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# The Impact of Confidence on Clinical Dental Practice

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## Abstract:

Introduction: Increasing confidence through learning has the potential to change General Dental Practitioners' (GDPs) perceptions of clinical practice. By examining how changes in confidence influence the clinical practice of two cohorts of GDPs, during and following an extended period of postgraduate training, we show the importance of confidence to GDPs and that a lack of confidence is a primary reason why GDPs attend postgraduate training courses.

Methods: A mixed method approach was adopted for this study. Quantitative data were collected via a series of linked questionnaires; qualitative data were collected using focus group discussions, interviews and contemporaneous field notes. Analysis was undertaken using SPSS software and a phenomenological approach respectively.

Findings: Participants indicated an increase in confidence in their ability to undertake dental procedures, which led to an increase in confidence in communication skills, and their ability to undertake complex restorative procedures. This led to greater treatment acceptance by patients resulting in better 'job satisfaction'.

Discussion: A sense of confidence is central to personal development and on-going study, leading to firstly, an improved capability to perform tasks (competence), secondly, confidence is a product of the relationship and trust of those people associated with the individual/professional and thirdly, the correct level of challenge is important to confidence.

Conclusions: The issue of confidence has not been looked at in postgraduate dentistry but it is well recognised in medical education fields.

**Introduction:**

In this study we considered the impact of a change in confidence on general dental practitioners' (GDPs) clinical dental practice during and following the completion of a learning experience. This impact of a change in confidence is difficult to measure in quantitative terms alone [1], so this study aimed to look at perceptions of changes in confidence (qualitative data) as well as quantitative data from a questionnaire, after completing a five year part time master's in Restorative Dental Practice. This article outlines the literature supporting the study, indicates the methods used to obtain data, reports on the findings and discusses the significance of these findings. Many GDPs embarking on postgraduate training programmes do so with some trepidation and caution [2]. A large number of GDPs choose to engage in university accredited postgraduate training because they perceive a need to enhance confidence in their clinical skills and knowledge, their ability to treat more complex cases and desire to become more self-efficacious.

The Restorative Dental Practice (RDP) designed for GDPs, who report a lack of confidence as a primary reason for attending postgraduate courses[3].

Confidence can be defined as: 'freedom from doubt; belief in yourself and your abilities' [4] and has been described as both context specific [5] and as a predictor of academic achievement [6]. The emotion of self-confidence is frequently confused with self-efficacy [7]. Self-efficacy has been defined as: 'peoples' judgements of their capabilities to organise and execute courses of action required to attain designated types of performance' [8]. Confidence and competence are terms, which are often used synonymously but are not identical concepts [9]. In addition to the definition of confidence, the feeling of confidence, together with the notions of self-concept, self-efficacy and anxiety, have been shown to be a reliable indicator of academic achievement [10].

Armstrong et al. (2010) reported on an evaluation of an educational intervention on the competence of social workers and concluded that social workers were more competent in delivering cognitive behavioural strategies following a brief face-to-face learning experience but not necessarily more confident. In a study based on social learning, a group of nurses reported that they were able to supply safe care to their patients with more confidence following the learning experience [11]. The nurses reported that they were empowered by the acquisition of advanced critical thinking, teamwork and communication skills and specialist practice knowledge. A grounded theory study linking learning to confidence in developing practice looked at developing confidence in nurses to strengthen their clinical expertise [12].

The role which confidence plays in facilitating successes in postgraduate dental education, albeit important, has hitherto been unexplored. On the other hand, there are several studies in other medical disciplines that have explored the question of confidence and its impact on practitioners' future working patterns. Lam et al [13] investigated the learning outcomes of a short postgraduate course for General Medical Practitioners on dermatological training and concluded that graduates of the course improved confidence, attitudes and skills in treating common dermatological problems thus needing to make fewer referrals of common dermatological problems encountered in their clinical practice.

The complexity of treating patients with multiple illnesses was investigated by Phillips et al [14] who reported that inter-professional workshops had an immediate and sistained impact on the knowledge and confidence of those attending the training. The short-term nature of the apparent success of this study is contradicted by Ward and Sanson-Fisher [15], who reported that following a 3-

day workshop, little clinical benefit was perceived in adopting preventative care measures by junior hospital medical trainees.

