A Qualitative Examination of Women’s Self-presentation and Social Physique Anxiety During Injury Rehabilitation

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Introduction

The attempt to present oneself in a particular manner has been termed self-presentation.[1,2] Typically people present characteristics that highlight positive attributes and de-emphasize behaviours or aspects of the self that may result in undesirable impressions. Those who are concerned with how they are perceived may suffer social anxiety when they doubt their ability to present themselves as desired.[3] Social anxiety resulting from concerns about physical evaluation is termed social physique anxiety (SPA).[4]

Research in exercise has established that women consistently report higher SPA than men.[5-8] It has been demonstrated that women reporting high levels of SPA prefer to exercise in environments that are exclusively female,[9] and may reduce the amount of time they spend exercising when males are present.[7] Furthermore, there is consistent evidence that those with high SPA avoid wearing physique-salient clothing and prefer exercise environments that are private, to avoid potential evaluation by others. SPA is also positively associated with Body Mass Index (BMI) such that women who are overweight or obese generally report higher levels of SPA than their normal weight counterparts.[4]

These findings have recently been replicated in injury rehabilitation settings. Driediger [10] examined the self-presentation and SPA of both undergraduate students in the hypothetical context of injury rehabilitation, and women who had actually been prescribed physiotherapy. This work demonstrated positive,
significant relationships between SPA and women’s preference for attending physiotherapy sessions with other females, wearing clothing that de-emphasized the physique, and receiving treatment in private areas of the clinic. Similarly, Setchell and colleagues found that the presence of mirrors, open-concept clinic layouts, and being watched while performing rehabilitation exercises influence patient perceptions of negative body weight judgments in physiotherapy settings.[11]

Evidence suggests that negative outcomes (e.g., non-adherence, lack of satisfaction) may result from exercising in environments with large evaluative potential, especially for those who are high in SPA.[8,12] Given our limited understanding of how rehabilitation environments influence such outcomes for patients, there is a need to determine how elevated self-presentational concerns may influence women’s rehabilitation experiences and behaviours. Accordingly, the purpose of this study was to provide an in-depth examination of the perspectives of women who are highly physique anxious and engaging in a rehabilitation program. The main objective was to gain insight into their experiences in the rehabilitation setting, and their attitudes and preferences toward the social and physical features of the rehabilitation environment.

**Methods**

**Participants**

Purposeful sampling was used to recruit women who would provide rich, genuine information regarding self-presentation in injury rehabilitation.[13] The
inclusion criteria were: females with high SPA [Social Physique Anxiety Scale (SPAS) total score $\geq 25$]; referral to physiotherapy for an injury requiring at least three treatment sessions; yet to begin the prescribed treatment program; no physiotherapy treatment in the previous two years. All participants were recruited from a single clinic and were referred by the same primary care practitioner (author #4).

**Procedures**

Ethics approval for this study was obtained from the ethics board at the hosting university. Potential participants were approached by their physician at the end of the medical appointment in which they were referred to physiotherapy. The physician administered the SPAS to screen for ‘high SPA’. [4] Eligible women provided written consent to participate.

**Social Physique Anxiety Scale (SPAS)**

The brief 9-item SPAS was employed to assess women’s general concern with evaluation of their figure or physique. [14] Items were rated on a 5-point scale ranging from 1 (*not at all characteristic of me*) to 5 (*extremely characteristic of me*). The summative total of the items ranges from 9 to 45.

**Interview procedures**

Grounded theory is an interactive qualitative approach that builds inductive theories through the process of simultaneous data collection and comparative
This method aims to develop explanatory theories of social processes rather than verify existing theory through hypothesis-driven study. Considering the early stage of research into the phenomenon of SPA in rehabilitation settings, this approach was taken because it allowed for our understanding to be informed by the lived experience of the population of interest. Using qualitative interviews to access this experience provided a rich source of information and gave the researchers opportunity to clarify or explore topics in greater depth to ensure that the meaning of the experience to the participants was captured appropriately.

Author (author #1) completed all interviews at the physiotherapy clinic. Each participant was interviewed once before her first treatment appointment, and once after her third appointment. The first interview lasted 45 - 60 minutes, while the second lasted approximately 30 minutes. Before the first interview, the researcher led each participant on a tour of the clinic to provide a reference.

Semi-structured interviews, based on a grounded theory approach, followed a combination of standard, open-ended questions and an interview guide. Each section of the guide for both interviews began with a general, open-ended question that was followed up by more specific probe questions depending on the type and amount of information provided by the participant. Women were asked to discuss their (a) self-presentational concerns; (b) social setting preferences; and (c) physical setting preferences in the context of the clinic. Data collection continued past the point of saturation to ensure that no new information emerged.

