to be addressed: (1) What is the impact of PI in mental health education on students' knowledge? (2) What is the impact of PI in mental health education on students' attitudes toward patients? (3) What is the impact of PI in mental health education on students' competencies?

## 2. Method

For the purpose of the study, a mixed-method systematic review (MMSR) was deemed appropriate. It makes use of a combination of qualitative, as well as quantitative research, in order to provide a detailed and in-depth synthesis.

### 2.1 Search Strategy

The systematic literature search was conducted between December 2023 and February 2024. The databases used were PubMed, PsycInfo, PubPsych, Scopus, and ScienceDirect to search for potentially eligible literature. PubMed was chosen for its high-quality, freely accessible literature on (mental) health disciplines (Tober, 2011). PsycInfo and PubPsyc were selected for their peer-reviewed, high-quality literature on behavioural and social sciences (Ebsco, n.d). Scopus and ScienceDirect were included due to the breadth and topicality of the literature available (Tober, 2011). Hereby, it was ensured that the literature meets qualitative

standards and comprehensively covers a broad range of mental health disciplines, meeting the demands of the research question.

A specific query was used, which developed iteratively by experimenting with different phrase combinations. The query combined the concepts *patient involvement*, *mental health*, *tertiary education*, *clinical health students* and *impact.* Moreover, boolean operators as and truncations were used, in order to optimise the search strategy and specify the hits. The final search string used to start the literature search was the following:

((“Patient involvement” OR “client participation” OR “client involvement” OR “service-user” OR “consumer” OR “experts by experience” OR “lived experience” OR “EBE”) AND (“mental health” OR “psycholo*” OR “psychotherap*” OR “psychoanalysis” OR “nurs*”) AND (“education” OR “tertiary education” OR “higher education” OR “universit*” OR “postgraduat*” OR “training”) AND (“psychology students” OR “undergraduate” OR “trainees”) AND (“effectiveness” OR “impact” OR “effects”)).

### *2.1.1 Eligibility Criteria*

In order to be included in the following study, following eligibility criteria, chosen for the purpose of answering the research question needed to be met:

1. Studies that define patient involvement as the inclusion of individuals that experience(d) mental health issues and according treatment and are hereby permitted to be involved in tertiary education, namely universities or training programs.
2. Patients roles in studies are in accordance with one of the levels proposed by Towle’s taxonomy of PI (Towle et al., 2010).The applied PI has to reflect one of the levels depict in Towle’s taxonomy of PI.
3. Studies, that include patients as tutors, teachers and/or as part of the academic staff in tertiary education.
4. Studies, in which undergraduate and postgraduate students who follow mental health-related disciplines make up the primary participant pool. Included example programs can be social work, psychiatric nursing, psychology or other related mental health studies.
5. Studies in which the aim was to assess the effectiveness and/or the experience of patient involvement on students' attitudes and perspectives in the delivery of education. Thus,

articles in which the study design was either quantitative and/or qualitative are determined as eligible.

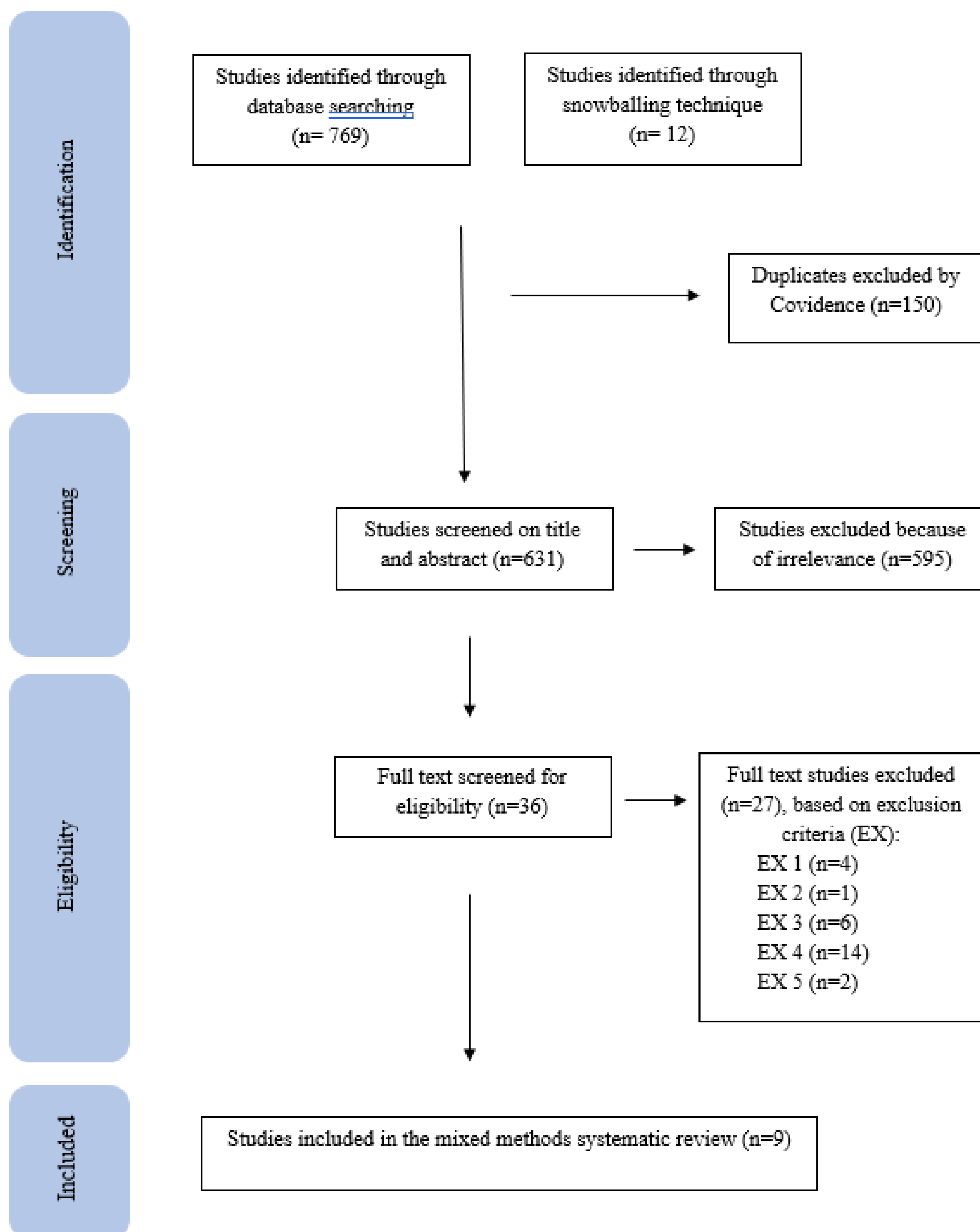
6. Studies that were written in English language.
7. Studies that were published after 2000, due to increased emphasis on PI in mental health education.
8. Studies that were published in peer-reviewed journals.