The only dental study found with respect to confidence following a dental postgraduate course and its impact on practice reported that confidence of practitioners had been increased in a learning intervention involving placing implants by using a surgical stent to allow proper alignment of the implants [16]. It was recounted that the overall experience for the operator and patient was very positive.

Our study therefore contributes to the literature, addressing the lack of previous findings in respect of confidence of postgraduate dentists following a prolonged period of study. Confidence is an important consideration as many GDPs enter postgraduate dental education to improve confidence in their clinical knowledge and skills.

**Method:**

This was a mixed method study incorporating quantitative and qualitative data collection and analysis. This enabled the triangulation of findings and encouraged participants to express their perceptions. Two cohorts of postgraduate students attending the RDP programme (2010 and 2011) were invited to participate in the study. 72 participants from each year were included. Data were collected via a series of questionnaires, focus group discussions, interviews and field notes. This mixed method of data collection ensured the robustness of the data Questionnaires were distributed by hand prior to the participants starting the programme, at the end of year 1 (certificate), at the end of year 3 (diploma) and at the end of year 5 (master's). Focus group discussions [17,18] were undertaken during year 1, using teaching groups of 8 students, which were considered to be an appropriate size. Interviews were undertaken at the conclusion of the programme and contemporaneous field notes [19] were recorded throughout each of the two cohorts five year programme. Questionnaires are a well tried and tested method of quantitative data collection that is relatively easy to undertake, inexpensive to finance and makes data analysis straightforward. A carefully designed questionnaire can also encourage the respondent to include qualitative data; together with the quantitative information this can be used to develop questions for interviews and focus group discussions. Focus group discussions can allow the respondents to discuss issues within their peer groups, whilst the facilitator guides the conversation, in order to answer the research question. Interviews carried out in this study were of a semi-structured nature, allowing additional questions to be asked, where and when appropriate. All participants who agreed

to attend a focus group and/or interview, signed a consent form, were assured of the anonymity of the data collected and were offered the chance to withdraw from the process if they felt at all uncomfortable. Ethical issues were considered but specific Research Ethics Committee approval was not required as the study was categorised as a service evaluation.

Three of the four authors could be considered to be 'insider researchers' but it was felt that the advantages of greater knowledge of the programme structure, more familiarity with the department and knowledge of the participants, outweighed the perceived disadvantages [20]. The findings of this study can be considered to be the participants' perceptions.

Quantitative data were analysed using SPSS software version 21[21] (IBM SPSS). Qualitative data from interviews, focus groups and field notes were analysed using a phenomenological approach, having organised the data thematically via a 'Framework 'spreadsheet [22].

**Findings:**

We present both quantitative and qualitative findings for both cohorts together, as the responses were very similar for both cohorts. The quantitative findings are presented as tables where necessary, indicating the scores reported by the respondents. Qualitative findings are presented in the themes that emerged from data coding and analysis. 144 participants started the programme (2010 n=72; 2011 n=72); and a total of 25 participants completed the programme. 25 (100%) responded to the final questionnaire (2010 n=12 ; 2011 n=13).

Due to the availability of multiple exit points (at the Certificate and the Diploma stages) for the programme before the final award of the Masters, there is a natural reduction in number of students progressing through the programme. Results of responses to the certificate year are representative of 143 responses to the first questionnaire; 140 responses to the questionnaire following completion of the year 1 Certificate programme when students are free to exit. 60 students progressed to the diploma element of which 40 completed the questionnaire and 25 progressed to the Master's element, all of whom responded to the final questionnaire.

The participants indicated an increase in their confidence in their ability to do dentistry over the programme, which was preceded by a minimal increase in confidence following year 1. Participants reported an increase in their confidence in their ability to do dentistry, on communication skills and their ability to use evidence based protocols to decide on materials and techniques (See Figure 1 & 2). Increased confidence was seen to have a positive impact on clinical dental practice. Participants

reported an increase in patients' acceptability of treatment plans, indicating confidence in the participant, which further enhanced their own confidence (See Figure 3).

