Men’s transformative health service use: rethinking customer experience of vulnerability

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Abstract

Purpose -- Preventative health services are keen to identify how to engage men and increase their participation, thus improving health, well-being and life expectancy over time. Prior research has shown general gender norms are a key reason for men’s avoidance of these services, yet there is little investigation of specific gender norms. Furthermore, masculinity has not been examined as a factor associated with customer vulnerability. This paper aims to identify the relationship between gender norm segments for men, likely customer vulnerability over time and subjective health and well-being.

Design/methodology/approach -- Adult males (n = 13,891) from an Australian longitudinal men’s health study were classified using latent class analysis. Conditional growth mixture modelling was conducted at three timepoints.

Findings -- Three masculinity segments were identified based on masculine norm conformity: traditional self-reliant, traditional bravado and modern status. All segments had likely customer experience of vulnerability. Over time, the likely experience was temporary for the modern status segment but prolonged for the traditional self-reliant and traditional bravado segments. The traditional self-reliant segment had low subjective health and low overall well-being over time.

Practical implications -- Practitioners can tailor services to gender norm segments, enabling self-reliant men to provide expertise and use the “Status” norm to reach all masculinity segments.

Originality/value -- The study of customer vulnerability in a group usually considered privileged identifies differential temporal experiences based on gender norms. The study confirms customer vulnerability is temporal in nature; customer vulnerability changes over time from likely to actual for self-reliant men.

Keywords Health services, Transformative, Preventative, Masculinity, Gender norms, Customer vulnerability, Men’s health, Well-being

Paper type Research paper

1. Introduction

Transformative services, such as health services, aim to improve well-being and equality for consumers (Anderson et al., 2013). Hence, there is growing interest in consumer experiences of vulnerability in transformative service research (TSR) in different service contexts. Transformative health services such as primary preventative health services, while important to consumer health and well-being, are often avoided by one customer segment not usually perceived as experiencing vulnerability, men (Manne, 2020; Thornton, 2019). This avoidance leads to worse health outcomes for men than women across 99% of all countries (World Health Organization, 2021); with higher rates of chronic disease and reduced life expectancy, men suffer and die younger (World Health Organization, 2018a). Thus, service organizations offering preventative health services have identified men as a priority group and are keen to pinpoint how to engage men increasing their participation in preventative health.

Marketing research on customer vulnerability commenced in the transformative consumer research (TCR) literature (see Baker et al., 2005 for an example) and has been extended with...
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extensive research in the TSR literature. Consumer experiences of vulnerability occur in the marketplace and can be linked to marketplace controls such as limited accessibility or confusing information, as well as customers’ personal characteristics, external conditions and individual conditions including subjective perceptions of susceptibility (Baker et al., 2005; Raciti et al., 2022; Riedel et al., 2021). Customer vulnerability is conceptualised as socially constructed and can be driven by different factors including biophysical and psychosocial characteristics or situations that prevent customers from realising the same level of value experiences from a service (Baker et al., 2005; Baker and Mason, 2012). Vulnerability can be experienced as either an ex ante state, where the outcome is probable but not certain, therefore forecastable by using probabilities, or an ex post state whereby pre-existing immovable/static factors predetermine vulnerability where the outcome is certain (Naudé et al., 2009). Therefore, the roles of risk, susceptibility and likelihood of vulnerability are uncertain in an ex ante state as this is forward-looking (Maeda and Ishida, 2021) but certain due to being backward-looking in an ex post state (Alwang et al., 2001). So, customer vulnerability for the same issue (i.e. poverty) can be ex ante (the threat of poverty) or ex post (the experience of poverty) (Maeda and Ishida, 2021). In the context of men’s use of primary preventative health services, the risk of illness because of avoidance is not definite. Therefore, the experience of vulnerability is ex ante – likely, but not certain – for all men who avoid use of health services. In the context of primary preventative health services, therefore, we define male experiences of customer vulnerability likely to occur when male customers do not regularly access or avoid transformative preventative health services, increasing their susceptibility to diminished health outcomes and well-being.

