Gender role conflict, emotional approach coping, self-compassion, and distress in prostate cancer patients: A model of direct and moderating effects

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Abstract

Objective: Gender role conflict or the negative consequences of male socialization may compromise men's adjustment to prostate cancer by shaping how patients perceive and cope with their illness. Given mixed findings regarding how gender role conflict interacts with emotional approach coping to regulate distress in prostate cancer patients, the present study examined the effects of emotional approach coping, when considered alongside self-compassion, the ability to be kind and understanding of oneself.

Method: Ninety-two prostate cancer patients completed questionnaires measuring gender role conflict, emotional approach coping, self-compassion, and distress. A moderated mediation model was tested, where emotional approach coping mediated the path between gender role conflict and distress and self-compassion moderated paths between (1) gender role conflict and emotional approach coping, and (2) gender role conflict and distress.

Results: Results partially supported this model with all study variables predicting distress in the expected directions. Emotional approach coping did not mediate associations between gender role conflict and distress; however, self-compassion did moderate the pathway between these variables.

Conclusion: Results indicated that higher levels of self-compassion might protect men from distress related to emasculating aspects of the cancer experience. Further investigation is required to understand how self-compassion interacts with emotionality and subsequently influences distress in prostate cancer patients. To better understand the effectiveness of emotional approach coping in reducing distress in prostate cancer patients, it is recommended that future research accounts for the receptiveness of social environments to men's emotional displays.

KEYWORDS

emotional approach coping, gender role conflict, oncology, prostate cancer, self-compassion

1 | BACKGROUND

Prostate cancer (PCa) accounts for 15% of male cancer diagnoses in 2012.¹ Improvements in PCa detection and treatment means that more men are surviving and living with the life altering side effects of PCa therapies.² Erectile dysfunction is a side effect of most PCa treatment modalities, while urinary and bowel incontinence are more commonly experienced after prostatectomy and radiation therapy, respectively. Brachytherapy can disrupt urinary and bowel function, and adjunctive treatments such as hormone therapies have been
linked with adverse effects such as weight gain, osteoporosis, and hot flushes.3

Research indicates that between 14% and 38% of PCa patients exhibit clinically significant depression and anxiety symptoms related to the emotional, functional somatic and somatic features of the disease and its treatment.4 Consequently, investigating factors that promote resilience and continued wellbeing is important in PCa care.

Traditional masculinity and masculine gender role conflict (GRC) have been implicated as mechanisms underlying compromised adjustment in men with cancer.5 GRC refers to the negative cognitive, emotional, and behavioral consequences associated with male socialisation6 or the ways in which internalization of stereotypical masculine norms may prohibit psychosocial wellbeing. It has been suggested that GRC is inherent in men's cancer-related distress: in addition to threatening health, the experience of cancer is fundamentally at odds with traditional masculine values, eg, power and control.7 Consequently, distress related to cancer diagnosis and treatment may be exacerbated by a reduced ability to embody masculine stereotypes.7 Aspects of the cancer experience such as fear and vulnerability are perceived as threats to masculinity and are associated with poorer outcomes.8 High levels of GRC were associated with compromised psychosocial functioning in PCa patients.9

When coping with PCa, patients utilize a range of strategies, which may have different implications for distress.10 Various coping strategies that cause men to acknowledge and regulate cancer-related emotions have been investigated as a mechanism linking GRC and distress.11 9 Of these, emotional approach coping (EAC) refers to identifying, understanding, and expressing emotions appropriately.11 EAC consists of 2 distinct yet related strategies: emotional processing (EP) refers to efforts at acknowledging, exploring, and understanding emotions derived from the PCa experience, while emotional expression (EE) encompasses attempts at communicating cancer-related emotional experiences.9

EAC may facilitate positive adjustment in female cancer patients12; however, research examining EAC in male and PCa patients is less consistent. While some evidence supports EAC as an effective means of regulating cancer-related distress in men, this has not been reliably replicated 13 Although Hoyt et al14 found that EP modulated stress-related inflammatory processes in PCa patients, EE was associated with higher inflammation (indicative of greater stress) when EP was low.

Hoyt9 suggested that the benefits of EAC may not be equal for all male cancer patients: while EE predicted lower distress, it was associated with greater distress in men whose social relationships were characterized by restricted communication regarding thoughts and feelings. Gender stereotypes may underlie such inconsistencies and moderate EAC's effect in alleviating distress in men with PCa. It is possible that men who subscribe heavily to traditional masculine ideologies might try to experience emotions evoked by cancer in ways that are consistent with ideals such as strength, power, and dominance. In doing so, they may channel vulnerable feelings into more stereotypically masculine emotions like anger that could exacerbate distress levels. Favouring the suppression of emotional responses that are perceived as "unmanly".15 Consequently, GRC derived from subscription to restrictive masculine beliefs may prevent EAC from

...
4. SC would moderate the relationship between GRC and distress such that higher levels of SC would reduce the strength of positive associations between GRC and distress.

