An exploratory study of the role of emotional intelligence and self-efficacy on service quality and adherence in a weight loss setting

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Abstract

This study investigates the role of self-efficacy (SE) and emotional intelligence (EI) on perceived quality and adherence. SE and EI are proposed to moderate the relative strength of the relationship between perceived technical and functional quality and adherence. These variables are also proposed to directly influence adherence behaviour. Qualitative data were obtained from in-depth interviews with 20 customers on a pharmacy meal replacement program. Participants were purposely recruited from different urban and regional areas in Australia. The findings suggest that SE and EI moderate the relative strength of quality perceptions and also support a direct link between these variables and adherence. By tailoring service delivery interventions to customers displaying different socio-cognitive profiles, health care providers could positively influence quality perceptions which could increase adherence.

Keywords: emotional intelligence, self-efficacy, service quality, adherence, health services

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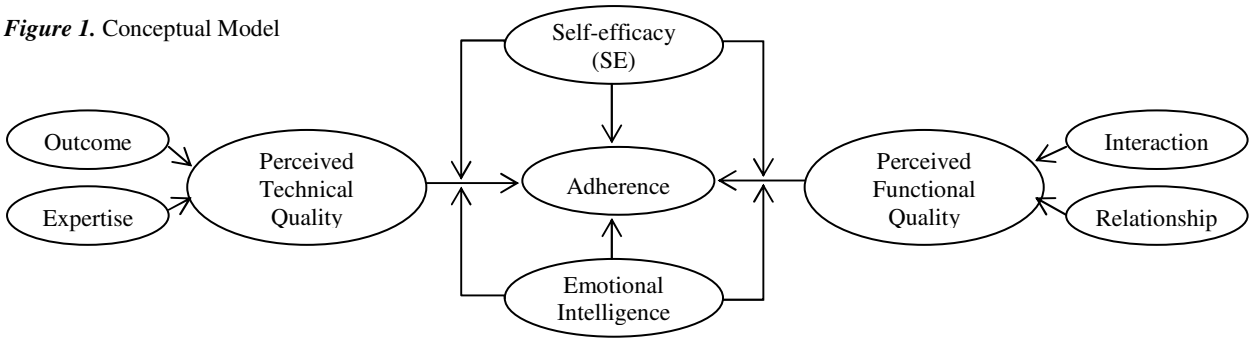
Introduction

The examination of adherence in weight loss services is important given the global prevalence of overweight and obesity. In Australia, 68% of adult men and 55% of adult women were overweight or obese in 2007-2008 (Access Economics, 2008). The growth in pharmacy weight loss programs in Australia reflects the increasing uptake of customers utilising this treatment for their weight loss efforts. Given that many weight loss treatments expect consumers to engage in certain behaviours outside the supervision of the health provider, understanding the factors that influence consumer adherence to the regime becomes crucial for health providers (Dellande, Gilly and Graham, 2004). Although several studies have demonstrated the important role that the provider plays in supporting customers on weight loss treatments (e.g. Ahrens, Hower and Best, 2003; Dellande et al., 2004), no study has examined the interaction between the customer's socio-cognitive predisposition and perceived service quality and how these relationships affect adherence behaviour. The purpose of the study was to develop and qualitatively explore a conceptual model based on insights from various disciplines including services marketing, consumer behaviour, organisational behaviour, psychology, and sociology.

Conceptual Model

Perceived service quality is modelled on two dimensions: technical and functional quality (Gronroos, 1984). Socio-cognition is represented by self-efficacy and EI. Both these variables are proposed to moderate the relative strength of the relationship between technical and functional quality perceptions and adherence, as well as directly impacting adherence, as shown in Figure 1.

Figure 1. Conceptual Model



The following discussion presents the rationale for the proposed relationships between these constructs. First, a review of the literature is provided to support the conceptual framework. This is followed by a summary of the findings. The paper concludes by stating the limitations, managerial implications and suggestions for future research.