Men, traditionally seen as privileged compared to women (Manne, 2020), have poor health and well-being outcomes globally (World Health Organization, 2018a). In Australia and many developed countries, men have reduced mental health and physical health and low use of preventative health services (Australian Government, 2019; World Health Organization, 2018a). While women’s vulnerability when accessing healthcare services has been previously identified (Manne, 2020), there has been little acknowledgement men also experience vulnerability in healthcare (albeit for different reasons to women). Therefore, compared to women, men have lower life expectancy and often die more from preventable causes (Thornton, 2019; World Health Organization, 2019). Furthermore, men have cited feeling disempowered or loss of control when using health services, breaching or violating masculinity norms such as being self-reliant, exercising emotional control or boosting perceived social status (Addis and Mahalik, 2003). Perceived lack of control or loss of power because of social or cultural conditions can mark a state of consumer vulnerability, as can engaging in risky behaviours that may impact one’s welfare, including deviant behaviours resulting in unrealised service value (Amine and Gatfaoui, 2019; Johns and Davey, 2019; Mason and Baker, 2014).

Previous research has found conformity to traditional masculine norms, such as being self-reliant, controlling one’s emotions, the importance of presenting as heterosexual and risk-taking deters men from participating in positive health behaviours such as primary preventative health service use and is a factor in health risk behaviours (Fleming and Agnew-Brune, 2015; Mahalik et al., 2007). While extensive in the health and psychology fields, literature in TSR linking gender norms and health service use is limited to women and usually qualitative, with small sample sizes (Harrison et al., 2016; Robertson et al., 2021; Voola, 2019). While masculine norms are known to have divergent roles in men’s health service use (Levant and Wimer, 2014; McGraw et al., 2021), there is no research to distinguish which masculinity norms are influential in different customer vulnerability experiences for men. Hence, there has not yet been examination of masculinity as a factor associated with customer vulnerability. Furthermore, we do not know how different clusters of endorsed gender norms can be grouped to reveal distinct customer segments for health service use. It is also not known how membership of specific gender norm segments predicts service use over time, or the differences in subjective health and well-being.

For many men, avoidance of health services prevails across the lifespan (Australian Government, 2019), suggesting an ongoing or prolonged experience of potential vulnerability in the health service context. However, in the TSR literature, the experience of customer vulnerability is usually considered as temporary as it is contextual to the situation and customer (Raciti et al., 2022). Therefore, there is a presumed transient nature to general customer vulnerability. For some service customers, such as those who identify as non-binary and/or transgender, vulnerability may be ongoing in varying service situations (McKeage et al., 2018). Yet, there is limited examination of temporality and customer vulnerability in TSR and no extended examination for complex services such as health. Therefore, the likely experience of customer vulnerability based on gender norms in the customer journey has not yet been examined over time.

Consumer subjective health and well-being can be impacted by experiences of vulnerability, particularly if the experience is ongoing or prolonged rather than episodic or temporary (Amine and Gatfaoui, 2019; Anderson et al., 2013). In TSR, well-being outcomes are often observed qualitatively (Sharma et al., 2017) or as specific constructs (e.g. financial well-being) (Mende and Van Doorn, 2015). There is limited quantitative examination of overall subjective well-being of customers experiencing vulnerability, except in social research (Khor et al., 2020) and few studies examining subjective health well-being and customer vulnerability (Tanner et al., 2020). Associations between subjective health and well-being and customer vulnerability over extended periods of time have yet to be established in TSR. Furthermore, the implications for well-being of different masculinity segments and their experiences of customer vulnerability in a health service is unknown.