Figure 1 & 2 refer to the percentage of respondents reporting a perceived increased in confidence following the completion of the master's programme. Figure 3 illustrates the increase in acceptance treatment plans before and after the RDP programme and Figure 4 illustrates the perceived confidence following the completion of the Certificate in Restorative Dental Practice (CRDP). These findings are expressed as a percentage to illustrate the responses.

## Impact of confidence on communication skills

Perceived increases in communication skills have been shown following a modest increase in confidence after the first year, and a more significant increase in confidence following completion of the programme (See Figures 5 & 6). These figures illustrate that there were 140 responses to the end of certificate questionnaire and 25 responses to the end of the MSc element questionnaire. The mean findings for the impact on communication skills were 7.55 pre-course and 8.91 after the completion of the MSc element, indicating a mean rise in confidence of 1.36 across both cohorts.

The gradual escalation in confidence over the five years of the programme (see Figure 7) indicates that for those participants who completed the programme, their confidence grew as the programme progressed. 6% (n=4) of the participants from the 2011 cohort where initially very apprehensive, however their confidence increased during the programme to bring them in line with the other participants. None of the 2011 cohort scored their confidence levels at 10/10 before the start of the programme, but 23% (n=3) scored 10/10 at the end of the programme. The majority of the participants showed some increase in confidence over the five-year programme. Figure 7 illustrates only minor differences between the two cohorts.

As a mixed method study this research gathered a large amount of qualitative data which enhanced the quantitative findings. Examples of qualitative data taken from the questionnaires, focus group discussions, interviews and field notes are shown here to illustrate why, when and how participants felt about confidence in relation to clinical practice. The source of each quote is acknowledged. The quotes are arranged in themes. Table 3 illustrates the thematic analysis presented in this study.

Themes:

*Reasons for attending the programme:*

Participants gave a number of reasons for attending the programme. Some had reflected on their practice and identified limitations to their knowledge or confidence, which they felt they needed to address. Others were motivated by the postgraduate award. Yet others wanted to pursue the programme to refresh their practice and prevent boredom. Of course for many the reasons were manifold.

Interview 3, Master's student: *'I was worried I was getting bored with dentistry and wanted to start to enjoy it. I wanted to feel more confident in handling my work. This was a way of getting clinical experience, being intellectually challenged and a qualification'.*

*Confidence:*

The increase in confidence reported by the participants was reinforced by their increase in self-efficacy (Bandura, 1986) and the realisation that they were able to successfully complete certain tasks that they previously were unable to achieve [24]. The individuals' journey through the programme was driven by their increase in confidence as they have progressed. Their desire to do 'good quality dentistry', indicated an increase in self-efficacy as well as confidence and increased enthusiasm for life generally. This unexpected spin-off due to an increase in confidence indicates that for this individual their confidence is not necessarily contextual or fragile [23].

Interview 4, Master's student: *'My increase in confidence encouraged me to keep going. I am always trying to be a better dentist. The increase in confidence has led to an enthusiasm to do good quality dentistry and more enthusiasm for life generally'.*

Certificate student questionnaire: *'I have gained a lot of hands-on experience to enhance my clinical skills confidence'.*

Field notes: *'I have certainly much more in terms of personal satisfaction, greater understanding of treatment planning skills and a bigger impact on acceptance of treatment. I have definitely got more confidence'.*

The RDP programme consists of three phases: i) certificate (year 1); ii) diploma (years 2&3) and iii) Master's (year 4 and 5). This comment, which occurred in the 2nd diploma year,

indicates how this individual is exuding personal satisfaction, a greater understanding and confidence in their own ability. It is noticeable that it has taken until this stage of the programme to achieve this level of confidence. Clearly this individual has gained confidence from the fact that their increase in knowledge and skills has led to an increase in patient acceptance of suggested treatments, which in turn boosted their confidence. There is no prior evidence in the literature of such a positive impact of confidence and how this has changed the learning experience and clinical practice of participants.

*Learning experience:*

It would be quite easy to assume that the gradual increase in confidence reported above was a universal finding. (See Figures 2 & 3). Here the participant expresses a degree of disappointment that they have not been able to enhance their competence and by inference confidence, in handling complex cases but a realisation that if they continue with the programme they hopefully will fulfil their aims and objectives.

