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Self-perceptions of masculinities and testicular cancer: Qualitative explorations

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Abstract

Objective: Masculinities have been explored in men with testicular cancer (TC), though limited contemporary research is available on traditional masculine norms important to masculine self-perception. The purpose of this research was to explore the discourse of TC experience in relation to masculine self-perception.

Methods: A qualitative descriptive study was conducted consisting of semi-structured interviews with 21 men. Men were aged between 31 and 47 (M^{age} = 35.7). Most men were diagnosed with Stage 1 cancer (66.6%), all men had finished active treatment and time since diagnosis ranged from 17.3 to 71.8 months (M = 47.2). Independent coding was conducted by two researchers and was refined in coding meetings with authors. Themes were developed in a predominantly deductive manner, and analysis of themes was undertaken using a reflexive analysis approach.

Results: Traditional masculine norms showed differing relationships to masculine self-perception. Two main themes were identified [1] Maintained or enhanced masculine self-perception and [2] threats to masculine self-perception. Subthemes demonstrated that maintaining emotional control, strength and 'winning' was important to men, and reduced physical competencies (i.e., strength, sexual dysfunction, virility) challenged self-perception. Strict adherence to traditional norms in response to threatened self-perception related to psychological distress.

Conclusion: Leveraging traditionally masculine norms such as physical strength and control and developing flexible adaptations of masculinities should be encouraged with men with TC to retain self-perception and potentially enable better coping. Masculine self-perception of gay/bisexual men may centre around sexual functioning, though further research is required.

KEYWORDS

cancer, masculinity, oncology, orchiectomy, psycho-oncology, psychology, qualitative, survivorship, testicular cancer, testicular neoplasm

1 | BACKGROUND

Testicular cancer (TC) accounts for less than one percent of all cancers, however, is considered to be the most common solid cancer in young men (15–45 years).[1,2] Identified as a malignant tumour in one (or rarely both; i.e.,<1%)[3] testicle(s), the mainstay of treatment involves orchiectomy (i.e., removal of affected testicle). Additional treatment may include cisplatin-based chemotherapy or retroperitoneal lymph node dissection if cancer has progressed (i.e., beyond Stage 1).[4] Due to treatment advances, TC is one of the most curable cancers with global 5-year survival rates averaging 95%.[5] However, with increasing survival rates, more attention is being placed on survivorship concerns of this population with evidence of high levels of psychological distress.[6,7] Therefore, research has begun to investigate correlates of distress including the gender socialisation process for men with TC and how masculinities interact with their experience.[8]

Theories of masculinities have developed since the late 1980s, most notably by Connell,[9,10] who described multiple masculinities that interact with the world and shift and mould accordingly based on response. Whilst masculinities are context dependent, they are also generally considered to exist hierarchically, according to dominant norms of the culture or community in which men exist.[11] Conventional Western norms can be described as self-reliance, risk-taking, dominance, emotional control, stoicism, primacy of work/status, strength, violence, winning, sexual prowess and virility.[10,12] These traditional norms are generally considered incompatible with cancer experience, characterised by frailty, dependence, work disruption, sexual dysfunction and emotional distress.[13] Inability to meet these norms may contribute to threatened masculine self-perception (i.e., in brief, how masculine one feels varies across context and the connection between masculine self-concepts and perception of one's sense of self).[14]

For men with TC, feeling 'different', disrupted development and perceived inability to meet some traditional norms impacts psychological wellbeing, relationships and may contribute to threatened masculine self-perception.[8,15,16] In 2022, a systematic review on masculinity and TC demonstrated most qualitative studies were conducted more than 17 years ago.[15] It has been recognised recently that masculine strengths exist, and traditional norms can have both negative *and* positive outcomes and impacts on health behaviours.[17–19] For example, endorsing self-reliance has been associated with psychological distress and substance use, whereas primacy of work related to motivation and health promotion behaviours.[17,20] Many norms are not uniquely positive or negative to health behaviours and wellbeing, likely related to the context in which norms are adhered to.[17,18] For men with cancer, strict adherence to traditional norms can have potentially deleterious effects on psychological and physical wellbeing, including hiding 'feminine' emotions (e.g., sadness, worry) and denying help.[21] However, identifying norms associated with positive outcomes may work towards understanding how masculine strengths can be leveraged to encourage maintained masculine self-perception, mental health utilisation, engagement and wellbeing for men with TC.[19,22,23] Moreover, conflicting results have been found for factors related to orchiectomy and threatened self-perception (e.g., not all young, single men).[15] Considering rigid adherence to norms have shown to be more salient for male AYA,[24] adherence to traditional norms and inability to meet expectations (e.g., being unable to conform to protector/provider traditions) may provide additional information on understanding threatened self-perception related to orchiectomy.