## 2.2 Study Selection and Data Extraction

Generally, the screening process and article selection was executed by using the review tool *Covidence*, which enables the management of systematic reviews. The tool enables a systematic screening and reviewing of literature. The first step in the selection process was made based on screening the title and abstract and whether they included all the relevant basic variables, underpinning this study. Hereby, duplicates were removed. Second, the full text was scanned for the potential of eligibility. Especially the methods and results section gained major importance, to ensure the studies' sufficient applicability, reliability, and validity. Studies not fulfilling eligibility criteria were removed. Third, the snowball technique was applied. By screening the reference list of each study, it was cross-checked for further appropriate articles. After the articles were retrieved, they lastly were re-assessed for the final fit, by considering the whole text and its quality. The selection process is illustrated by a Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram, which is depicted in Figure 1.

**Figure 1**

PRISMA flowchart illustrating the selection process of article identification



The primary data retrieved from the articles mainly focused on the authors, year of publication, country of origin, study population, study design, level of PI, goal of the study and outcome measures. The study population was labelled as either students following psychiatric or psychological education programs, psychiatric nursing or social work. Mainly, the study program needed to include an emphasis on mental health treatment. Specifically, the student's perspective and point of view on the effects of PI were focused hereby.

The study design of each article was categorized as either qualitative or quantitative, or a combination. Studies using a quantitative design were used to extract measurement tools, their quantitative results and statistical significance. The analysis of qualitative studies, in contrast, primarily aimed to retrieve the underlying themes that underpin the current study's aim and are relevant to the research questions.

### 2.3 Quality Assessment

The quality of the studies was appraised using the Mixed Methods Appraisal Tool (MMAT) displayed in Table 2 (see Appendix). Initially, two screening questions, applicable to all study types were answered (Hong et al., 2018). If either is answered with *No* or *Can't tell*, further appraisal is not recommended. Then, the tool categorises studies into five primary study types, each one assessed by five questions about methodological quality, with responses being *Yes*, *No*, or *Can't tell*. Finally, it is decided whether the study is included or excluded. At least three questions per study need to be answered with *Yes*, to be appraised and included in this literature review. If studies do not meet these required criteria, they are excluded.

### 2.4 Data Synthesis

The synthesis of the current study follows a convergent integrated approach, according to the Joanna Briggs Institute (JBI) methodology for mixed-methods systematic review (Aromataris & Munn, 2020). As either quantitative or qualitative findings could answer all research questions, the analysis aims to assemble quantitative and qualitative research findings into a coherent synthesis. Therefore, the current study adheres to the following steps:

First, the qualitative studies are analysed. Therefore, the results of all qualtitative studies are considered and scanned for data based on students' subjective experiences with and opinions about the effects of PI. Afterward, the relevant findings to answer the research questions are

extracted.  Hereby, it needs to be considered that also minor details are abstracted, in order to substantiate the overall findings of the study with detailed, individual illustrations.

Second, findings of all included quantitative studies are examined. Hence, the quanitative studies are scanned for objectively measured outcomes that comprise the effects of PI on students, specifically on their competencies, attitudes and knowledge. In order to enable a coherent synthesis subsequently, consisting of qualitative as well as quantitative information, quantitative information needs to be *qualitised*. Statistically presented outcomes were hence transformed into a textual, narrative phrasing, according to the procedure recommended by the JBI. (Aromataris & Munn, 2020). Hereby, a suitable framework to analyse the derived information is created. Not only significant test- results but also non-significant outcomes were extracted and reported, in order to generate a coherent and complete synthesis of results.

Lastly, the assembled qualitative and 'qualitsed' data is then scanned for themes and subthemes that emerged, which are necessary and crucial to respond to the research question.

**2.5 Data Analysis**

Data gathered from the synthesis is subjected to a qualitative, direct content analysis according to JBI methodology (Aromataris & Munn, 2020; Dixon-Woods et al., 2005).

The analysis was managed by utilizing the research software ATLAS.ti (version 9.1). Since the domains of interest are given by the underlying research questions (knowledge, attitude and competencies), the underlying content is examined per research question. Followingly, the data underwent an iterative coding process, in which units of data are pooled together thematically, resulting in sets of differentiated codes. Afterward, the created codes are attributed to overarching themes, resulting in an organized, generated collection of themes and subthemes. An example: If two studies mention an effect of PI on students' skills to communicate with patients, the chunks of information are coded as *skills* and put together into the theme of *personal skills*. If themes are suitable to respond to more than one research question, they are represented as overarching themes. The frequencies of each theme and subtheme are calculated. In the end, the content analysis enables a comprehensive understanding of the findings, facilitating the response to each research question.

# 3. Results

Of the overall 781 identified articles, 150 duplicates were removed at first. Afterward, the title and abstract of 631 studies were screened, whereupon 595 were excluded because of irrelevance. The remaining 36 studies were screened for full text, which led to an exclusion of 27 studies. One major reason for the exclusion of those studies were an unsuitable population of investigation. Either participants who were supposed to function as patients were for example suffering from physical instead of mental health issues, or students did not follow an exclusively mental health programme or course. Studies, in which a course was offered to train patients themselves, aiming for later application in a setting of patient involvement at universities were also excluded. Finally, nine articles were qualified for being included in the mixed-method systematic review.

## 3.1 Characteristics of the included studies

The study design of two studies can be classified as quantitative, while five studies utilized a qualitative study design. Among the qualitative studies, three studies conducted interviews, either via the phone or personally in a semi-structured or in-depth- interview style. Other studies analysed the underlying topic of interest by conducting focus groups.  Two further studies were characterised as a mixed-method studies.

All studies were published between 2003 and 2018. The majority of the included studies were conducted in Australia, England or in New Zealand, whereas a number of studies were executed in several countries simultaneously. Participants of all included studies were primarily comprised by undergraduate or postgraduate nursing students with a focus on mental health, or Cognitive Behavioral Therapy (CBT) trainees. Considering all included studies, the sample size ranged from six to 194 participants.