Certificate student, questionnaire: *'I thought I may have more skills in complex case management, but the learning curve was started at least'*.

Focus group discussion: *'The course has made me realise how little I know and that I want to continue with further postgraduate education'*

This feeling of lack of confidence early on during the certificate year indicated a realisation of how little this individual knew and the need to learn more. (See Figures 2 & 3).

*Motivation:*

Interview 14, Master's student: *'My motivation was to improve my skills and to get a qualification as well. It is important to get letters after my name.*

This participant is quite clear about their motivation to do the RDP programme. Like many of their contemporaries, they want to improve their skills, but this individual is in the minority in seeing getting a further degree as a major motivational factor. They are not necessarily motivated by a change in confidence influencing the learning experience but are driven by the long-term goal of an extra degree. Their motivation to increase self-efficacy is geared to the long-term nature of the programme and so they realise that self-efficacy and confidence will develop as the learning experience progresses.

Interview 19, Master's student: '*Now I feel more confident but in the first year I felt intimidated. I didn't want to say anything when I was first in the group and I was quiet. What made my confidence improve was the motivation from the tutors. They would push you and if you needed it they give you personal feedback'.*

Motivation to proceed for this participant came from their tutors. Their confidence has developed through the progression of the programme and is seen to be a product of the feedback they received. During year 1 they admit to feeling intimidated and by inference less confident; this may be due to the learning interventions used in the programme and in particular learning in peer groups.

*Impact on practice:*

Interview 5, Master's student: '*We have a mixed NHS/Private practice so there have been no restrictions in implementing the changes since doing the course. There was no one telling me what to buy or do. My associate has become a partner and we are both doing the course. It has raised the standards in the practice. I try not to accept what I feel is unsatisfactory especially with other colleagues in the practice examining your [clinical] work. Peer influence has a positive impact on practice'.*

The impact on this individual's practice following the learning experience was extensive. It would appear that this individual owns their practice so is not restricted by financial constraints in the same way as some participants who are associates or employees of dental practices. It is unclear from this comment in isolation whether one individual started the programme and then encouraged their partner to start or if they started at the same time, but what is interesting is how the status of the associate has changed to being a partner and the peer element of the relationship has helped the practice to develop.

Field notes: *'I gained more confidence; I know when to ask for advice. I am able to assess mistakes and am better equipped to correct them. The course is about me feeling more able to work, not so much about theory'.*

Being confident in one's clinical ability allowed this individual to better assess mistakes and correct them in an appropriate way. At the same time, they have enough humility to appreciate that they have more to learn and are not afraid to ask for advice when needed.

This allows them to feel more confident in their clinical ability and whilst the theory is necessary, it is this ability to do clinical dentistry that has driven them forward.

Interview 5 Master's student: *'I think my dentistry has changed. I wanted to be a better dentist, I just wanted to be more confident in what I do and that is one thing the course has done it has made me more confident'.*

This participant expressed a view held by many participants that they wanted to improve their dentistry. As a result of becoming a 'better dentist' they have increased their confidence, which was one of their primary aims from the programme. There is a direct relationship here between improved ability to do clinical dentistry and confidence.

Interview 16, Master's student: *'Talking to patients, even within the practice, I think it is a different level of professionalism now… '*

The question of professionalism was mentioned by several participants in connection with their communication skills. This participant said that their communication skills with their patients is now enhanced and that they feel more professional during conversations. The inference here is that in order to be able to discuss treatment with patients, the individual needs to be confident so that their professionalism comes through.

Interview 2, Master's student: '*Increases in confidence were accompanied with increase in patient's satisfaction. I do feel more confident because I can justify my treatment plan, which is evidence based. I can explain to the patient what material is best for them and how it will benefit them'.*

When asked directly about confidence, this participant was keen to explain the link that they had made between their confidence and patient satisfaction. By expending better knowledge and skills, the participant perceived an increase in their confidence with use of communication skills and their ability to do dentistry. In the participant's response the satisfaction of their patient was important as was their sense of professionalism. (See Figure 7). The participant has undergone an extensive period of postgraduate education having recognised a need to continue learning and as a result was able to improve their provision of care for their patients, which is the basic philosophy of continuing professional development [25]. The increase in knowledge, skills and confidence of this individual has had a positive impact on their clinical practice. This positive impact was reflected by many of the interviewees.