Data preparation
All interviews were audio recorded. After each interview, comprehensive notes were taken, including common themes that emerged. Each interview was transcribed verbatim and an inductive content analysis approach was used to organize quotes into meaningful themes and comprehensive categories.[13,18]

**Data analysis**

Transcripts were analysed by a single rater using QSR*NVivo9.[19] Quotes, including individual words, phrases, or combinations of sentences that expressed a single thought or feeling, were organized as text units and placed into thematic nodes.[20] Hierarchical trees illustrating this process are presented in Figures 1-3.

Both inductive and deductive approaches were employed.[21-23] The analysis was deductive in that the most general nodes that were identified were derived from the interview guide. The constant comparative technique was used to inductively identify emerging themes during data collection.[15,24]

Triangulation was used to establish credibility during interview guide development (i.e., multiple researchers involved), and a second researcher independently analyzed 20% of the data to ensure the fit of the classification system. Member-checking was used with two participants to ensure credibility.

**Results**

The sample included 10 women with SPAS scores ranging from 25 to 45 (M=36.44, SD=7.78). Seven of the women were obese, while one was overweight and two were within normal weight range. Six additional women completed the
screening process but were ineligible based on low SPAS scores. Only seven participants (BMI>25) were interviewed for a second time; one woman did not start her physiotherapy program, and two others could not be contacted for follow-up. Participant characteristics are presented in Table 1.

**Self-Presentational Concerns**

All participants acknowledged that uncertainty about upcoming physiotherapy sessions caused them to feel apprehensive about how they would be perceived, and in most cases this did not diminish over time. Participant 1 discussed how the physiotherapy setting was different from other social situations and caused her to experience anxiety that would persist despite exposure:

“But in physio it’s more of an enclosed area, there’s more, it’s more intimate, you know what I mean? There’s more people in your space and stuff like that and so yeah, I’m still self-conscious.”

Participants (n=8) also worried that the validity of their injury may be questioned because of its severity, or because it was not obvious. Participant 10 stated:

“... I think I would be a lot more comfortable if it was like an elbow or, you know, something visible, or something easier, or a
broken foot or something. That’s just one thing and that’s kind of more acceptable and people know about it. It would also be easily identifiable instead of invisible.”

A frequently (n=4) expressed concern was that others would attribute injuries to the woman’s body type. For example, one woman (participant 5) commented, “I’m sure a lot of people will say, ‘well no wonder, she’s heavy, and so that’s why she has knee problems.’”

All participants reported feeling anxiety about others’ thoughts regarding their physical appearance, and worried about others evaluating their weight. Participant 2 discussed how her inability to perform exercises as well as expected would result in negative perceptions: “I walked in there pretty fine but then when I started to do the exercises, I couldn’t do them. That’s when I’m thinking people are thinking I’m a wimp.”

Participants favoured clothing that concealed their figure. They were adamant that they would not wear shorts or tank tops, and that having to do so would affect their program adherence. Participant 7 said: “It would deter me from even getting into that process, of even going to the clinic. I probably wouldn’t go.”

**Social Environment Preferences**

Participants indicated increased awareness of evaluation with more people present during appointments. They stated that they would not complete their session if the clinic was too busy, but two specified that they did not want to attend
appointments alone because of the focused attention. Participant 4 expressed this:

“Maybe like 4 or 5 [other people]. Not a room full, but not empty either because being the only one in the room is kind of uncomfortable too because there’s nobody else to look at but you.”

Participants all reported that they would feel pressure to perform beyond their capability if they felt that they had to impress others in the clinic:

“I definitely would hate it and would try to compensate and make it look like, oh, I can do this exercise even though it was hurting horribly. But oh, I can do 50 sit-ups or I can do 50 planks even though I know that after the first two I shouldn’t be doing these at all.” [Participant 9]

The women (n = 8) indicated they would feel more aware of the potential for evaluation if males were present. They asserted that they did not feel comfortable with men, even after attending a number of physiotherapy sessions. They (n = 7) also indicated that they preferred other patients to be their age or older. They perceived less judgment from older people, and Participant 6 indicated that the presence of young females may discourage them from continuing with their rehabilitation program:

“If there are a lot of teenagers, per se, that are girls, I think that it could be frustrating and aggravating to the point where I
wouldn’t want to go back. I think I could potentially stop going to physio because of it.”