Studies differed in the level of PI they complied, when taking into account Towle's taxonomy of PI (Towle et al., 2009). None of the included studies met the criteria for accomplishing the first level of PI, whereas all other levels were represented. PI in the majority of studies could be categorized into the fourth or sixth level of PI (Towle et al., 2009).

## 3.2 Integrated Findings

Ten themes were revealed by the data analysis, which are broadly displayed in Table 3. Further, the underlying subthemes, the frequencies of themes and the studies they derived from are visualized. An overview of the data extraction is depicted in Table 4. The following results are organized along the three research questions: knowledge, attitudes and competencies and the equivalent themes.

**Table 3**

*Frequency Table of Integrated Themes, including Subthemes and the Studies they Derive from*

| Themes | Subthemes | Frequencies | Studies |
|---|---|---|---|
| | Knowledge (n=20) | | |
| 1. Comprehension of mental illness | Understanding the daily issues of mental illness and its impact, Recovery- focused care and the attaining of recovery | 7 | Byrne et al., (2013a), Byrne et al. (2013b), Happell et al. (2019b), Jack (2019) |
| 2. Comprehension of clinical context | Broadened perspective on mental health system, appreciation of mental health jobs | 5 | Byrne et al. (2013a), Happell & Roper (2003) |
| 3. Humanity and Holism | Importance of Partnership, encountering both perspectives in relationship, importance of an effective and compassionate interaction, attention to patient's needs, holistic care, humanity | 18 | Byrne et al. (2013a), Happell et al. (2019b), Happell & Roper (2003), Jack (2019), Schneebeli et al. (2020) |
| | Attitude (n=30) | | |
| 4. Reflection of the personal stance towards the Profession | Questioning personal approach and attitude to practice, reflecting pre-assumptions and personal beliefs about mental health care, readjusting priorities in practice in favour of patient | 6 | Bingham & O'Brien (2018), Byrne et al. (2013a), Byrne et al. (2013b), Happell & Roper (2003), Jack (2019) |

| | | | |
|---|---|---|---|
| 5. Openness towards patient | perspective-taking, questioning previous assumptions about mental illness, increased openness and more positive attitude towards patient, importance of recovery and hope | 16 | Byrne et al. (2013a), Byrne et al., (2013b), Happell et al. (2019a), Happell et al. (2019b), Happell & Roper (2003), Jack (2019), Schneebeli et al. (2020) |
| 6. Questioning academic approaches | Questioning academic approaches and practical approaches, e.g. the biomedical model | 4 | Garwood & Hassett (2019, Happell et al. (2019b), Jack (2019) |
| 7. Negative attitudes | High expectations of PI course, patient was perceived as vulnerable, felt responsibility, negative attitude of PI towards CBT approach | 3 | Garwood & Hassett (2019), |
| | Competencies (n=19) | | |
| 8. Enhanced Reflective Practices | Greater self-reflection, self-awareness | 5 | Byrne et al. (2013a), Byrne et al. (2013b), Happell & Roper (2003) Jack (2019) |
| 9. Clinical skills | Empathy, Compassion, Communication skills, readiness for future practice | 14 | Byrne et al. (2013a), Byrne et al. (2013b), Happell et al., (2013a), Happell & Roper (2003), Jack (2019), |
| | Overarching Theme (n=4) | | |
| 10. Stigma | Questioning preconceptions about mental illness, accomplishing stigmatizing attitudes, conquering self-stigma | 4 | Bingham & O'Brien (2018), Byrne et al., (2013b), Happell et al. (2019a), Happell et al. (2019b), Jack |

| | |
|---|---|
| | (2019), Schneebeli et al. (2020) |

*Note.* CBT = Cognitive Behavioural Therapy, Frequencies = The number of times the themes appeared

### *3.2.1 Knowledge*

**Comprehension of Mental Illness.** Generally, students articulate a broadened understanding of mental illness, as a result of experiencing PI (Byrne et al., 2013b; Happell et al., 2019b). Specifically listening to the patient's experiences seemed to provide a comprehensive understanding of how living a life with mental illness looks like (Happell et al., 2019b). One student for instance reflected on their experience and describe PI as "… It's like seeing things with fresh eyes what is going on" (Byrne et al., 2013b, p. 198).

Not only the meaning of a mental illness was reflected upon, but also the consequences a diagnosed mental illness entails (Byrne et al., 2013b). Students articulate to be increasingly able to estimate the impact of a life with mental illness (Byrne et al., 2013b). Accordingly, one student for example mentioned: "[I] will probably ... think a bit more ... about- the patient's side ... in a way it is still with us what they told about how they experienced things…" (Happell et al., 2019b, p. 954)

Next to the diagnosis and its consequences, students claimed to have gained increased knowledge about the possibilities of recovery (Byrne et al., 2013b; Happell et al., 2019b). Students in the study study by Jack (2019) not only experienced an improvement of understanding the concept recovery, but moreover realized that recovery is indeed attainable (Jack 2019). In line with those findings, Byrne et al. (2013a) report that the students who experienced PI were increasingly able to apply the recovery model across the spectrum of mental health care and nursing.

**Comprehension of Clinical Context.** On the one hand, students who experienced PI report about a broadened perspective on the overall mental health system and its functions for care delivery (Byrne, 2013a; Happell & Roper, 2003). For example, 71.24% of the participants in the study by Happell & Roper (2003) declared, that they experienced an increase in awareness and an enhanced reflection on their practice. Byrne et al. (2013a) additionally found that students labeled their experience of PI as tasting clinical reality (Byrne et al., 2013a). Particularly,

students exemplified this experience to the valuable insight into both perspectives of the therapeutic relationship (Byrne et al., 2013a).

On the other hand, studies report that the experience of PI increased students' appreciation of mental health care (Byrne et al., 2013a; Happell & Roper, 2003). For example, PI encouraged students to students to realize the true, underlying nature of their job as mental health nurses, which in turn motivated them to become more effective clinicians (Happell & Roper, 2003). PI was determined as a source to develop the awareness, that clinical practice is much more far reaching than merely attending to physical needs of patients (Byrne et al., 2013a).