Increased confidence was seen to have a positive impact on dental practice. Participants reported increased confidence in: their ability to do dentistry, on communication skills and their ability to use evidence based protocols to decide on materials and techniques. A surprising finding was that patients' satisfaction with treatment provided increased as participants' confidence increased, which was based on greater knowledge and skills.

The data demonstrated a change in practice profile as a direct response to increased confidence, from largely state sponsored practice (NHS) to a more private orientated practice. The increase in confidence that has been generated during the RDP programme has contributed to facilitating some of the participants to make career decisions about the type of practice they wish to work in and have enough self-efficacy to actually make such a career change.

**Discussion:**

We discuss the findings of this study in relation to GDPs' perceptions of how changes in confidence impact clinical practice, following their participation on a master's programme. A sense of confidence is central to personal development and on-going study [8,26].

Confidence at the end of the programme is based upon a deeper understanding and appreciation of the problems associated with restorative dentistry, being able to deal with everyday problems in an evidence based way, being more aware of the materials available (particularly their limitations), feeling more confident in discussing various options with patients and having a higher level of skills to undertake dental restorative procedures. In addition, the increase in patient uptake of suggested treatment options and satisfaction with treatment undertaken is reflected upon, leading to an increase in confidence reported by participants. Treatment planning of patient cases was thought to be so thorough that outcomes of treatment were more predictable, and that predictability led to increased confidence. The increase in confidence to communicate with patients and colleagues resulted in the participants feeling completely adequate, secure in what they were doing and unintimidated by challenges such as that offered by complex restorative treatments.

We found no mention of the influence of confidence levels on clinical practice or patients' responses to treatment, treatment planning or the use of dental restorative materials during our literature review. Similarly, there is nothing in the dental literature to suggest that there is a link between participation in CPD activities and performance enhancement [27]. The medical literature includes mixed messages; there was no correlation between Continuing Medical Education (CME) and the improvement in specialist care of urology patients [28]. By contrast,

there is some evidence to suggest that undertaking a CME activity to enhance pain control did enhance performance [29]. In choosing to question participants about their perceived confidence in communication and clinical skills, we wanted to explore any repercussions of changes in confidence. Our findings point to an increase in confidence having a profound impact on clinical practice following this style of learning intervention. Whether a similar effect results from a short CPD activity is unclear. This would suggest that the length of the programme, the learning interventions, the support, the motivation, the setting of realistic goals and self-efficacy, all have an impact on confidence in clinical practice.

Various factors influence the transfer of new knowledge and skills from the teaching/learning environment to the 'workplace' [30]. This concept of re-contextualisation is well recognised in educational circles but is a relatively new concept in the medical/dental educational environment. By having multi-pedagogical learning interventions, the transfer of new skills from the learning environment to the clinical setting is less problematic.

The ability to communicate confidently with patients and fellow professionals is borne from a greater knowledge and understanding of the subject area (see Figure 6. One of the areas of most value is the increase in confidence when treatment planning, which not only requires the logical planning of treatment options but endorses the participants' ability to discuss treatment options with patients, resulting in an increased acceptance of treatment by patients, leading to a more confident individual (see Figure 3).

Patient satisfaction was expressed by participants as having directly influenced their perceived confidence levels. Thereby our data may not emanate from subject-related learning alone. Some of the participants reported an increase in their sense of job satisfaction with the increase in confidence. Their sense of job satisfaction was as a direct result of more knowledge and therefore the ability to communicate in a more authoritative, informative and empathetic way with patients.

A possible limitation of this study, which may have influenced the observations made relating to confidence, is the inherent flexibility of the programme, which allows participants to exit at different levels. Most participants found that the completion of year 1 (CRDP) had already satisfied their learning requirements. Throughout the history of the master's programme this has been a common trend. This may have had an influence on bias, as the self-selected cohort who completed the entire programme may have been the most enthusiastic and confident or potentially the least confident. This latter aspect is beyond the scope of the

present study. The use of “insider researcher”, its limitations and how we mitigated this potential anomaly are as discussed in the method section.