The purpose of this paper is first to identify the relationship between different gender norm segments for men (masculinity segments) and likely experience of customer vulnerability. Secondly, the paper seeks to understand the temporal nature of likely or actual customer vulnerability for each masculinity segment. Thirdly, the paper examines over time the association of these masculinity segments with subjective health and well-being. Specifically, this research addresses three research questions:

RQ1. What are the masculine norm segments of male customers experiencing likely customer vulnerability?
RQ2. What is the temporal nature of likely customer experience of vulnerability for different masculinity segments of male customers over a long period of time?

RQ3. What happens to perceived health and well-being over time for masculine norm segments of male customers experiencing likely and actual vulnerability?

This research contributes to the customer vulnerability stream in TSR literature. Men with higher conformity to traditional masculine norms are more likely to experience customer vulnerability over time, and the probable experience of vulnerability in the customer journey is likely to be prolonged for men with traditional masculinity norms. Furthermore, perceived low health and well-being over time indicates actual vulnerability for self-reliant men. Practitioners can identify and tailor the service offering for gender norm segments, enable self-reliant men to provide their expertise and use “Status” to reach all masculinity segments.

2. Literature review

2.1 Customer experience of vulnerability

The TSR literature is becoming increasingly concerned with consumer experiences of vulnerability and the implications for consumer well-being (Rosenbaum et al., 2017). Drawing on TCR literature (see Baker et al., 2005), TSR researchers have investigated customer vulnerability from the service perspective with a strong research stream emerging in recent years (see Raciti et al., 2022; Riedel et al., 2021). Baker and colleagues’ (2005) first clarified the conceptualization of consumer vulnerability, noting everyone can have the experience at some point. The experience occurs in consumption situations or interactions where the consumer feels loss of control or powerless in the exchange. The experience negatively impacts customer self-perceptions and identity and can be temporary, ongoing or permanent depending on the context and individual (Baker et al., 2005; Riedel et al., 2021; Robertson et al., 2021).

As customer experience of vulnerability is highly contextual, TSR scholars are beginning to suggest broadening the contexts of situations and characteristics that might contribute to experiences (Raciti et al., 2022; Riedel et al., 2021). Riedel and colleagues’ (2021) systematic review identified a paucity of research where gender was the basis of consumer experience of vulnerability. The review found limited research linking well-being outcomes, particularly overall well-being outcomes that comprise multiple subjective well-being indicators (Riedel et al., 2021).

Gender norms are a psychosocial source of customer vulnerability (Baker et al., 2005; Baker and Mason, 2012) and consist of perceptions including stigma, identity and status-loss. As Table 1 outlines, previous empirical TSR research examining customer/consumer vulnerability has identified the importance of these psychosocial sources of customer vulnerability as both ex ante (McGraw et al., 2020; Tanner et al., 2020) and ex post (Bast et al., 2021; Mele et al., 2022; Raciti et al., 2022).

As Table 1 illustrates, while McKeage and colleagues (2018) examined gender identity for gender variant populations, finding market vulnerability can be experienced in retail spaces, there is no vulnerability research examining specific gender norms for either men or women. Furthermore, where gender is a characteristic of the experience of vulnerability, the research is limited to women with exclusion of men (Harrison et al., 2016; Robertson et al., 2021; Voola, 2019).

Table 1 identifies evidence on both ex ante and ex post perspectives in the literature; however, no TSR research includes an examination of both states in a single study. Furthermore, customer/consumer vulnerability literature is dominated by cross-sectional research with limited examination over time, particularly timeframes spanning several years. The longitudinal research already undertaken specific to transformative services is mostly between six and 13 months (Amine and Gafnaoui, 2019; Batat, 2015; Mende and Van Doorn, 2015), with the exception of some 2–2.5 year studies (Bast et al., 2021; Boenigk et al., 2021). Longitudinal research with relatively short timeframes does not capture progressive phenomena particular to complex health services. Bast and colleagues’ (2021) qualitative participatory observational study with dementia care users spanned nearly two years and applied fractured reflexivity to manoeuvre participants with ex post (actual) vulnerability in the service design process. However, many transformative health services occur over long periods, sometimes periodically across the adult lifespan, such as cancer screening or heart health checks.