**Humanity and Holism.** Students emphasised, that they have an increased understanding of humanity and holism, its importance and meaning (Jack, 2019; Happell et al., 2019b). As addressed by Happell et al., (2019b), students were able to grasp the concept of holistic care, which they found difficult to understand beforehand (Happell et al., 2019b). In turn, person-centred care was emphasised by PI and enabled students to display the whole person, so that they could view the patient in a broader context (Byrne et al., 2013a; Happell et al., 2019b).

Next to that, PI enabled students to comprehend the meaningfulness of a partnership between carer and patient, particularly its necessity as well as its purpose (Byrne et al., 2013b). Those findings are verbalized by the voice one student: "The course has helped me to work with patients rather than working over them, to be more understanding of what the patient is going through—to listen“ (Byrne et al., 2013a, p. 268).

Not only the partnership in general but also the detailed interaction matters between patient and carer gained attention by participating in PI (Schneebeli et al., 2010). In another study, they were able to acknowledge and appreciate the importance to develop respect and learned that the feeling of understanding is a crucial aspect, especially as patients are seeking help (Happell et al., 2019b; Happell & Roper, 2003). Happell & Roper (2003) additionally found, that 33,33% of students sensed an increased understanding of the carer's impact on patients and how carers are supposed to respond. Next, students participating in the research by Jack (2019) were able to grasp the importance of the "little things" (p. 132). Specifically, the power of the patient's narrative clarified students understanding of the urgency and the purpose of a humanistic approach (Jack, 2019). Students were able to reflect on the purpose of

compassionate care: "seeing clients as humans [...] how we would want to be treated" (Jack, 2019, p. 134).

Moreover, students become more sensitive to patients' needs and enhance their compassion in care delivery (Byrne et al., 2013a, Happell & Roper, 2013; Jack, 2019). Specifically, students improved their ability to pay attention and be more aware of them. Thus, students got more mindful when working with patients (Byrne et al., 2013a).

### *3.2.2. Attitudes*

**Reflection of the personal stance towards mental health care.** Being taught by a patient challenged students to reflect their profession in general (Bingham & O'Brien, 2018, Byrne et al., 2013a). Undertaking a course with PI triggered a more positive and optimistic attitude towards practice (Byrne et al., 2013a). Next, students questioned their prioritisation in care. By listening to the narrative of the patient, students realized that their previous way of decision-making was partly disadvantageous for the client, but advantageous for the organisation. In the future, they want to enhance the benefit of the patient by making decisions in favor of the patient, when leading shifts in practice (Jack, 2019). Moreover, students wish to spend less time on paperwork prospectively, which typically occupies a great deal of time (Jack. 2019).

**Openness towards patients.** PI challenged students to engage in perspective-taking. Instead of seeing the patient as a mental illness, students opened up to patients' individuality (Happell & Roper, 2003). In line with those findings, Happell et al. (2019a) report a significant decrease of social distancing towards patients. Jack (2019) similarly reports of broken barriers and decreased power imbalances between carer and patient.

As a consequence, students questioned their previous assumptions of mental illness. By questioning the preconceptions, students were able to enhance their positive attitude towards individuals with a diagnosable mental illness (Byrne et al., 2013b). Simultaneously, other students report, that their pre-existing beliefs, but also stereotypes about mentally ill individuals got challenged (Schneebeli et al., 2010). Thus, a non-judgemental attitude could be established by PI (Byrne et al., 2013b).

Alongside, the need for a more assertive and optimistic attitude in interaction with mentally ill patients was recognized and students realized the importance of hope (Byrne et al.,

2013a; Schneebeli et al., 2010). One student for example realized that "… there is light at the end of the tunnel…" (Byrne et al., 2013a, p. 269). Happell et al. (2019b) also report that PI empowered students to shift their focus from a deficit-oriented to a strengths-oriented perspective (Happell et al., 2019b). In several studies, students mention that PI facilitated their view on a recovery-oriented practice (Happell et al., 2019b). Another study substantiates those findings, as students report of having felt the reassurance that patients do get better (Happell & Roper, 2003).

**Questioning mental health standards and academic approaches.** Students increasingly questioned the learned theoretical approaches and their application in practice (Happell et al., 2019b). Particularly, the traditional biomedical care model, which primarily focuses on diagnosis is reflected upon and its shortcomings got increasingly acknowledged. Students also felt empowered, to occupy themselves with the patient and their backgrounds, instead of being concerned by fitting them into theories and models, such as the medical model (Happell et al., 2019b). CBT trainees moreover questioned their standards in practice and realized an existing need for an adaption of CBT standards (Garwood & Hassett, 2019).

In contrast, other students mentioned an increased motivation to engage with the content of their academic career. Consequently, they experienced a reaffirmation of reasons to become a nurse in mental health settings (Jack, 2019). In summary, students have gained a critical stance towards approaches in care and their academic learnings. In contrast, other students got reassured about their current career.

**Negative attitudes.** Especially in the study by Gawrood & Hassett (2019), students were dissatisfied with several domains of the execution of the course. On the one hand, they experienced a slight discrepancy between previous expectations and the actual experience of the course. After the course, students reported of not having seen the value of hiring a PI, especially because they perceived the patient as being dissatisfied with the experienced treatment (Garwood & Hassett, 2019).

On the other hand, they partially report of having felt uncomfortable towards the involved patient. Since the patient was experienced as relatively vulnerable, the students questioned, whether it was her independent decision to participate: "Remember thinking, is, is it her decision to share this information and is it her initiative, or she has been prompted by the teachers? …" (Garwood & Hassett, 2019, p. 191). The experience mislead students to feel responsible of the

patient's well-being. In turn, this resulted in a huge struggle to maintain the role as student and hence, keeping the goal of learning in mind. Consequently, students dismissed the experience and possible benefits of PI (Garwood & Hassett, 2019). Garwood & Hassett (2019) concluded that those who experienced PI as uncomfortable were less able to perceive the learning experience as helpful and effective.

### *3.2.3 Competencies*

**Enhanced Reflective Practices.** Amidst the practical learnings, students indicate to have gained an increased capacity for reflective understanding: "… I was able to draw on my own personal experiences...Things started to make a little more sense when I [was] able to put [things] into my own situation, my own experience" (Byrne, 2013a, p. 269). Similarly, students in the study by Byrne et al. (2013b) reported that PI provided profound possibilities for self-reflection. Also, Happell & Roper (2003) have found that when looking into the future, students portray themselves as more likely to engage in reflection processes, specifically considering the impact of their actions on the patients.