Overall, as self-perception of masculinities remain person-dependent, qualitative explorations have been most reported. However, contemporary research is limited on masculine self-perception in TC that considers both maladaptive/adaptive norms that could encourage wellbeing and maintenance of masculine self-perception in a strengths-based approach to supporting men with TC.

1.1 | Aim

This study aimed to explore how Australian men with TC describe their perceptions of masculinities related to cancer treatment and effects.

2 | METHOD

2.1 | Participants

A full description of the recruitment method is provided in Appendix A. Participants were men diagnosed with TC in ≤10 years, currently aged between 18 and 50, had completed active treatment for TC, had answered a previous survey on experiences after TC, and expressed interest in an interview. Three invited men declined participation due to being no longer interested (n = 1) or too busy (n = 2).

2.2 | Data collection development

A semi-structured interview guide (Appendix B) was developed by the first author (VD) reviewed by DA, who has qualitative research expertise and JFW and MF who hold cancer research expertise. Two consumers (men who had experienced TC) also reviewed the guide twice and provided feedback. Consumers were reimbursed $70 for their time.

2.3 | Data collection

Interested and consenting participants were emailed invitations to participate, that included research purpose (Appendix A). Interviews were conducted between July-December 2022 with the first author

(VD, female, PhD Candidate) who was unknown to participants before interview. Verbal consent was provided at the beginning of the interview for recording and confidentiality purposes (written informed consent was obtained in a prior quantitative questionnaire; https://doi.org/10.1002/pon.6262). Interviewees were reimbursed $60 (AUD). Participants could opt to participate online (via Zoom) or in-person. Field notes were made throughout interviews and data analysis.

Twenty interviews were conducted online and 1 in person. Interview durations ranged from 42 to 110 min (M = 67 min). All participants were debriefed and emailed support services (Lifeline, Mensline) following interview. This article adheres to consolidated criteria for reporting qualitative research (COREQ guidelines; Appendix C).[25] This study was approved by Peter MacCallum Cancer Centre Human Research and Ethics Committee (HREC/72047/PMCC).

2.4 | Qualitative analysis

All interviews were audio and video recorded, de-identified and transcribed verbatim by a professional third-party service, reviewed for accuracy by two coders. Transcripts were returned to participants for 1 month to provide final comments/corrections. Final transcripts were imported to *NVivo-qualitative data management software*. Names were randomly generated for participants for anonymity.

Braun and Clarke's six-step thematic methodological approach for reflexive analysis was chosen to analyse qualitative interviews.[26] Analysis of interview data was continuous, with deductive coding being applied for theories of masculinities and traditional masculine norms. Inductive data driven themes were explored and tested for applicability and consistency independently and in meetings with other authors. As saturation remains contentious in literature, a sample size of 21 participants was hypothesised to be sufficient to tell a rich story of the phenomena of TC and masculinities, with the sample size finalised during the data collection/familiarisation process in place of data saturation.[27] Familiarization and coding (steps 1&2) were conducted with 4 investigators, with independent coding conducted by 2 investigators before team meetings to share construction of themes. This process continued until investigators were satisfied with shared conceptualisation of themes (steps 3&4). Remaining transcripts were analysed by the first author (VD) who further conducted preliminary analysis and developed meaningful themes to describe data (step 5), which was then reviewed and refined by the research team during analysis and by all authors again at write-up (step 6).

3 | RESULTS

3.1 | Demographics

Full demographics can be found in Table 1.

TABLE 1 Participant demographics.

	N (%)
Age	Range 31–47
	(M = 35.7, SD = 4.6)
Relationship status	
In a relationship	15 (71.4%)
Single	6 (28.6%)
Sexual orientation	
Heterosexual	17 (81%)
Bi-sexual	1 (5%)
Gay	3 (14%)
Parental status	
No children and do not want	2 (9.5%)
No children and want	12 (57.1%)
≥One child	7 (33.3%)
Ethnicity	
Caucasian/European	14 (66.6)
Other[a]	7 (33.3%)
Time since diagnosis	Range 17.3–71.8 months
	(M = 47.2, SD = 17.1)
Cancer stage	
1	14 (66.6%)
2	3 (14.3%)
3	4 (19%)
Treatment	
Unilateral orchiectomy	19 (90.5%)
Bilateral orchiectomy	2 (9.5%)
Retroperitoneal lymph node dissection	3 (14.3%)
Chemotherapy	12 (57%)
Radiotherapy	1 (5%)

[a](Asian/Indian (n = 4), European (n = 2), Hispanic/Latino (n = 1).