2 | METHOD

2.1 | Participants

Participants included 92 men who attended outpatient urology and radiation oncology clinics in a University Hospital. Participants were screened to exclude those under 18, unable to provide written consent, and who had a cognitively debilitating, co-morbid diagnosis. Participants were recruited over a pre-determined 4-month period. Time constraints prohibited recruitment of additional participants undergoing active treatment; hence, analysis was based on men who were being monitored, undergoing treatment for PCa, or who had finished treatment and were returning for check-ups.

2.2 | Procedure

Following receipt of ethical approval, patients were invited to participate by urology and radiation oncology consultants following medical appointments. Participants completed a questionnaire booklet containing demographic and clinical questions in addition to 4 standardized self-report measures.

3 | MEASURES

3.1 | Gender role conflict

GRC was measured using the widely used 37-item Gender Role Conflict Scale (GRCS), in which higher scores reflect greater conflict. Four factors are assessed: Success, Power and Competition, Restrictive Emotionality, Restrictive Affectionate Behaviour between Men and Conflict between Work and Family Relations. In keeping with Hoyt, items of the restrictive emotionality subscale were excluded from GRCS total scores, as restrictive emotionality exhibits conceptual overlap with EAC. The GRCS has displayed convergent validity with the Brannon Masculinity scale and the Fear of-Intimacy Scale. Cronbach’s alpha was .96 for the composite score in the present study.

3.2 | Emotional approach coping

EAC was measured using the 8-item Emotional Approach Coping scale, which assesses EP and EE. Both EAC scales have shown acceptable internal consistency and predictive validity. Cronbach’s alpha for total EAC score was .83 in the present study.

3.3 | Self-compassion

The 26-item self-compassion scale provides a total score, in addition to 6 subscale scores, with higher scores reflecting greater SC. Mean scores on the 6 subscales are summed to create an overall SC score.

3.4 | Psychological distress

The 21-item short form of the Depression, Anxiety, and Stress Scales (DASS 21) includes 3 subscales that measure depression, anxiety, and stress. Scores above 10 (Depression), 8 (Anxiety), and 15 (Stress) indicate clinical levels of distress for each subscale, respectively. The DASS exhibited good psychometric properties cross culturally in both clinical and non-clinical samples and has been successfully used to assess distress in PCa patients. The DASS also provides an overarching distress factor that all scale items load onto. Cronbach’s alpha for the total score was .92.

3.5 | PCa treatment related symptoms

Symptoms were assessed with the 16 item Expanded Prostate Cancer Index Composite for Clinical Practice (EPIC-CP), which measures patients’ urinary, bowel, sexual, and hormone symptoms. The EPIC-CP correlates highly with the longer EPIC and EPIC-26 and has demonstrated good internal consistency, reliability, and divergent validity. Higher scores reflect greater symptom severity. Cronbach’s alpha was .68.

3.6 | Data analysis

The IBM Statistical Package for the Social Sciences (SPSS) version 23 was used for data analysis. Seven cases were excluded due to missing data. To test the proposed moderated mediation model, Model 15 of the Process Macro for SPSS was used with bias corrected bootstrapping set to 10,000 samples. When testing for moderated mediation, the Process macro only estimates the indirect effect of the mediating variable at specific levels of the moderator (the mean and ± 1 SD of the mean). For this reason, a simple mediation analysis (Model 4) was conducted to address Hypothesis 2 and establish whether EAC mediated associations between GRC and distress irrespective of SC. The Process Macro produces unstandardized regression coefficients, which are reported below.

4 | RESULTS

4.1 | Demographic data and sample characteristics

The sample included 92 men ranging from 49 to 89 years (M = 68.16, SD = 9.66). Table 1 displays demographic and clinical information. Average time since diagnosis was 40.63 months (SD = 38.43; range = 1-180 months). Ten participants reported medical co-morbidities, including hypertension (n = 5), diabetes (n = 3) and heart disease (n = 2). Mean Gleason sum was 4.77 (SD = 4.77); however, staging information was only available for 66 participants. Mean symptom severity was 16.17 (SD = 6.82).
4.2 | Descriptive statistics and correlations

Descriptive statistics and correlations among primary study variables are shown in Table 2. Mean scores for DASS 21 subscales were Depression (M = 3.86, SD = 4.57), Anxiety (M = 7.15, SD = 7.66) and Stress (M = 12.59, SD = 10.59), which were all below clinical cut off levels. However, 35% reported clinical levels of stress, 27% reported clinical levels of anxiety, and 10% reported clinical levels of depression.