Not only self-reflection but also self-awareness was reinforced (Byrne et al., 2013a; Byrne et al., 2013b, Happell & Roper, 2003). To illustrate, 71.42% of students in the study by Happell & Roper (2003) indicate, that they have gained an increased awareness (and/or greater reflection) on practice. Students stress that they are more aware of their decision-making processes and acquired multifaceted knowledge directly from patients' evidence. As a consequence, they are able to consider conflicting values and ethical aspects when making decisions in future practice (Jack, 2019).

**Improved practical skills**. PI enabled students in numerous studies to apply the concept of empathy in practice and a way to develop a relationship (Happell et al., 2019b). In line with this, students value the importance of getting familiar with the patient, by understanding and listening (Happell et al., 2019b). Also, Byrne et al. (2013b) found, that students experience an enhanced will to understand the patient. Moreover, it has been argued that students acquired the ability to consider the impact of a mental illness on the patient and their life (Byrne et al., 2013a). They now have an understanding of individuality and namely want to understand the person behind the obvious: "No matter what is documented about a patient ... you actually see

the whole person, and maybe see what the actual problem is, and not make any assumptions ... meet the person ... with an open mind, no matter what." (Happell et al., 2019b, p. 954).

All in all, those practical skills are deemed to build a solid foundation for later practice (Byrne et al. 2013a) They felt increasingly able to deliver a more effective service to patients (Jack, 2019) and recognized that PI positively affected their engagement with patients in the future (Byrne et al., 2013a). Finally, they perceive themselves as more ready to enter the mental health area in the future (Happell et al., 2019a).

### *3.2.4. Overarching theme*

**Stigma.** By enhancing their knowledge about mental health, reinforcing a positive, compassionate attitude toward patients, and reflecting on their previous beliefs, students were prompted to abolish stigmatizing attitudes. Hence, stigma can be portrayed as an overarching theme that emerges from all beneficial aspects derived from such an educational intervention.

On the one hand, PI challenged students' pre-existing beliefs about mental illness (Schneebeli et al., 2010). Thus, students could reflect on the far-reaching effects that stigma towards people with mental health can have (Jack, 2019). While student's fear decreased, the normalisation of mental illness increased (Schneebeli et al., 2010). The study by Bingham & O'Brien, (2018) moreover reports, that stigmatizing attitudes in certain factors, namely fear of people with mental illness, avoidance of those, perceived dangerousness, and pity decreased. In line with these findings, the PI course investigated by Happell et al. (2019a) caused a decrease in social distancing as well as a drop in negative stereotypes. Not only understanding the patient in the broader context but also looking behind the obvious was a reason to conquer stimatizing attitudes (Happell et al., 2019b). One student highlights: "The recovery course teaches you not to be so judgemental…but to listen to what they are saying... what they are wanting to communicate … (Byrne et al., 2013b, p. 198).

On the other hand, the stigma students perceive patients have towards mental health carer is reflected. Students at times articulate a certain feeling of feeling judged by patients (Jack, 2019). Since PI enables patients to adopt the teaching role, students could reflect on how they are perceived by patients. In this regard, one student mentioned: "…It was good to hear that clients can see us beyond that…" (Jack, 2019, p. 133). Hearing positive feedback about the treatment of a patient was perceived as positive (Jack, 2019).

**Table 4**

*Results of included studies Investigating Patient Involvement and Its Effects on Mental Health Students*

| Author, Year, Country | Study Design | Sample (n= X) | Data Collection Method | Level of PI | Key findings in regard to knowledge | Key findings in regard to attitudes | Key Findings in regard Competencies |
|---|---|---|---|---|---|---|---|
| Bingham & O'Brien (2018), New Zealand | Quantitative approach | Undergraduate nursing students (n=45) | Pre- and post test, questionnaire: AQ-27 | 2 | N.A. | Stigmatizing attitudes in fear, pity, dangerousness and avoidance decreased | N.A. |
| Byrne et al. (2013a), Australia | Qualitative, exploratory approach | Undergraduate nursing students (n=12) | In depth individual interviews via the phone | 6 | Care is more than attending to physical needs of people, enhanced applicability of recovery model, Increased awareness of patients' needs and importance of partnership, experience of 'clinical reality', | Reflecting of personal approach to professional practice, more positive and optimistic attitudes toward practice; increased openness to patients; the importance of hope in treatment, enhanced attunement, importance of holistic care | Increased capacity for reflective understanding; positive way to engage with patients in future, facilitated self-awareness, the knowledge gained would affect practice later |
| Byrne et al. (2013b), Australia | Qualitative, exploratory | Undergraduate Nursing Students (n = 12) | in- depth interviews | 4 | increased appreciation of mental health nursing and the therapeutic relationship, enhanced understanding of mental | Challenging of preconceptions about mental illness and attitudes towards mental illness, increased reflection of the | Support in self-reflection, increased awareness, fostered drive to understand the patient, ability to grasp |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | approach | | | | illness, increased recovery-focused care | previous approach to practice, fostered non-judgemental attitude | the impact of mental illness on the individual person |
| Garwood & Hassett (2019), England | Qualitative approach | Postgraduate CBT trainees (n=6) | Semi-Structured interviews | 3 | N.A. | Increase of affective responses, need for an adaptation of CBT, students were dissatisfied, difficulties to maintain student role, high responsibility, frustration, anger, suspicion, sadness and warmth, empathy was tempered by suspicion | N.A.. |
| Happell et al. (2019a), Australia, Ireland, Finland | Quantitative | Undergraduate nursing students (n = 194) | Self-reported measures design, pre- and post test, 3 self-reporting instruments: MHNES, CPQ, OMS | 6 | N.A. | Decrease of social distancing, drop in negative stereotypes; adopting a more comfortable/less threatened position through emotional avoidance | Higher perception of readiness to enter the mental health field, increased capacities |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Happell et al. (2019b), Finland, Australia, Netherlands, Norway, Ireland, Iceland | Qualitative, exploratory approach | Undergraduate nursing students (n=51) | Focus groups | 6 | Person- centred care/ seeing the whole person; understanding the patient in a broader context, increased comprehension of mental illness, understanding of patients experiences, importance to develop respect, feeling of understanding is crucial for patients when seeking help, importance to pay attention to individual needs rather than overall tasks, understanding of recovery enhanced concept of holism | Challenging the medical model, embracing recovery; increased questioning view on mental health service delivery, acknowledging limitations of traditional biomedical care model, questioned their view of recovery, shifting focus on strengths of patient rather than deficits | Getting to know the person, understanding, listening; increased ability of developing a relationship, understanding patients on human than medical level, communication skills, ability to connect the concept of empathy to practice |
| Happell & Roper (2003), Australia | Mixed-method approach | Postgraduate Nursing Students in Diploma of Advanced Clinical | Anonymous questionnaire with 7 open-ended question | 4 | enhanced knowledge; wish to become an effective clinician, broadened perspective on and reflection of on the mental health system | changed attitudes; seeing the client as individual, not illness, increased empowerment, motivation to engage with the course content, higher awareness of the way actions affect clients, enhanced perspective on patients as human being | increased skill of responding to patient, increased awareness and greater reflection; will to listen, enhanced individual capacity, increased reflection skills |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Nursing (n=21) | | | | | |
| Jack (2019), England | Qualitative approach, case study | Undergraduate nursing students (n=38) | Two focus groups | 5 | Meaning of humanity, increased understanding that 'little things' are valuable, understanding the impact of stigma, improved understanding of the concept recovery, reflection on compassionate care | Power imbalances were re-addressed, reflection on personal attitudes, reaffirmation on reasons to become a nurse, readjusting priorities; focus away from negative risk-taking to benefit of client, minimisation of risk, | Increase in ability to deliver effective service, enhanced skills in ethical, clinical decision-making increase in delivering compassionate care in practice, reflecting on attributes of a nurse; ability to anticipate needs of clients and their careers, empathy and understanding |
| Schneebeli et al. (2010), New Zealand | Mixed-method approach | Undergraduate nursing students (n=30) | Questionnaire with 5 open-ended questions | 4 | Understanding interaction matters between carer and patient | Emphasis on recovery and individualized care, challenge of students pre-existing beliefs and stereotypes of mental health issues, reduction of fear, increased normalizing of mental illness | N.A. |