When examining the subjective well-being of transformative services’ customers experiencing vulnerability, there is little quantitative research in the literature measuring well-being, particularly subjective well-being over time (Mende and Van Doorn, 2015). There also is little research examining associations between well-being and customer vulnerability in a health service over an extended period (Sharma et al., 2017; Tanner et al., 2020). As Table 1 illustrates, in TSR, well-being outcomes are usually qualitatively examined and with small samples (Amine and Gafnaoui, 2019; Sharma et al., 2017). Amine and Gafnaoui (2019) qualitatively examined 10 vulnerable banking customers who actively adapted behaviours to preserve eudaimonic well-being. Sharma and colleagues (2017) found well-being was derived from hedonic and eudaimonic well-being for vulnerable mental health customers. However, customer experiences of vulnerability have not been associated with overall subjective well-being across extended timeframes.

2.2 Male customer experiences of vulnerability in health services and masculine norms

Men are not usually identified as a group that experiences vulnerability. However, compared to women, men’s health outcomes are consistently worse and in most countries men continue to have lower life expectancy (World Health Organization, 2021). For men who die younger than expected, the cause is often preventable (Australian Institute of Health and Welfare, 2019; Centres for Disease Control and Prevention, 2022). Yet, in economically developed countries such as the USA, the UK and Australia where access to preventative health services is facilitated and encouraged, sometimes freely available, men underuse such services (Australian Institute of Health and Welfare, 2019; Nuzzo, 2020; Patel et al., 2020) and thus likely experience customer vulnerability. Much of men’s health literature finds gender norms, or masculine norms, contribute to men’s poor health behaviours and health outcomes, including avoidance of preventative health services (Fleming and Agnew-Brune, 2015). Gender norms are socially constructed rules,
<table>
<thead>
<tr>
<th>Author</th>
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<th>Study context: Characteristics of customer experience of vulnerability</th>
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<th>Gap 2: experience of vulnerability over time</th>
<th>Gap 3: subjective health and well-being outcomes and vulnerability</th>
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<tr>
<td>Hamilton et al. (2011)</td>
<td>Qualitative: focus groups (n = 29)</td>
<td>Homeless women veterans Ex post (actual vulnerability)</td>
<td>Five primary initiators to homelessness identified in participants including: (1) pre-military adversity (e.g. violence, abuse and unstable housing), (2) military trauma and/or substance abuse, (3) post-military interpersonal violence, abuse and termination of intimate relationships, (4) post-military mental illness, substance use and/or medical issues and (5) unemployment. Together with contextual factors, homeless women veterans are caught in a “web of vulnerability”</td>
<td>N/A</td>
<td>Prolonged vulnerability identified</td>
<td>N/A</td>
</tr>
<tr>
<td>Batat (2015)</td>
<td>Qualitative: ethnographic longitudinal (n = 20)</td>
<td>Adolescents aged 11–15 years Ex ante (likely vulnerability)</td>
<td>Adolescent perceptions of consumer vulnerability are defined by their own norms, codes and consumption culture. The experience of consumer vulnerability for adolescents can be imposed, where they feel obliged to adopt risky behaviours to fit in with peer group norms or deliberate where adolescents partake in risky behaviours such as smoking, drug-taking and surfing porn websites</td>
<td>N/A</td>
<td>Examined across six months</td>
<td>N/A</td>
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<tr>
<td>Mende and van Doorn (2015)</td>
<td>Quantitative: longitudinal data collection at two timepoints (n = 115)</td>
<td>Clients of financial counselling services Ex post (actual vulnerability)</td>
<td>There is a positive relationship between coproduction (customer participation) and objective financial well-being (credit score), while objective financial well-being mediates the effect of customer coproduction on subjective financial well-being (financial stress)</td>
<td>N/A</td>
<td>Examined over nine months</td>
<td>Coproduction of financial services improves consumer financial well-being</td>
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<tr>
<td>Kim et al. (2015)</td>
<td>Quantitative: longitudinal panel data (n = 7138)</td>
<td>Preventative healthcare services for adults aged over 50 years Ex ante (likely vulnerability)</td>