4.3 | Mediation analysis

A parallel mediation analysis was conducted to test whether EP and EE mediated the path from GRC to distress, controlling for age and severity of treatment symptoms. This model accounted for 37% of the variance in distress scores, $R^2 = 0.37$, $F(5,85) = 9.87$, $P < .001$. Results failed to support either EP ($B = 0.26$, SE = 0.65, 95% CI = –1.02, 1.55) or EE ($B = –0.28$, SE = 0.67, 95% CI = –1.62, 1.06) as mediators of the relationship between GRC and distress, evidencing a non-significant indirect effect, $B = 0.003$, SE = 0.017, 95% CI [–0.029, 0.042]. However, there was a significant direct effect of GRC on distress, $B = 0.16$, SE = 0.06, $t = 2.58$, $P < .01$, 95% CI [0.04, 0.29].

4.4 | Moderated mediation analysis

Neither EP ($B = 0.11$, SE = 0.06, 95%CI = –0.02, 0.23) nor EE ($B = 0.09$, SE = 0.06, 95%CI = –0.03, 0.22) significantly predicted

### TABLE 1 Sample characteristics

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Note.

*= P < .05

**= P < .01. Two tailed
distress, and there was no evidence of moderated mediation as their indirect effects were non-significant at low, moderate, and high levels of SC. However, SC significantly moderated the association between GRC and distress (B = 0.02, SE = 0.01, 95% CI = 0.004, 0.05). At low SC (1 SD below the mean), the direct effect of GRC on distress was not significant, (unstandardized simple slope = 0.007, SE = 0.007, t = 0.94, P = .35, 95% CI [-0.008, 0.021]). However, at moderate (mean SC) and high (1 SD above the mean) levels of SC, the direct effect of GRC on distress was statistically significant, (unstandardized simple slope = 0.020, SE = 0.006, t = 3.04, P < .005, 95% CI [0.003, 0.007]) and (unstandardized simple slope = 0.034, SE = 0.010, t = 3.31, P < .005, 95% CI [0.013, 0.054]), respectively.

5 | DISCUSSION

Results partially supported the proposed model. In keeping with Hypothesis 1, previous findings were replicated whereby GRC predicted higher distress. However, results failed to support Hypothesis 2. Although EAC was negatively correlated with GRC, it was not a significant mediator or significantly correlated with Distress. While EAC has been linked with some improvements in terms of patient distress, alternative evidence has shown that men are more likely to engage in and benefit from more “masculine” coping styles, eg, problem focused coping. Roesch and colleagues concluded that an active approach to coping constitutes a more robust predictor of adjustment relative to specific strategies; past research linking EAC to improved outcomes could be explicated based on patients’ efforts at identifying and using techniques that mitigate disease-related distress, rather than specifically using EAC.

The effectiveness of coping techniques employed by PCa patients is likely to depend on factors such as individual differences or the context in which strategies are employed. Contextual factors such as receptiveness of social environments may underpin the relationship between EAC and distress. EE and disclosure were associated with greater distress when PCa patients reported constrained social relationships. The immediate social environment represents a powerful socialization agent; thus, it is likely that men’s expectations for normal emotional behaviour somewhat reflect that of their social environment. The cancer experience often involves levels of fear, anxiety, and distress which are novel and overwhelming for patients. The emotional strain of cancer may lead men to deviate from typical patterns of emotionality, in which case members of immediate social environments may be unprepared for such behaviour and fail to respond supportively. Research has also suggested that medical staff do not always recognize distress or invite patients to discuss their emotions, which may inadvertently invalidate patients’ emotions and discourage expression. While addressing the influence of social and medical contexts was beyond the scope of this study, previous research suggest that these environments may have important implications for patients’ use of EAC. It is important that social environment factors are considered in future research of EAC in male cancer patients.

Hypothesis 3 predicted that greater levels of trait SC would foster a self-attitude that allowed men to relax rules regarding masculine norm adherence, enabling them to engage in EAC, safe in the knowledge that distressing feelings are an understandable and acceptable part of cancer. SC did not significantly moderate associations between GRC and EAC, indicating that the influence of masculine socialization on emotionality prevailed, irrespective of SC levels. However, SC was significantly correlated with EAC suggesting that the absence of a moderating effect might lie in associations between GRC and SC. Direct associations between GRC and SC were not part of the tested model, limiting the capacity for causal inference regarding directionality of associations between these variables and subsequently with EAC. However, a number of speculations can be made regarding the absence of significant moderation and the nature of the relationship between GRC and SC.