3.2 | Theme 1: Maintained or enhanced masculine self-perception

Three subthemes were related to maintained or enhanced masculine self-perception: (1) Maintaining or enhanced physical functioning, (2) Rising to the fight, (3) Maintaining normalcy & control (Figure 1).

3.2.1 | Maintaining or enhanced physical functioning

Men described meeting expectations of strength, fertility, virility and sexual functioning or increased physical strength/fitness relating to maintained masculine self-perception throughout TC. Jude felt that

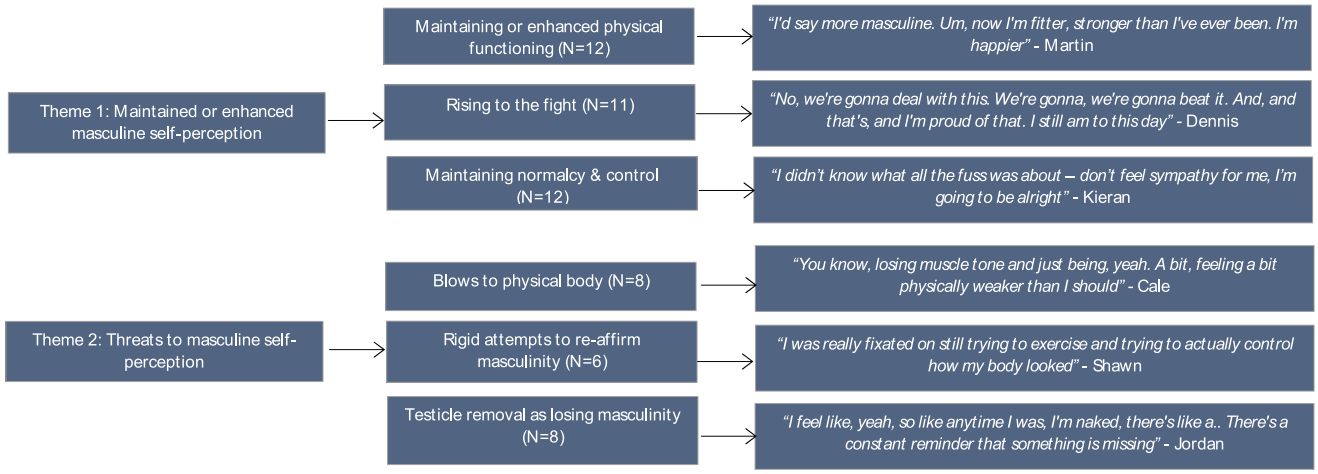

FIGURE 1 Description of main themes, subthemes and key quotes.

"sexually and all that, like you're still able to do all the same types of things. So for me, nothing really changed". Ability to reproduce was important to self-perception as Kieran felt *"If I found out that I have not been able to father children, then that probably would have been skewed"*. Men also connected testosterone levels to self-perception: *"probably the thing I was most concerned about"* (Rene), that was alleviated by 'checking' levels remained high. Restoration of physical functioning (e.g., through prosthesis) restored self-perception after initial threat: "*I'm gonna look, the same, and, you know, more or less feel the same. It did give me a little bit of peace of mind that, you know, it wasn't all… terrible. It wasn't all doom and gloom"* (Maurice). Desire for intact physical functioning propelled Tony into help-seeking *"went to like maybe three different doctors just trying to figure out if they could help me"*. Men also described increasing or maintaining strength in the form of exercise, both in response to cancer and during treatment that increased self-perception. Martin described himself as *"more masculine. Um, now I'm fitter, stronger than I've ever been. I'm happier"*. Building strength during TC served as pillars of resilience to look back on: *"If I could do all that kind of stuff during that treatment I could, like it built up my mind I think"* (Tony).