<td>Higher life satisfaction was associated with higher likely use of preventative health services for women (having a mammogram X-ray or Pap smear) and men (having a prostate exam)</td>
<td>N/A</td>
<td>Tracked over two years</td>
<td>Improved life satisfaction and well-being improves preventative health behaviours in older adults</td>
</tr>
<tr>
<td>Harrison et al. (2016)</td>
<td>Qualitative: cross-sectional (n = 8)</td>
<td>Young adult female gamers Ex post (actual vulnerability)</td>
<td>Stereotypical perceptions of “gamer girls” in the masculine-oriented gaming subculture drive gender-based consumer vulnerability for female consumers. Gaming is a vulnerable consumption environment at individual, marketplace and cultural levels</td>
<td>Gender-based subjugation for women Segments not identified</td>
<td>N/A</td>
<td>N/A</td>
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<td>Sharma et al. (2017)</td>
<td>Qualitative: interviews and focus groups ( (n = 42) )</td>
<td>Mental health-care organization customers Ex post (actual vulnerability)</td>
<td>Mental health customers experiencing vulnerability integrate resources to co-create value outcomes such as hedonic well-being characteristics (sensory pleasure) and eudaimonic well-being (fulfillment of human potential)</td>
<td>N/A</td>
<td>N/A</td>
<td>Subjective well-being derived from hedonic well-being and eudaimonic well-being</td>
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<td>McKeage et al. (2018)</td>
<td>Qualitative: interviews and collages ( (n = 24) )</td>
<td>Various service contexts (especially retail), Nonconforming and/or gender variant consumers Ex post (actual vulnerability)</td>
<td>Consumer vulnerability is a useful lens to understand gender variant consumers’ experiences in the marketplace, such as retail spaces, and in multiple contexts such as gendered products and interactions with service providers. Transgender and genderqueer people experience market vulnerability and it can be an extended experience without a defined ending point (ongoing or perpetual vulnerability)</td>
<td>Experiences of consumer vulnerability because of gender identity Gender segments not specifically identified</td>
<td>Experience can be ongoing/perpetual/cyclical iterative process</td>
<td>N/A</td>
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<tr>
<td>Amine and Gatfaoui (2019)</td>
<td>Qualitative: case studies/interviews longitudinal ( (n = 10) )</td>
<td>Banking customers facing unforeseen events disrupting normality and altering standard of living Ex ante (likely vulnerability)</td>
<td>Clients experiencing vulnerability actively adapt their behaviours to preserve well-being. Coping strategies between vulnerable clients and bank advisors include mutual adjustment, strategy of influence, complaining to the hierarchy, avoidance and dissolution of the relationship. Therefore, the clients’ vulnerability is temporary or episodic rather than chronic</td>
<td>N/A</td>
<td>N/A</td>
<td>Examine for 13 months: experience can be temporary or transitory: “episodic”</td>
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<td>Voola (2019)</td>
<td>Qualitative: interviews Cross-sectional ( (n = 6) )</td>
<td>Women/single mother/carer consumers of microfinance loans Ex post (actual vulnerability)</td>
<td>Gendered vulnerabilities have the potential to be exacerbated or eradicated by macro-social forces. When sources of vulnerability are viewed in isolation rather than as intersecting, certain groups of people can be overlooked. The paper reveals overlapping vulnerabilities faced by consumers of microfinance loans including economic status and gender</td>
<td>Gender inequalities because of societal gender norms re women’s competence with financial matters Segments not identified</td>
<td>Masculine identities for different older men who avoid preventative health services Archetypal masculine identities identified</td>
<td>N/A</td>
</tr>
<tr>
<td>McGraw et al. (2020)</td>
<td>Qualitative ( (n = 39) )</td>
<td>Older men who do not participate in regular free bowel cancer screening Ex ante (likely vulnerability)</td>
<td>Based on Jungian archetypes, the masculine identities identified as most likely to have negative health beliefs and behaviours were the Outlaw, the Ruler and the Explorer. Participants mostly identified with the Thinker, the archetype identified likely to have positive health beliefs and behaviours, followed by the Regular Guy and the Explorer</td>
<td>N/A</td>
<td>N/A</td>
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<td><strong>Tanner et al.</strong> (2020)</td>
<td>Quantitative Cross-sectional ($n = 370, n = 546$)</td>
<td>Perceived health services access and use for adult customers Ex ante (likely vulnerability)</td>