Literature Review

Service Quality. Although the health literature offers a number of different approaches to assessing service quality perceptions (e.g. Choi et al., 2004; Zineldin, 2006) many of these approaches contain similar and or overlapping dimensions, with the majority based on

Gronroos' (1984) original technical and functional domains. Similarly, this study defines perceived service quality along these two dimensions. Customers evaluate quality on both technical (perceived knowledge or competence of provider) and functional (perceived provider courtesy) dimensions (Donabedian, 1966). Consistent with findings from the health literature (Haynes, McDonald and Garg, 2002; Pascoe, 1983), it is posited that quality perceptions on both dimensions are likely to be positively linked with customer adherence behaviour as indicated in Figure 1.

Adherence. The medical literature describes compliance or adherence as a reflection of the extent to which patients follow their medical regime (Lutfey and Wishner, 1999; Trostle, 1988). Adherence captures the interactive complexity of health care and recognises the co-productive role of the patient (customer) in producing and consuming the service. The present study examines customer perceptions of these interactions for two main reasons. First, the study investigates the customer's perspective since it is the customer's perception of the service offering that affects quality perceptions (Gronroos, 1984). Second, the aim of the research was to understand how socio-cognitive variables moderate quality perceptions and whether these associations affect adherence.

Self-efficacy. Social cognition theory (SCT) posits that people have competencies that can be used to influence their own motivation and action through: an interaction of cognitive, emotional, and other personal resources; action; and environmental factors (Bandura, 1989, 1998). Central to the causal structure of SCT is beliefs of personal efficacy (Bandura, 1997). Perceived self-efficacy refers to "beliefs in one's capabilities to organize and execute the courses of action required to produce given levels of attainment" (Bandura, 1998, p.624). The model suggests that adherence behaviour is influenced by self-efficacy. The literature on self-efficacy provides strong support for the direct relationship between self-efficacy and health behaviour (e.g. Dellande et al., 2004; Jayanti and Burns, 1998; Schwarzer, 2000; Snell and White, in press). The literature also suggests that outcomes are influenced by varying levels of self-efficacy. For example, in a study examining a similar construct to self-efficacy, consumer self-confidence, Bearden et al. (2001) found that decision making was affected by varying degrees of consumer self-confidence. They found that consumers with low self-confidence were more inclined to be affected by environmental circumstances, and to display inconsistent decision making than those with high self-confidence. Thus, on the basis of the literature, it would be reasonable to expect that customers with low self-efficacy will have difficulty assessing service quality and thus have to rely on the functional aspects of the service (Sharma and Patterson, 1999). That is, because self-efficacious people have stronger beliefs in their capabilities and confidence in their abilities to achieve their goal, they will place less importance on the interactive abilities of the provider, and more importance on the technical aspects of the program, such as perceived provider knowledge, as suggested in Figure 1.

Emotional Intelligence. Broadly, EI refers to the interaction between emotion and cognition that leads to adaptive functioning (Salovey and Grewal, 2005). Extant literature suggests three main approaches to emotional intelligence: ability emotional intelligence (ability EI); trait emotional intelligence (trait EI); or a combination of ability and trait EI (mixed models) (Mayer, Salovey and Caruso, 2008; Petrides and Furnham, 2001). Prior research has established the relationship between emotional intelligence and communication (Rozell, Pettijohn and Parker, 2004); customer satisfaction (Giardini and Frese, 2008; Kernbach and Schutte, 2005); and workplace performance (Carmeli, 2003; Cartwright and Pappas, 2008). The social sciences literature has also linked emotional intelligence to a wide range of

psychological and health behaviours such as mood recovery (Salovey, et al., 1995), deviant health behaviours (Brackett and Mayer, 2003), and everyday behaviour (Brackett et al., 2004). However, no study to date has investigated the relationship between emotional intelligence and adherence behaviour in a weight loss setting. Based on this gap in the literature, further investigation of EI is warranted. The model posits that people with high EI are likely to display stronger adherence to the program than those with low EI. Further, the model suggests that because the weight loss program involves multiple interactions between the customer and the provider, differing levels of customer EI may influence the relative importance of functional and technical quality perceptions. Thus, the extent to which the customer adopts certain perspectives of service providers could help account for variances in quality perceptions which could in turn, influence adherence behaviour. The direct and moderating roles of EI on adherence and service quality are expressed in Figure 1.