**Conclusions:**

Increases in confidence, following participation on a master’s programme, had several impacts on clinical practice for general dental practitioners. These included: a desire and ability to advise patients in a more informative way thus improving communication skills, a realisation that previously unattainable skill levels were attainable, allowing the participants to undertake more complex, challenging cases with confidence; a greater appreciation of the individual’s limitations; and a greater sense of job satisfaction, which was reflected by greater patient acceptance and satisfaction. Early frustrations (during the certificate year of the programme) with the limitations of incorporating new knowledge and skills into practice, were superseded during the diploma stage of the programme by increases in confidence. The participants who took part in this study were able to develop their clinical practices, which in some cases meant moving practice, were able to utilise their new knowledge, and were able to plan future postgraduate learning opportunities. They had fulfilled their aims and objectives of attending the programme and increasing self-confidence.

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**Figure 1: Perceived increase in confidence reported following completion of the MSc**

**Figure 2. Perceived increase in confidence of clinical skills before and after the RDP programme.**

**Figure 3. The degree of acceptance of treatment plans before and after the RDP programme.**

**Figure 4. Perceived changes in confidence, of both cohorts, in their ability to do dentistry, before and after the certificate year.**

**Figure 5. Perceived changes in participants' confidence in communicating with patients before and after the Certificate year.**

**Figure 6. Perceived changes in confidence throughout the RDP programme with respect to communication skills.**

**Figure 7. Perceived change in confidence levels for both cohorts at start and completion of the RDP programme**

| | 2010 | 2011 |
|---|---|---|
| Number of Returned Questionnaires | 70/72 (97%) | 67/72 (93%) |
| Age | Mean 32<br>Range 25-50 | Mean 33<br>Range 24-57 |
| Gender | Male=44 (63%)<br>Female=26 (37%) | Males=48 (79%)<br>Females=12 (21%) |
| Number of Years Qualified | Mean 8.9<br>Range 3-30 | Mean 8.9<br>Range 2-20 |
| Location of Undergraduate University Training | UK=47 (66%)<br>Europe=7 (10%)<br>Rest of World=14 (21%) | UK=38 (62%)<br>Europe=9 (15%)<br>Rest of World=13 (21%) |
| Type of Practice Currently Working in | NHS *=8 (11%)<br>NHS and Private=51 (73%)<br>Private=8 (11%)<br>Community Service=2 (3%)<br>Corporate ** =2 (3%) | NHS=23 (34%)<br>NHS and Private=27 (40%)<br>Private=8 (12%)<br>Community Service=0 (0)<br>Corporate=5 (7%) |

**Table 1. Demographic data for 2010/11 cohorts on entering the programme**

**(*National Health Service, ** Large company or group)**

| | 2010 Cohort | 2011 Cohort |
|---|---|---|
| **Responses to Questionnaire** | 12 (66.6%) | 13 (72.2%) |
| **Gender** | Male 8 (66.6%) | Male 4 (30.8%) |
| **Age: Range and Mean** | 30-55, Mean=39.8 Years | 27-50 Mean 31.5 Years |
| **No. of Years Qualified: Range and Mean** | Range 8-34 Years<br>Mean 15 Years | Range 7-24 Years<br>Mean 12.6 Years |
| **Type of Current Practice** | NHS=4 (33%)<br>NHS/Private=9 (75%)<br>Private=0 (0)<br>Community Service=1 (8%)<br>Corporate=0 (0) | NHS=2 (15%)<br>NHS and Private=8 (61%)<br>Private=3 (23%)<br>Community Service=0 (0)<br>Corporate=0 (0) |