Participants discussed how the physique and physical ability of others would affect their adherence to their rehabilitation program. Several (n=7) stated that they would not attend an appointment or would end a session early if the other patients were physically fit. The qualities of the physiotherapist were also important, and all participants identified similar desirable characteristics:

“Kind, caring, empathetic, good listener, skilled, confident, competent, puts me at ease, not shocked by any of the injuries... and non-judgmental. It doesn’t matter the age probably, I would probably feel better if it was female because of where it is – hip and lower back and stuff. Although if a guy was... well, I think I’d feel more comfortable with a female.” [Participant 9]

Physical Environment Preferences
The open concept setting was associated with the most potential for evaluation. Five women indicated that they would be discouraged from returning to physiotherapy if they had to receive treatment in this type of setting. Participant 8 was adamant: “I don’t want people staring at me. That I can tell you. If that were to happen, I wouldn’t come back. No, I wouldn’t do them out in the open area. I just wouldn’t...”
When discussing treatment received in a curtained area, the women expressed concern with other people overhearing their conversations with the physiotherapist. They felt that they would be evaluated based on what they were saying, even though others could not see them. The women indicated a strong preference for a separate examination room with a door, but some (n=3) maintained that they only required a private room for exercises that were difficult, or aspects of treatment that required them to expose parts of their body.

Mirrors and windows in the physiotherapy clinic were highlighted as anxiety provoking, but once the women had some experience with the facility four of them reported that they no longer felt additional anxiety about these features.

The women suggested that they would feel apprehensive about advocating for themselves if they felt uncomfortable with the area in which they were receiving treatment. They perceived that others would criticize them if they asked for additional privacy.

**Other Themes**

**Injury location.** All participants indicated that their environmental preferences and concern over others’ perceptions of them would change if they were undergoing rehabilitation for a different injury. Participant 3 revealed this:

"Your lower back, where you’d have to show anything under my shirt or something like that, I’d definitely want to be behind"
closed doors. So I guess it kind of depends on where the injury is.”

**Self-presentational efficacy.** Initially, participants reported minimal confidence in their ability to convey positive impressions in injury rehabilitation. In the second interview, two women stated that their confidence had increased as their familiarity with the situation increased. They emphasized experiences when they did not feel evaluated as being essential to raising their efficacy; however, five women maintained a lack of confidence despite having had some experience with physiotherapy.

**Coping strategies.** Participants all mentioned that they used some kind of protective self-presentational strategy to reduce anxiety. These included self-talk, thought-blocking, and thinking about other things as a distraction. Others discussed avoidance strategies. The approach employed most often was scheduling appointments at specific times when there were fewer people present, or when it would be unlikely that a particular group of people would be there. For example, one woman stated how she asked her physiotherapist for a time when younger people were not typically there. Participants also indicated that they physically moved away from others so that they could not be seen, they avoided eye contact, or they disengaged from others by reading a magazine or book.
**Recommended modifications.** The women stated that they would feel best in a clinic that catered specifically to females. They also recommended positioning clinic windows higher so that natural light was permitted but no one could see in, organizing open space into separate areas with dividers, or designing the room as an L-shape to give a sense of concealment. Finally, they indicated a need for additional private rooms. They expressed the necessity for open communication with physiotherapists regarding each patient’s choice of treatment setting.

**Discussion**

The purpose of this study was to provide an in-depth consideration of the self-presentational concerns exhibited by physique anxious women undergoing injury rehabilitation. The findings revealed that these women experienced extensive self-presentational concerns that were intensified due to the nature of the physiotherapy environment.

As anticipated, participants were concerned with how others would view them based on their appearance. Being injured amplified this anxiety, as they perceived additional criticism due to their limited physical ability. Similarly, patients expressed that they perceived negative judgment from others based on their appearance, supporting the findings of Setchell et al.[11]

Consistent with findings in other domains,[25] participants indicated greater anxiety as the number of other people present increased, particularly if they were people whom the women felt they needed to impress. Aligned with the concept of social facilitation (i.e., people work harder when others are present),[26]
participants reported they would attempt to perform to the best or beyond their means to impress others in the clinic. In exercise, Martin and Leary found that some people deliberately engaged in unsafe behaviours to impress others, such as lifting weights that were heavier than they were capable of lifting.[27] Carron et al. proposed that people may focus greater attention on themselves when highly motivated to present themselves in a particular way, especially when performance is important to them.[28] Thus, motivation to present as a physically able person may cause an increase in self-focused attention with subsequent elevations in anxiety and reductions in performance. In rehabilitation, exercise quality is fundamental to recovery. Therefore, receiving treatment in the presence of people whom physique anxious women are motivated to impress may be detrimental to their ultimate recovery.