3.2.2 | Rising to the fight

Viewing cancer as a personal challenge, fight or battle to overcome maintained self-perception. Ezra felt *"I've always had that sort of fighter in me"* and men expressed a desire to 'win' by beating cancer, showing grit and getting *"back on the bike"* (Trent). Tony described "*you get knocked that far down. I guess you just want to, you can either just make you stay down, or just try and overcome it"*. This also meant opportunity to feel accomplished, as Dennis described "*we're gonna beat it. And, and that's, and I'm proud of that. I still am to this day*" that maintained strength norms and self-perception. Tony looked to David Goggins who he described preached values of strength and stoicism that aligned his desire to *"getting things done"*. Three men explicitly discussed using 'stoic philosophy' that aligned with desire for emotional control throughout TC. Clayton felt proud he *"didn't break, uh, like the logician point of view in life. You know, I kind of like the idea that I didn't give in to just it being, uh, the end of the world"*. These strategies enhanced masculine self-perception: *"I think it's quite manly and a good way to live"* (Tony). Men described stoic philosophy as "*accepting things that are outside of your control"* (William), and "*doing things instead of just talking about it"* (Tony) reflective of values-based living, mindfulness and acceptance.

3.2.3 | Maintaining normalcy & control

Some men appreciated when others continued to 'act normal' as helpful to maintaining self-perception. Men led decisions on who, what and how they discussed TC to avoid dealing with other's emotional expression or emotional aspects of TC in general: *"I told the people I knew wouldn't feel sorry for me, that wouldn't be too emotional"* (Clayton). Men also worked to avoid dealing with other people's sympathy: *"don't feel sympathy for me, I'm going to be alright"* (Kieran). Pity or other's perception of them as 'weakened' threatened self-perception: *"you don't want them to look at you like, oh, you know, poor [name], he can't, you know, yeah"* (Cale) which led to contemplating concealing aspects of cancer treatment or cancer altogether.

Men also sought to maintain control by protecting loved ones: "I didn't really tell them until later on and that's what things escalated. Because I was worried for them that they would be worried for me (laughs)" (Garrett). For Sebastian, re-framing other's perception to strengths-based and reducing their worry was "the emotional burden". When this couldn't be avoided, other people's emotions tainted men's ability to maintain self-perception "that was the only time throughout the whole journey that I… any sense of like really feeling sorry for myself" (Rene) and made men feel "worse" (Tony), suggesting maintaining normalcy and emotional control was protective to self-perception. Inversely, men appreciated encouragements of perseverance from friends that supported their own views of themselves as in control and being able to 'win': "they said I was going

to smash this, there's no question in their mind" (Ezra). Men also used humour that maintained comradery and normalcy amongst friends: "I made a joke of it with my male friends—I'm not dying but I'm close to it" (Clayton) as well as emotional control: "I was grateful there wasn't a lot of hysterics around it" (Alberto).

3.3 | Theme 2: Threats to masculine self-perception

Three subthemes were related to a threatened self-perception of masculinity: (1) Blows to physical body, (2) Removing a testicle as losing masculinity, (3) Rigid attempts to re-affirm masculinity (Figure 1).

3.3.1 | Blows to physical body

Some men described difficulty with inability to meet physical expectations (strength, sexual functioning) and masculine self-perception. Tristan felt that *"You don't feel as fit and strong, um, and confident as you, as I used to be"*. Without restoration, these meant reduced self-perception by inability to gain control over their bodies: *"I just didn't feel the same and I didn't feel like I was that, a lot… confidence was a bit lower, and everything, I did, I felt. Maybe confidence? Wasn't there? I think that's another thing I think, like as man, confidence"* (Tony). Physical changes also related to downward comparisons of self, as Jordan precancer compared himself 'favourably' to other men but since TC *"I see like other guys, and I'm like, oh God. Like it's, uh, sort of, it sort of seems like other, other men all look better than I do"*. Some men were 'hit' by fertility impacts and inability to conceive naturally as Ellis felt "*a bit inadequate, I guess"* even if they were not planning on fathering children: *"so kind of felt like slightly less of a guy. Um… yeah, there's not really much you* can *do about it but yeah did, did sting a little bit"* (William).

Bisexual and gay men described sex/sexual performance as directly related to masculine self-perception. These men described 'overthinking' erectile dysfunction that expanded to feeling inadequate for their partner or avoiding prospective partners to prevent "*letting somebody down"* (Cale). Some men felt anxious with new sexual partners and lost ability to be present during sex: *"wondering if the other person like thinks I look like a freak"* (Jordan). Shawn described compensatory actions stemming from overwhelming fear of losing sex drive and *"go out and seek more sexual partners than I probably needed to because of that, to really test out that theory"*.