*Note*. N.A. = Not Applicable; CBT = Cognitive Behavioural Therapy; MHNES = Mental health Nurse Education Survey; CPQ= Consumer Participation Questionnaire; OMS= Opening Minds Scale

## 4. Discussion

This mixed-method literature review aimed to provide a comprehensive and deep understanding of the impact PI has on students in mental health-related educational programs. As a response, this study investigated the impact of PI in educational settings on mental health students, particularly on their knowledge, attitudes, and competencies. Taken together, ten themes were identified, that resulted from participating in such an educational intervention. The reviewed papers demonstrate, that students gained increased comprehension of mental illness and the impact it entails on the patient. PI enabled students to engage in a new perspective on care, but also on the meaning of their personal careers. Students enhanced the consideration of the patient's expertise in practice and recognized the significance of the meaningful relationship between both, which fostered the holistic and humanistic character of care. While self-reflection and awareness were enhanced, social distancing towards patients was reduced. Overall, these results contributed to the abolishment of students' stigma towards individuals with mental disorders, resulting in a more positive and less judgmental attitude. Albeit the beneficial influence on students, dissatisfaction with PI was also evident.

In numerous reviewed studies, students labelled their experience of PI as clinical reality, reinforcing knowledge about mental health care services. These findings can be linked to the provision of a real narrative. Green (2006) found, that narratives provide the audience with concrete stories of real experiences. Hereby, the provided realism is perceived as meaningful and the narrative's impact on the audience can be enhanced (Potter, 1986). Those implications are in line with previous findings. Kuti and Houghton (2019) investigated PI and its effects on learning and highlighted, that students got inspired and motivated by the patient. By getting into touch with patients' reality, students reflect the later practice and its values (Kuti & Houghton, 2019). The mechanism of the narrative may have enabled students in the reviewed papers to bridge the gap between their theoretical perception of mental health care and clinical reality, by expanding the knowledge "beyond the classroom and into the community" (Perrin, 2014, p. 4).

Moreover, the meaning of the contact with patients may account for students' increased know-how and their motivation to make efforts in becoming a mental health carer. Krathwohl et al. (1964) highlight the significance of the affective domain when it comes to learning. The author established a hierarchical model of learning, ranging from receiving information on the lowest level to acting on an established value set on the highest level. In between, finding the

value the worth in an activity is of crucial importance. According to Wirth and Perkins (2013), recognizing the value of the unit to learn is the key driver for effective learning, since it, in turn, fosters the commitment students may embody. In line with that, Perrin (2014) argues that connecting with experiential learning can increase students' passion and commitment. Especially facing real-world situations may foster students' feeling of accountability, so that their wish to produce meaningful work is strengthened (Perrin, 2014). Followingly, if students participating in PI come to realise the effects of their practice, their motivation to question academic theories and engagement to deal with the theoretical content is facilitated appropriately. Those findings were also reflected in the reviewed papers, in which students emphasised their increased commitment to theory and practice, aiming to become more effective clinicians in the future.

Previous literature also emphasises the importance of knowledge in the reduction of stigma toward mental illness. According to Mann and Himelein (2008) point to the fact, that numerous studies and educational campaigns assume, that higher knowledge about reasons and symptoms for mental illness reduces prejudice the most. Correspondingly, Rüsch et al. (2005) argue, that negative knowledge structures can effectively be abolished by getting into contact with diagnosed individuals. However, other studies fail to detect such an effect and further, nursing or medical students, despite their high knowledge about mental illness, do not demonstrate a significant decrease of stigma (llerena et al., 2002). Gray (2002) supports those findings, as they stress that stigmatising attitudes are specifically prevalent among mental health carers.

In contrast, most of the papers reviewed capture students' attitudinal development, shifting towards greater openness and positive attitudes towards patients with mental disorders. One major reason for such a prompted change can be the *Transportation Experience*. Green and Brock (2000) define transportation experience as "a distinct mental process, an integrative melding of attention, imagery and feelings" (p. 701). Followingly, if mental health students are transported into the message provided by a patient, the probability that they perceive the message as an actual experience instead of an external reality is higher and can in turn foster persuasiveness. The mechanism, that attitudes can be changed effectively by identification with narratives is also supported by Green (2006). The author clarifies that eliciting emotions is a major driver for attitudinal and behavioural change and real characters, such as patients are able to trigger those. Since attitudinal changes are originally based on affect and/or cognition, the

elicited emotions can in turn spur changes in behaviour (Green, 2006). In line with those findings, the study by Caputo and Rouner (2011) found, that narratives are also associated with less social distancing towards patients with mental illnesses. The higher the perceived relevance rated by participants, the lower the social distancing behaviour (Caputo & Rouner, 2011).