**Table 2. Demographic data for the MSc element of the programme.**

| Theme | Sub-Theme | Sub, sub-Theme |
|---|---|---|
| Reasons for attending programme | • Perception of need for more knowledge<br>• Boredom<br>• Improve confidence<br>• To gain a postgraduate degree | ➢ A need to know more in order to teach<br>➢ Previous educational history |
| Confidence and Self-efficacy | • Confidence as a result of Knowledge<br>• Confidence of the participant<br>• Confidence of patients<br>• Confidence as a result of Learning Experience | ➢ Flexibility of programme<br>➢ Self-doubt |
| Learning Experience | • Small groups<br>• Hands-on/clinical teaching<br>• Combined learning pedagogy<br>• Reflective learning<br>• Self-directed learning<br>• Feedback | ➢ Social aspect<br>➢ Peer learning<br>➢ Lectures/tutorials<br>➢ Programme length<br>➢ On-going support<br>➢ Research project |
| Motivation | • Goals<br>• Influence of family/friends<br>• To obtain a postgraduate degree<br>• To improve dental knowledge/skills | ➢ No goals<br>➢ One goal; the master's |
| Impact on Clinical Practice | • Treatment planning<br>• Taking on challenging cases<br>• Evidence based<br>• Changes in techniques and materials | ➢ Fitting new ideas into practice<br>➢ Restrictions/limitations<br>➢ Patient satisfaction<br>➢ Ability to do dentistry<br>➢ Communication skills |

**Table 3. An overview of the various themes derived from the qualitative analysis**

**Figure 1: Perceived increase in confidence reported following completion of the MSc**

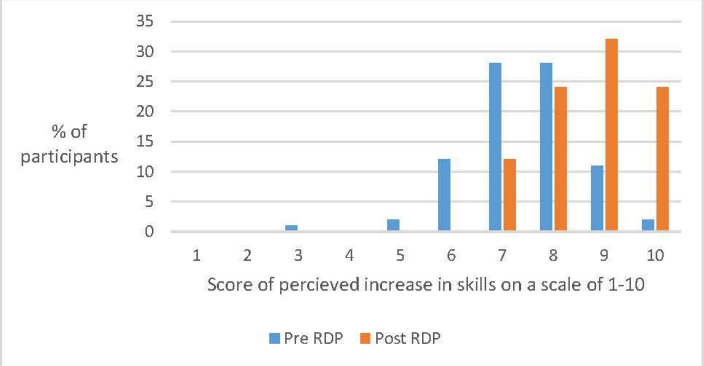


**Figure 2. Perceived increase in confidence of clinical skills before and after the RDP programme.**

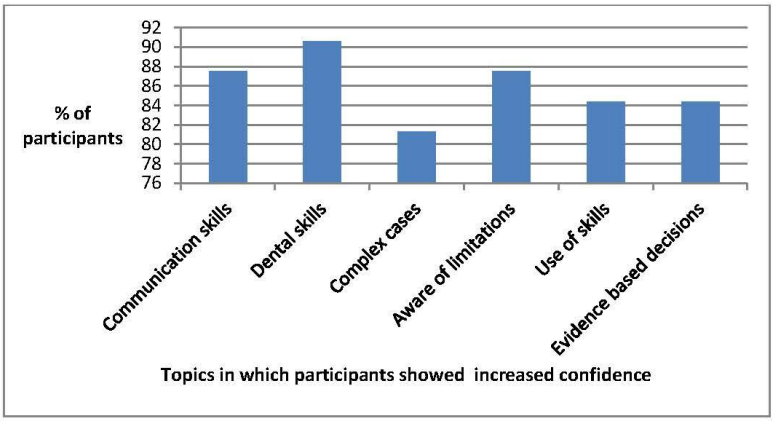
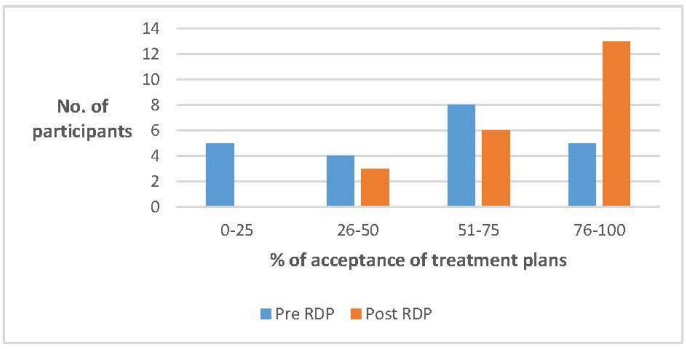