3.3.2 | Testicle removal as losing masculinity

Some participants described anticipatory or experienced distress associated with orchiectomy and reduced self-perception, including fears of what others may think: *"are my mates still going to be my mates following this?"* (Maurice). William felt that *"No one is supportive. So, just keep it under your hat"* after others taunted him about orchiectomy. Men expressed difficulty adjusting to appearance of one testicle and felt that something was 'lacking': *"definitely at the time and probably for a year after, I felt less as of a man"* (Noah). Two men (who identified as gay and bi-sexual) described distress about recurrence that threatened masculine identity, as Jordan felt *"I'd probably be suicidal, um, if, if I were to get that news"*. For Corey, having both testicles removed initially defined his masculine identity: *"it made up 90% of what it meant for me"*. Interestingly, two men who felt orchiectomy threatened self-perception also described stress related to inability to meet traditional norms that predated cancer, in that they never felt *"masculine enough"* (Jordan).

3.3.3 | Rigid attempts to re-affirm masculinity

When self-perception was threatened, some men described rigid attempts to re-affirm their self-perception. This meant earlier than desired return to work and attempting to 'prove' masculinity. In retrospect, these men described feeling regret/needlessness of their actions: "*I spent that summer tryna prove to myself that I was 10 men. And now I know that I was, I was not doing the right thing and that's not what I should have been doing"* (Noah). For two men this resulted in a 'breakdown', and for one these attempts were fuelled by previous discomfort with feeling helplessness/weakness when diagnosed. Interestingly, after this experience Noah was able to develop flexibility in masculine self-perception: *"some of the things that you did believe probably aren't that important"*.

Men also experienced tension with not meeting/letting go of rigid self-expectations including self-reliance: "I felt like I had to isolate myself because I had to micromanage the people around me because I- just the expectation of myself to, to be really strong. And when people help me, it made me feel weak" (Cale). Rigid self-reliance also contributed to loneliness and inability to speak to others about TC: "grit your teeth and get on with, it's no one else's problem. Like, be a man, suck it up and just deal with it rather than like, you know, talking to, talking to someone about it" (Jordan). For Dennis, whilst exercising every day through chemotherapy was important for maintaining self-perception, rigid adherence and risk-taking meant "I crossed the line a few times whilst training… one of the times I thought I was gonna die" that he related to negative impact. Ezra explained "I didn't need to put as much pressure on myself" and that rigid adherence to independence in response to self-perception threat ultimately did not serve him.

4 | DISCUSSION

This study aimed to explore masculine self-perception of men with TC. Overall, physical functioning, emotional control, normalcy and winning were important to maintained self-perception. Inability to meet these norms meant threatened self-perception, though men found ways to 'restore' this (e.g., prosthesis), consistent with prostate cancer research of ways men 're-affirmed' masculinity,[28] though

rigidity was detrimental to this process. Without restoration, being unable to meet desired expectations contributed to reduced masculine self-perception. Broadly, results were consistent with the work of Connell, and the inability to meet traditional norms as serving to cause conflict/distress in men with TC.

Overall, results are consistent with previous research relating physical functioning, emotional control, protector role, and strength norms as central to self-perception of masculinity[29–31] and literature demonstrating men manage prostate cancer using strength, control and stoicism.[32] However, it uniquely contributes to identifying norms related to masculine self-perception in men with TC. For example, emotional control (previously associated with avoiding anger/stress)[17] was used by men to manage their own/others' emotional expression throughout TC and may be protect self-perception. Winning (previously associated with athletic involvement/endurance)[17] maintained self-perception by pushing physical limits and 'fighting' cancer and a competitive mindset may encourage a sense of purpose and masculine self-perception in TC. Previous TC research found men who used approach-oriented coping (recalculating challenges as opportunities) adjusted better to cancer,[33] which may further support winning as related to better survivorship outcomes.

In contrast, rigidity was associated with worse outcomes. Responding to threatened self-perception with rigid self-reliance, independence and attempts to 'prove' masculinity by risk-taking was associated with distress (i.e., 'breakdown') and negative health behaviours (e.g., avoiding help-seeking, overexercising), consistent with previous research on self-reliance and negative mental health[20] and inverse relationships between risk-taking and proper use of health care resources.[17] These results also highlight an elusive challenge remains for balancing encouraging exercise to maintain self-perception whilst also being cognisant of norm rigidity that can be detrimental to coping with TC. Additionally, stress associated with inability to meet traditional norms (including predating cancer), may explain conflicting findings related to orchiectomy threatening masculine self-perception.[15] For example, feeling strain at being unable to meet protector/provider traditions (rather than being single itself) may predict orchiectomy-related threatened self-perception.