Methodology

The weight loss setting used in this study is an Australian pharmacy meal replacement program distributed through a franchise operated pharmacy group and purpose built, branded weight loss centres. Participants were purposely recruited from different urban and regional suburbs in Sydney. Qualitative data were obtained from in-depth interviews with 20 customers. Males and females were equally represented in the study. Respondents ranged from 21 to 65 years of age. All participants were English speaking, 18 years or over and had been on the program for at least two weeks.

The recruitment process involved participating pharmacies and weight loss centres making initial contact with eligible customers. Five pharmacies and four weight loss centres participated in the study. Details of customers who agreed to participate in the study were referred to the research team and subsequent contact was made by the researchers to arrange interview times. Eleven customers were recruited through pharmacies and nine customers were identified through the weight loss centres. Interviews for the majority of participants (n=19) were conducted at the customers' pharmacy or weight loss centre. One participant was interviewed by phone due to scheduling issues. The interview questions were based on a review of the literature from disciplines including services marketing, social sciences, management, and psychology. Pseudonyms have been used to mask the identity of customers (e.g. P1, P2, P3 etc) and practitioners (pseudo names). Each interview was digitally recorded and transcribed verbatim and the average interview time was 45 minutes.

Rigour. Lincoln and Guba's (1985) parallel criteria for trustworthiness was used give the study's interpretative design. This process offers techniques that parallel those of the conventional paradigm: credibility (for internal validity); transferability (for external validity); dependability (for reliability); and confirmability (for objectivity). Credibility was established by prolonged engagement with each participant during the interview (interview times ranged from 35 minutes to 68 minutes). Triangulation was achieved by cross-checking data with different sources (e.g. weight loss practitioners, management). Extensive peer debriefing with experts in the field as well as stakeholder groups also helped to promote the data's credibility. Transferability was achieved via the verbatim transcription of each interview. Finally, a protocol was established to record and monitor all the procedures for data collection (Perry, 1998) which helped promote the study's dependability and confirmability.

Analysis. Manual thematic analysis was conducted. The sequence of analysis followed a complete transcription of each interview, which was verified and supplemented by field notes

and other supporting documentary evidence. Initially, all the data was categorised in an attempt to intuitively aggregate units (Stake, 1995) and then analysed by searching for similarities, recurring themes and relationships in the data (Miles and Huberman, 1994). This process was repeated several times until a general set of themes emerged from the data. The data was then categorised according to the four primary quality dimensions (technical, functional, administrative and environmental). Socio-cognitive profiles were then developed based on the participants' EI and self-efficacy perceptions. To explore EI, participants were asked a number of questions in relation to their perceived personal competence (e.g. self-awareness, motivation) and social competence (e.g. social skills, empathy). Additionally, participants were asked to respond to two hypothetical scenarios. Scenario one depicted a negative interaction with their practitioner and scenario two depicted a negative social interaction. Participants were also asked a range of questions regarding beliefs about their capabilities in adhering to their program to explore perceived self-efficacy. Finally, the socio-cognitive profiles were analysed by comparing them with quality perceptions which were then compared with adherence self-ratings.

Research Findings

Perceived Service Quality. While participants identified factors representative of all four quality dimensions (technical, functional, administrative, and environmental), the most significant finding was the importance attributed to the functional aspects of quality. A number of recurring themes was identified from the data including: relationship, interaction and empathy (functional quality); and the perceived knowledge, credentials and experience of the provider (technical quality). This finding suggests that most participants perceived quality in terms of the support services offered by the staff and is reflected in the model's representation of quality as technical and functional dimensions.