**Figure 3. The degree of acceptance of treatment plans before and after the RDP programme.**



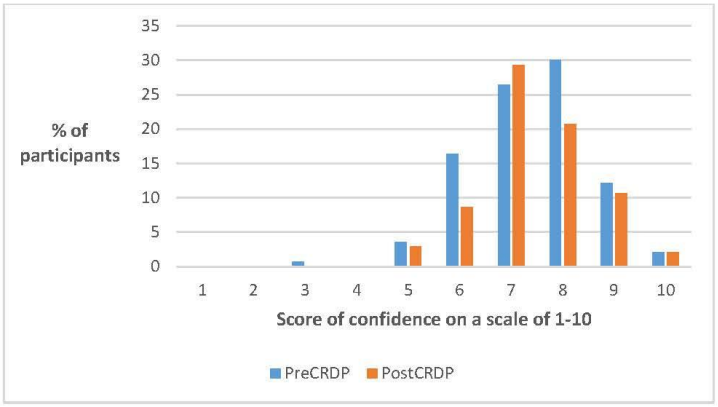



**Figure 4. Perceived changes in confidence, of both cohorts, in their ability to do dentistry, before and after the certificate year.**

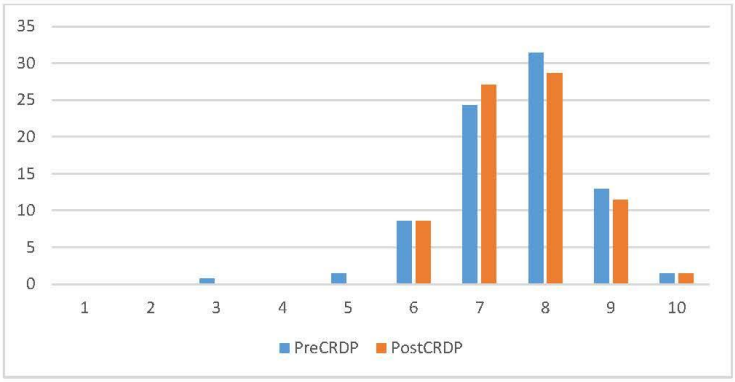



**Figure 5. Perceived changes in participants' confidence in communicating with patients before and after the Certificate year.**

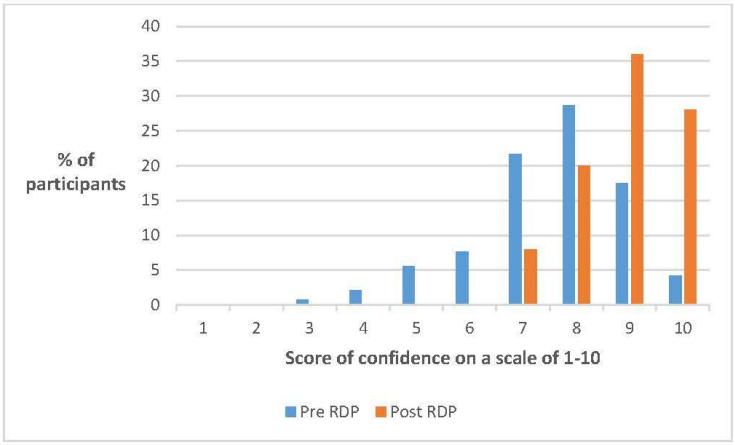



**Figure 6. Perceived changes in confidence throughout the RDP programme with respect to communication skills.**

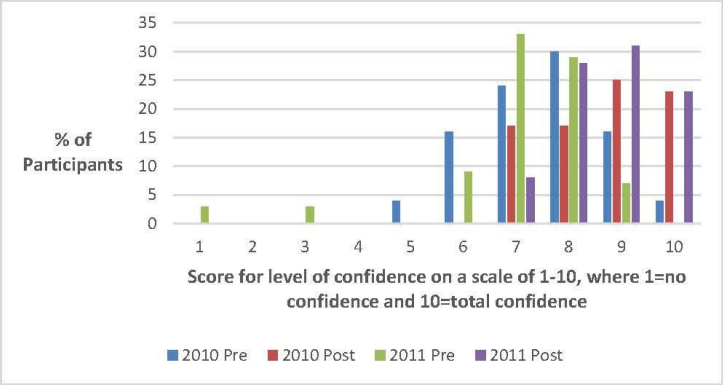



**Figure 7. Perceived change in confidence levels for both cohorts at start and completion of the RDP programme**