<td>A consumer’s perceived access to health services precedes perceived health vulnerability, eventual preventative health behaviours and subjective overall health. However, a moderated mediation relationship exists between three access dimensions; perceived affordability, perceived acceptability and perceived availability, to subjective overall health through perceived vulnerability. Therefore, a consumer’s perceived vulnerability impacts overall health outcomes.</td>
<td>N/A</td>
<td>N/A</td>
<td>Perceived health vulnerability influences overall health and subjective well-being</td>
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<td><strong>Boenigk et al.</strong> (2021)</td>
<td>Mixed methods ($n = 862, n = 44$)</td>
<td>Refugees seeking to access higher education Ex post (actual vulnerability)</td>
<td>Participation in transformative service initiatives (TSI) for people experiencing vulnerabilities (such as refugees) has positive effects on higher education access. Barriers to refugees’ participation in higher education include legal and environmental, service and organizational, interpersonal and personal. Refugees develop strategies to overcome barriers such as civic engagement, counselling, social community support and self-empowerment.</td>
<td>N/A</td>
<td>Examined for 2.5 years</td>
<td>N/A</td>
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<tr>
<td><strong>Robertson et al.</strong> (2021)</td>
<td>Quantitative: online survey Cross-sectional ($n = 127$)</td>
<td>Women in a state of infertility undergoing in-vitro fertilization (IVF) using IVF medical services Ex post (actual vulnerability)</td>
<td>Vulnerability is reduced when IVF consumers actively persist with endeavours to conceive. However, women who make “at all costs” personal sacrifices to fulfill their goal to parent via IVF, increase their vulnerabilities. For example, the impact on their careers when taking time out for IVF treatment.</td>
<td>Gender-role requirements a potential trigger for the experience of being vulnerable</td>
<td>Experience identified as temporary or ongoing or long-term (depending how long before infertility ceases)</td>
<td>Perceived technical service quality and perceived control influence experiences of vulnerability and well-being</td>
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<tr>
<td><strong>Bast et al.</strong> (2021)</td>
<td>Qualitative: field study; participatory observational ($n = 36$)</td>
<td>Dementia care users Ex post (actual vulnerability)</td>
<td>The study applies fractured reflexivity to manoeuvre users experiencing vulnerability with cognitive impairment in the service design processes. Three interrelated features constrained and enabled the process: cognitive aspects (cognitive capabilities as well as cognitive impairment), social aspects (acquired knowledge, norms and values in society) and representativeness (inclusion of the voices of users).</td>
<td>N/A</td>
<td>Nearly two-year examination. Usually a permanent state but can fluctuate (fractured reflexivity)</td>
<td>N/A</td>
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<td>Mele et al. (2022)</td>
<td>Qualitative and quantitative: action research: (n = 31)</td>
<td>Patients with disabilities in residential care Ex post (actual vulnerability)</td>
<td>Well-being was improved for patients experiencing vulnerability who adopted wearable smart devices. Caregivers’ patient knowledge was also improved. Positive effects of integration of smart technologies in patient care include increases in levels of engagement, reduced anxiety, worry and behavioural disorganization and increased cognitive adherence, acceptance of pathology and codified routines</td>
<td>N/A</td>
<td>N/A</td>
<td>Smart technologies enhance patients’ physical, social and psychological well-being</td>
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<td>Raciti et al. (2022)</td>
<td>Qualitative: interviews and co-design workshops (n = 87)</td>
<td>Students and recent school-leavers from low socioeconomic backgrounds Ex post (actual vulnerability)</td>
<td>A new strengths-based definition of customer/consumer vulnerability that is human-centred, process oriented, solutions-focused and holistic. A five-step strengths-based approach to elicit deep insights from tacit knowledge of customers experiencing vulnerability (SAIV) is presented</td>
<td>Gender or gender norms not examined Four student personas identified</td>
<td>N/A</td>
<td>N/A</td>
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Source: Authors’ own work
behaviours, attributes and attitudes culturally conveyed to males and females as appropriate for their inclusion in society (Courtenay, 2000; Fleming and Agnew-Brune, 2015). The construction of one’s gender identity is usually through conformity to gender norms and, for men in particular, includes conformity through health behaviours, which can be detrimental to well-being (Courtenay, 2000).