Consistent with previous findings in physiotherapy [10] and exercise, [29] participants disliked sharing treatment space with male patients. A male presence has been shown to reduce the intended amount of time that women spend exercising.[7] This may have implications for rehabilitation adherence, but has yet to be investigated experimentally. Additionally, participants preferred other patients to be the same age or older, with lower ability to perform rehabilitation tasks. Evidence suggests that a woman’s self-confidence to present herself in desired ways is affected by perceived discrepancies between herself and others.[30] Therefore, determining the effect of other patients on treatment adherence is a crucial next research step.
Each participant outlined how her self-presentational concerns and environmental preferences would change if she were receiving treatment for a different injury. Previous attempts to demonstrate that injury location might affect self-presentational concerns have been unsuccessful,[10] but these studies were based on hypothetical injuries. The current findings with women who were actually injured suggest that injury location may indeed be salient. Therefore, the effect that specific injury types have on women’s rehabilitation experiences needs to be determined in order to understand how best to mitigate self-presentational concerns.

Interestingly, the women felt apprehensive about advocating for themselves when they felt uncomfortable during treatment. They indicated that they felt social pressure to conform to the typical treatment setting (i.e., open concept environment) and expected judgment from others if they asked to be treated more privately. In physical activity settings, females have been shown to minimize the occurrence of any behaviour that would increase attention from others, even avoiding participation in an activity that they enjoy so as not to be singled out.[31] Therefore, physiotherapists may need to initiate these conversations with their patients, instead of relying on patients to state their preferences.[11] The psychological strategies (e.g., thought-blocking, self-talk) that participants reported using are also potential intervention approaches that therapists could promote for reducing anxiety in the clinic, although studies of their effectiveness are needed.

Limitations
One limitation of this study was that most of the women were obese. It should be noted that obesity was not an inclusion criteria for the study, and overweight women were not targeted for recruitment. Research in exercise has found that high levels of SPA can be exhibited independent of body fat,[32] and researchers have concluded that it is not only overweight women who experience SPA.[10] Nonetheless, the self-presentational concerns of women who are high in SPA, but of average weight, remain poorly understood.

A second limitation is that the second interview was conducted after only three physiotherapy sessions. Most participants did not report changes in thoughts or feelings after this length of exposure, and it is possible that this time frame was not long enough to alter their views. It is also possible that women with high SPA may be precluded from reductions in self-presentational concerns regardless of familiarity with the environment. In order to ascertain which is the case, future studies should examine self-presentational concerns throughout the course of an injury rehabilitation program.

Despite our best efforts to accurately portray the attitudes and behaviours of our participants, qualitative research holds the potential for researcher bias. We attempted to overcome this in a number of ways, including presenting quotes in detail so that readers can interpret their meanings differently.

Conclusions

Our results demonstrate that injured women who are high in SPA experience extensive self-presentational concerns that are exacerbated by the injury
rehabilitation environment. These concerns and preferences are similar to those reported in exercise,[33] but also include concerns that are exclusive to the rehabilitation setting.[11] The protective self-presentational strategies employed by these women could be implemented to help make patients feel more comfortable and potentially improve adherence to rehabilitation programs.

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**Funding:** [Removed to facilitate blinding].

**Conflict of Interest:** The authors declare no conflict of interest.
References


TABLE 1

*Descriptive characteristics of female physiotherapy patients*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>Women (n = 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Mean (standard deviation)</strong></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>41.3 (16.9) (range = 18-64)</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td></td>
<td>34.4 (range = 19.4-50.1)</td>
</tr>
<tr>
<td></td>
<td><strong>Frequency</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obese (BMI &gt; 30)</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Overweight (BMI 25-30)</td>
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</tr>
<tr>
<td></td>
<td>Normal weight (BMI &lt; 30)</td>
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</tr>
<tr>
<td>Injury location</td>
<td>Knee</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Back</td>
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<td>Shoulder</td>
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<td></td>
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<td></td>
<td>Ankle</td>
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</tbody>
</table>

*Note.* BMI = Body Mass Index.
Figure 1. Hierarchical tree illustrating self-presentational concerns.

Note: The number of text units indicates the number of times a particular theme was discussed, but higher numbers do not necessarily signify importance over and above that which is emphasized by the participants.
Figure 2. Hierarchical tree illustrating social environment preferences.
Figure 3. Hierarchical tree illustrating physical environment preferences.