Adherence. The findings indicate that for the first two weeks of commencing the program, the majority of participants indicated that they adhered to the program as instructed: 11 participants adhered to the program all the time; six indicated that they adhered to the program most of the time; and three adhered to the program some of the time. When asked to self-rate the extent to which participants believed they were able to adhere to the program overall (i.e. since commencing the program), a different trend can be observed: no participant adhered to the program as instructed all the time; nine adhered to the program most of the time; and 11 adhered to the program some of the time. The data suggests that most people adhere to the program for the first two weeks of commencing, thereafter variations exist.

Self-efficacy (SE). Self-efficacious participants displayed strong beliefs in their capabilities in achieving their goal weight by completing the program. These beliefs influenced their motivation and their ability to adhere to the program despite challenges. Participants displaying efficacious beliefs were characterised as high SE. Participants with low SE displayed low confidence in their ability to achieve their goal weight and were classified as such. Low SE participants were found to have a higher relapse rate (breaks from the program) than high SE participants.

Emotional Intelligence (EI). Overall, the findings suggest that the majority of participants had high EI, with the majority of participants presenting strong personal and social competence self-ratings. When combining these common responses with other data relating to motivation beliefs and self-awareness, an EI profile (low, medium, high) was developed for each participant. For example, a participant with high EI was characterised as someone who indicated they would not

be that affected by the hypothetical negative behaviour as depicted in either scenario. High EI participants also displayed empathy in responding to the scenario. Conversely, participants were classified as low EI if they were affected by the encounter, to the extent where it would affect their ability to continue with the program and or cause personal distress. Further, low EI participants displayed little to no empathy with the situation and or were not able to regulate their emotions. Participants who displayed high EI characteristics in one scenario and low in the other were classified as medium EI.

Discussion and Limitations

The aim of this exploratory study was to investigate the moderating role of socio-cognition on perceived quality and whether these relationships influence adherence. Additionally, the study examined the direct relationship between socio-cognition and adherence. The findings suggest that participants evaluated quality primarily in terms of functional attributes. This is due in part to the credence properties associated with health services, but in particular due to the weight loss setting of the study where quality formations were derived largely from the multiple interactions with the provider. A number of different relationships between the socio-cognitive variables and quality were found. Participants with strong socio-cognitive abilities (high EI and high SE) placed a greater importance the technical aspects of service, while participants presenting low socio-cognitive abilities (medium to low EI, low SE) relied more on the provider's interactive abilities. The variations reported in adherence can be attributed in part to the moderating effect that socio-cognition has on the two perceived quality dimensions. The results also suggest a direct relationship between socio-cognition and adherence. The findings therefore suggest that socio-cognition moderates quality perceptions which influence adherence. The findings also support the direct relationship that socio-cognition has with adherence.

The limitations associated with interpretations from the small sample size (n=20) are acknowledged. The purposeful nature of the sample means that caution is necessary in drawing general conclusions from the information provided in this study, particularly given its focus on a specific pharmacy meal replacement program. Finally, the study recognises the limitations associated with the criteria of English-speaking customers as exclusionary of other cultural perspectives and or minority groups.

Conclusion, Implications and Guidelines

This study presents a socio-cognitive approach to service quality perceptions and adherence by conceptualising perceived quality as technical and functional quality, where the strength of the relationship between these dimensions and adherence is moderated by the customer's EI and SE. No study has yet examined perceived service quality and adherence from this integrated perspective. Management can potentially increase quality perceptions and hence adherence behaviour by developing more customised services based on the customer's socio-cognitive profile. Other areas for future research could be to investigate these relationships from a dyadic or triadic perspective, involving providers and or powerful others such as family or friends. Furthermore, these relationships can be explored in other preventative health contexts such as smoking cessation programs and exercise.

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