The significant negative correlation between GRC and SC tentatively suggests that SC may have failed to moderate relations between GRC and EAC because GRC reflects a mechanism that inhibits SC. It is possible that internalization of traditional masculine values such as strength and toughness prevents men from extending kindness towards the self and accepting perceived weaknesses (such as experiencing and expressing vulnerable emotions). The incongruence between values and principles underlying SC and GRC is such that individuals who are self-compassionate may be less permeable to unrealistic and punitive standards of masculinity. Further research into how GRC and SC interact is advisable.

Although SC was not found to moderate associations between GRC and EAC, SC was significantly correlated with both EP and EE suggesting that a self-compassionate attitude lends itself to emotional exploration and expression. However, in contrast to Diedrich and colleagues’ findings, pathways between SC and EAC in the current study did not lead to lower distress. As expected, SC was related to lower distress; however, the correlation between EAC and Distress was non-significant. The mean level of EAC was quite low and a restricted range of scores may have attenuated the correlation observed. Participants may have used more familiar coping strategies to manage distress, or the present results may reflect environmental factors. Men may be less likely to engage in EAC encouraged by self-compassionate tendencies if they believe that such coping efforts would not be met with similar acceptance and understanding by those invested in their care, including family, friends, and medical personnel.

Hypothesis 4 was supported as SC was a significant moderator of associations between GRC and distress. Specifically, results indicated that the moderating effect of SC was significant only at moderate and higher levels of SC, indicating that certain levels of SC are required to lessen GRC-related distress. This finding was unsurprising given previous research supporting the benefits of SC in alleviating distress in oncology samples.

While results suggest that SC was influential in reducing the implications of GRC for distress, it did little to ease some of the emotional constraints associated with traditional male socialization. It is possible that SC may have greater implications for helping PCa patients accept violations of masculinity that are attributable to external factors, such as illness as opposed to themselves. In individuals high in GRC, SC may promote acceptance of elements of the PCa experience that are incongruent with masculine stereotypes (eg, emasculating symptoms, relinquishing power, and control to medical professionals, etc.) so they are perceived as an inevitable part of the illness rather than a personal failure at upholding masculine standards. Consequently, SC may
prevent men from perceiving emasculating situations related to cancer as challenges to masculinity, so that such situations are less distressing. Comparatively, more internalized processes such as how men emotionally respond and cope with illness may be interpreted as a reflection of personal character and masculine constitution. Thus, for men who are high in GRC and value masculine status at the expense of psychosocial wellbeing, SC may be incapable of promoting action (eg, EAC) that causes men to personally violate masculine norms and compromise their sense of masculinity.

5.1 Study limitations

This study has provided encouraging evidence that SC may be beneficial in alleviating distress, specifically in PCa patients. Furthermore, it has explored and raised questions about how SC interacts with GRC and EAC; phenomena that previous research has suggested are relevant to PCa patient distress. However certain limitations should be considered when interpreting current results. A cross-sectional design was used to measure phenomena that may vary over time. The present study used GRC rather than a cancer-specific measure (e.g. Cancer Related Masculine Threat); although the GRC was selected on the basis of widespread use and potential for comparability across studies, the generic measure may have lacked sensitivity to assess cancer-specific aspects of gender role threat. Future research could use such cancer specific measures to gain a more focused insight into how the experience of cancer threatens masculinity. It should also be noted that distress levels in the present sample were mostly outside of the clinical range. It is widely acknowledged that distress in PCa patients is heavily influenced by emasculating side effects of PCa treatments. Almost 25% of participants were at the surveillance stage, so it is possible that many had yet to experience adverse treatment effects that could inflate distress levels. In addition, although the ethnic profile of the sample reflects the Irish PCa population, the lack of diversity limits the generalizability of the findings.

5.2 Clinical implications

The current study indicates that both GRC and SC are related to distress levels in PCa patients and has raised questions for further investigation. The directionality of cause and effect between GRC and SC is perhaps the most salient question that emerged from present results; however, a consideration of social factors in understanding how EAC influences distress will also be important for future research. The use of interventions that foster SC such as mindful compassion in relation to psychopathology symptoms and quality of life in chronic and in cancer patients. Clin Psychol Psychother. 2013;21(4):311-323. https://doi.org/10.1002/cpp.1838

REFERENCES


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