The aspect, that patients report from a first-person perspective may have been notably effective for students to reflect on their judgemental attitudes towards patients and enlarge the awareness. De Graaf et al. (2012) investigated narrative persuasion and found, that first-person narratives are associated with higher persuasion and more consistent attitudes, since the identification with the character's attitudes and perspectives is higher, compared to third-person narratives. Mann and Himelein (2008) moreover contrasted a first-person narrative approach with traditional teaching methods in a psychopathology course. They point out, that stigmatising attitudes decreased after being exposed to a first-person narrative. In addition, they stress that traditional teaching methods of psychopathology in contrast do not contribute to dismantling mental illness stigma (Mann & Himelein, 2008).

Educators in a great deal of the investigated papers implemented PI on high levels, with the fourth or sixth level by Towle's taxonomy being mostly applied (Towle, 2009). Since those levels of PI entail an extensive duration of contact with the learner, students were able to establish a relationship with patients throughout the course (Towle, 2009). Green (2006) emphasises the importance of building a relationship with characters in the transportation of narratives. According to the author, the identification with the character has special power in shifting the audiences' beliefs (Green, 2006).

The duration of such a sustained relationship in the investigated papers also may have enabled students to increase their empathy towards patients and in turn enhanced students' appreciation of the partnership. The systematic review by Boshra et al. (2022) investigated interventions in which patients teach medical students and illustrated, that those interventions facilitated their empathy. Similarly, Petrucci et al. (2016) point out, that empathetic attitudes can strengthen the relationship between health carer and patients and can in turn function as a key driver to diminish stigma towards patients with mental disorders (Petrucci et al., 2016).

Nevertheless, the likability of the narrative character seems to be important. In one of the investigated studies, the students perceived the patient as vulnerable and dissatisfied with the previous treatment. On the one hand, students may not have perceived the patient as sympathetic.

Next to Green (2006) who highlights the importance of the character's sympathy in transportation, Cohen (2001) suggests that identification with a character is highly associated with sympathy and understanding for the character. This was not given in the study by Garwood and Hassett (2019). De Graaf et al. (2012) moreover found, that if a character demonstrates attitude inconsistencies, the existing attitudes of the audience can be attenuated. Instead of developing a foundation to develop more positive attitudes toward the patient, the students' negative attitudes in the study by Garwood & Hassett (2019) towards patients were fostered. The reinforcement of negative attitudes of students in the study by Garwood & Hassett (2019) could have also been caused by the perceived vulnerability of the patient.

Another explanation for students' dissatisfaction with PI in the investigated study by Garwood & Hassett (2019) may be the high expectations of the participants. Garwood & Hassett (2019) explicitly asked students about their expectations or experiences with PI before the course started, which may have evoked the salience of previous positive experiences. When PI did not turn out favourably as expected, a certain dissatisfaction was fueled. Van Dijk et al.(2003) argue, that higher expectations lead to less desired outcomes. Lower expectations in contrast go hand in hand with more favourably experiences in the end (van Dijk et al., 2003). In line with those findings, Stuhlmiller (2005) specifically advised against establishing an interaction between mental health students and patients with acute symptoms of mental illness, since those experiences bear the risk of enlarging negative stereotypes (Stuhlmiller, 2005). Stuhlmiller (2003) has argued, that pairing nursing students with a severely ill individual leaves little room for a learning opportunity. Students seem to not discern the opportunities, compared to patients who are perceived as more well. As a result, PI can also reinforce negative attitudes towards patients, as observed in the study by Garwood & Hassett (2019).

The greater openness of students towards patients with mental illnesses can be justified by students' reduced feeling of keeping control and increase. In previous literature, it is evident that nurses sometimes find themselves in a dominating role (Shattell, 2004). Specifically, professional and personal knowledge might lead to an increased sense of power, which can result in practicing heightened control over patients (Warne & McAndrew, 2007). Warne & McAndrew (2007) substantiate those behaviours with (pseudo)-omnipotence, which might be unconsciously used as a defence mechanism to protect nurses' vulnerability. However, being openminded towards patients and indeed grasping their personal reality instead of assuming to

comprehend it is labelled as central to mental health nursing (Warne & McAndrew, 2007). Thus, challenging mental health students in embracing the fact, that they are able to handle uncertainty is required. Thus, they need to gain specific confidence and trust in the therapeutic relationship (Warne & McAndrew, 2007).

Next, PI may have addressed power- asymmetries between patients and mental health carer, which in turn affected the abolishment of stigma. Sukhera and Knaak (2022) reviewed interventions that addressed mental health and substance use in relation to structural stigma in healthcare settings. They identified, that implementing PI in health care organisations provides a solid opportunity to counter traditional power structures exercising *Stigma Power*. Stigma power, introduced by Link and Phelan (2014), refers to the "capacity to keep people down, in and/or away by using stigma-related processes" (p. 12). As a result, stigmatised groups experience personal, social but also structural disadvantages (Link & Phelan, 2014). Sukhera and Knaak (2022) conclude, that addressing stigma power and correcting those attitudinal and behavioural problems might explain the success of interventions such as PI. Through power sharing, such interventions can raise awareness, reestablish the alignment of values, entangle historical mistrust between partners and disable such power hierarchies (Sukhera & Knaak, 2022).

The reduction of stigmatising attitudes can also be explained by the increase in empathy derived through PI. Román- Sánchez et al. (2022) specifically point out, that empathy among mental health nurses is the key to decreasing stigmatizing attitudes to patients encompassing mental disorders. Gu et al. (2021) also argue, that changing attitudes towards patients also brings heightened empathy.

**4.1 Strengths and Limitations**

The literature review has some strengths. In light of the advantages of a mixed-method design, various study designs of the reviewed studies were included. Further, the chosen eligibility criteria have established a broad foundation for the relevance of the studies to be included.