Moreover, sexual prowess was salient for gay and bisexual men in this study. Whilst heterosexual men described differing levels of concern, sexually diverse men experienced distress from sexual inability that destabilised masculine self-perception and created significant concern about recurrence. Unique sexual concerns of gay/bisexual men with prostate cancer have been recently reported[34] and the current study extends these findings to highlight gay/bi-sexual men with TC's self-perception may be particularly affected by sexual dysfunction and orchiectomy. However, interpretation or generalisation of this findings to gay or bisexual men should be cautioned, as the numbers within this sample are small and further research is needed.

Finally, three men described beneficial strategies as 'stoicism/stoic philosophy'. The definition of stoicism in health literature often describes a lack of emotion, having a 'stiff upper lip' and silent suffering.[35] However, men with TC described mental 'preparation' of acceptance, reprioritising values, and using logical/rational reasoning that would generally be considered adaptive. A potential explanation is these men were drawn to strategies that enabled maintenance of emotional control and winning norms (packaged as 'stoicism') that enabled better coping in line with masculine ideals. This also relates to men who responded to threatened self-perception with rigidity in emotional and experiential avoidance (i.e., strict stoic-like coping), who then felt increased pressure and worse mental health. Previously, stoicism has been unrelated to psychological distress and psychological flexibility, which may suggest stoicism is not inherently maladaptive/adaptive but a strategy drawn upon in keeping with masculine values.[36] Other research found stoicism a central technique used by men to maintain a 'normal' life and reduce stress/worry associated with cancer[37] and it may remain that stoicism in men with cancer needs further exploration.

4.1 | Study limitations

These results describe individual relationships between masculine self-perception and TC, therefore causation cannot be inferred. Our sample demonstrated some limitations in diversity, (most participants identified as heterosexual, Caucasian/European), sampling (based on the convenience of interested men) and demographics (older age) that limits generalisability to all men with TC. Our study contains men currently residing in Australia and recognise that adherence to masculine norms and traditional gender role expectations are context and culturally specific meaning these results do not represent or generalise to explain masculinities of all men in Australia let alone globally. Moreover, it is notable that men with diverse sexualities disclosed substantially more information on sexual experiences than heterosexual men, suggesting possible discomfort from some heterosexual men with a female interviewer, which could have limited findings. There may have been differences in how men responded between modes of delivery though research has demonstrated the quality of interviews between online and face to face does not differ.[38] Finally, whilst averaging 4 years post diagnosis meant longer-term impacts related to masculinities were captured, men's recollection of the minutiae of masculinities and TC may have waned.

4.2 | Clinical implications

This research builds on the growing recognition of distress related to TC and is one of few recent qualitative studies on masculine self-perception. Notably, factors related to enhanced maintained self-perception of masculinities contributes to knowledge of norms associated with positive health behaviours (e.g., strength) and leveraging this can mean modifiable targets for intervention (e.g., exercise). For example, referrals to exercise physiology during treatment may be beneficial. Therapeutically, developing flexible adaptations of masculinity, and attending to concerns about physical deteriorations linked to self-perception threats may reduce distress.

Limitations exist in accessible cancer-specific support for men 10 years beyond treatment, though accessing support through general practitioners and mental health care plans may provide this opportunity. Preventative techniques may look like collaborative treatment roadmaps with oncologists that include opportunities for men to have shared control over their treatment and recovery and address fears of physical deterioration. Future research should continue to explore traditional masculine norms as related to or predictors of masculine self-perception in men with TC to corroborate these findings, with emphasis on the needs of gay/bisexual men. Future research should also consider how experiences differ by additional treatments (e.g., chemotherapy). Finally, a natural next step for research would be to consider healthcare interactions and how healthcare professionals can support men with TC regarding masculine self-perceptions.

5 | CONCLUSION

Overall, this research highlighted men with TC engage and experience tension with traditional norms in various ways. Maintaining physical competency and emotional control assisted men in conserving or strengthening their view of themselves as masculine. Inversely, rigid adherence to masculine norms in response to threatened self-perception was related to worse coping and physical impacts without restoration related to reduced self-perception. Targets to prevent impacted self-perception may look like collaborative survivorship plans that support masculine ideals and address physical concerns. To intervene, increasing flexibility and exercise interventions may be important.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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