Besides the strengths, a few limitations of the mixed-method literature review need to be considered. First, the usage of content analysis holds several limitations. First, the objectivity of the content analysis is jeopardized by the sensitivity of language (Stemler, 2001). Different studies may have utilized different synonyms for one and the same phenomena, which may have

impacted the semantic validity of the analysis (Krippendorff, 1989). Adding to that limitation, no definitions of the investigated concepts of knowledge, attitudes and competencies were used. Consequently, categorising the content of the investigated studies into those three different domains may not have been as reliable as required. Moreover, merely one researcher performed the content analysis, which may have resulted in less consistent and reliable results (Stemler, 2001).

Second, the quality appraisal of investigated studies needs to be taken into account when considering limitations. Even though the MMAT enables an assessment of numerous study designs, such an assessment may be insufficient by answering five questions about the study's quality.

A third aspect, adding to the limitations of this study is the existence of pre-defined research questions, which may have neglected contradicting results in the reviewed studies. Ćurković and Košec (2018) point to a possible selection bias when writing literature reviews. By scanning research engines and databases for scientific studies, choosing the studies is primarily based on their usefulness but also an unconscious preference of the researcher. In turn, this might jeopardize an unbiased search for useful studies. Ćurković and Košec (2018) label this as the *research bubble effect*. Even though methodological precautions, such as using the guidelines by the Joanna Briggs Institute for methodological assessment, those biases cannot be ruled out to their fullest (Aromataris & Munn, 2020).

Lastly, the investigated papers also entail several limitations. Numerous studies included small sample sizes (Byrne, 2013b; Byrne, 2013a; Happell & Roper, 2003; Schneebeli, 2010). Adding to that, some studies investigated mental health students who actively chose the course, so results may not be generalisable to other mental health students nor the general population (Bingham & O'Brien, 2018; Byrne, 2013a). Happell & Roper (2003) for example also highlight, that the validity of the results highly relies on students' ability to recall the perceived changes and learnings and Happell et al. (2019) questioned the validity of self-report measures.

### 4.2 Implications for Future Education and Research

The results of this literature review entail numerous implications for mental health education and research.

Considering mental health education, numerous implications follow. It was evident, that PI bears huge potential for mental health students. Albeit the fact, that the majority of investigated studies included mental health nursing students, the review provided a vivid picture of the benefits of PI that can be generalised to students that are confronted with mentally ill clients and patients during their career. Consequently, undergraduate or postgraduate students following psychology, psychotherapy, or occupational therapy can profit from such an educational intervention in several regards. Not only students but also educators can benefit from the learning successes students can develop by participating in PI courses.

Alongside those educational implications, the patient's well-being needs careful consideration when introducing PI in mental health education. Specifically, the implementation of severely ill patients needs to be avoided to diminish risks to their mental well-being and recovery. Furthermore, students can especially benefit from PI when being subjected to contact with the patient for an extensive period of time. Thus, the implementation of PI should consider the possibilities of such long durations, to enhance the impact on students.

Since PI has been found to be a meaningful educational intervention, implementation in tertiary mental health education is beneficial and recommended. Thus, future research should employ possible barriers of developing PI, stopping or hindering educators from implementation. A growing body of evidence proves that implementation of PI brings several difficulties (Happell et al., 2015; Scanlan et al., 2019). Happell et al. (2019a) refer to different challenges in the delivery of PI in mental health programs. In line with the previous findings of Byrne et al. (2018), Happell et al. (2019a) underline that patients are denied several opportunities in educational settings. Often, patients are restricted to storytelling or involvement is implemented rather ad hoc than in a structured and organized manner (Happell et al., 2019). In order to establish appropriate and beneficial PI in mental health education, possible barriers and difficulties need to be discovered.

### 4.3 Conclusion

Taken together, this mixed method literature review aimed to investigate the impact of PI on mental health students and their knowledge, attitudes, and competencies. As a response, this study provides a deep synthesis of the benefits PI can provide to students in mental health care education. The findings reveal that PI displays a valuable educational intervention, benefitting students with respect of enhanced knowledge about mental illness and care, more positive and

optimistic attitudes, and facilitated competencies for future practice. Thus, it becomes evident, that PI can play a crucial role in training mental health students for their later careers in care delivery. Consequently, this study contributes to the research into PI and its positive impact as well as important factors to consider, from which educators in all areas of mental health, aiming to implement or improve their application of PI can benefit.

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## Appendix

**Table 2**

Mixed Methods Appraisal Tool (MMAT) criteria (Version 2018)

| Types of mixed methods study components or primary studies | Question Number | Methodological quality criteria |
|---|---|---|
| Screening questions | S1 | Are there clear research questions? |
| | S2 | Do the collected data allow to address the research questions? |
| 1. Qualitative | 1.1 | Is the qualitative approach appropriate to answer the research question? |
| | 1.2 | Are the qualitative data collection methods adequate to address the research question? |
| | 1.3 | Are the findings adequately derived from the data? |
| | 1.4 | Is the interpretation of results sufficiently substantiated by data? |
| | 1.5 | Is there coherence between qualitative data sources, collection, analysis and interpretation? |
| 2. Quantitative randomized controlled (trials) | 2.1. | Is randomization appropriately performed? |
| | 2.2 | Are the groups comparable at baseline? |
| | 2.3 | Are there complete outcome data? |
| | 2.4 | Are outcome assessors blinded to the intervention provided? |
| | 2.5 | Did the participants adhere to the assigned intervention? |
| 3. Quantitative non-randomized | 3.1 | Are the participants representative of the target population? |
| | 3.2 | Are measurements appropriate regarding both the outcome and intervention (or exposure)? |
| | 3.3 | Are there complete outcome data? |
| | 3.4 | Are the confounders accounted for in the design and analysis? |
| | 3.5 | During the study period, is the intervention administered (or exposure occurred) as intended? |
| 4. Quantitative descriptive | 4.1 | Is the sampling strategy relevant to address the research question? |
| | 4.2 | Is the sample representative of the target population? |
| | 4.3 | Are the measurements appropriate? |
| | 4.4 | Is the risk of nonresponse bias low? |

| | | |
|---|---|---|
| | 4.5 | Is the statistical analysis appropriate to answer the research question? |
| 5. Mixed methods | 5.1 | Is there an adequate rationale for using a mixed methods design to address the research question? |
| | 5.2 | Are the different components of the study effectively integrated to answer the research question? |
| | 5.3 | Are the outputs of the integration of qualitative and quantitative components adequately interpreted? |
| | 5.4 | Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? |
| | 5.5 | Do the different components of the study adhere to the quality criteria of each tradition of the methods involved? |