While we acknowledge gender inequality is usually understood through women’s vulnerability experiences, there is strong evidence from both theory and medical statistics that gender-based disparities in health also exist for men. Therefore, the vulnerability literature should be expanded to be inclusive of gender groups assumed to be otherwise privileged in other contexts. Customer experiences of vulnerability can be caused by a perceived lack of control brought about by social, cultural and/or economic market-imposed conditions (Mason and Baker, 2014), customers’ own deviant behaviours (Amine and Gatfaoui, 2019) or when the inherent value of a service activity is not realised (Johns and Davey, 2019). Masculine norms such as self-reliance and risk-taking encourage risk behaviours in men such as ignoring preventative health services (Fleming and Agnew-Brune, 2015). Therefore, we propose some men are likely to experience customer vulnerability in a preventative health service because of subjective perceptions of susceptibility to perceived masculine norms that discourage seeking help for health maintenance (Fleming and Agnew-Brune, 2015; Möller-Leimkühler, 2002). For this research, in the context of primary preventative health services, we define male experiences of customer vulnerability to be ex ante and likely to occur when male customers do not regularly access or avoid transformative preventative health services, increasing the susceptibility to diminished health outcomes and well-being.

Masculinity is a multifarious construct for today’s men, yet traditional masculine norms prevail, influencing men’s health. Some men’s health literature has found while masculine norms mostly have a negative effect on men’s health behaviours, some norms serve as protective buffers or influence increased use of health services (Levant and Wimer, 2014; McGraw et al., 2021). McGraw and colleagues (2021) found that Australian males from social generations Millennials and Generation X who conformed to some specific traditional masculine norms such as work or winning would have likely increased their use of preventative health services, suggesting some traditional masculine ideals usually associated with negative behaviours could be associated with socially acceptable ideals such as being successful at work and sport and thus keeping one’s health in check. However, so far in TSR there has been little examination of the role male gender norms play in men’s use of services (McGraw et al., 2020) and none to distinguish different masculinity segments of male customers likely to be experiencing customer vulnerability.

While prior health research has examined men’s vulnerability, marginalization and susceptibility in health and other marketplace contexts resulting from masculine gender norms such as breadwinner and toughness (Coskuner-Balli and Thompson, 2012; Emslie and Hunt, 2008; Möller-Leimkühler, 2002), the service literature examining men’s experience of customer vulnerability in health service contexts is limited. An exception is McGraw and colleagues’ (2020) qualitative ‘TSR study which, while examining the role of overall masculine ideals for older men’s use of a preventative health service, did not examine specific masculine norms; rather, it examined overall masculine identities. Thus, to better understand the experience of customer vulnerability and gender norm characteristics for a broad range of men, there is a need to quantify likely customer vulnerability based on specific gender norm segments using other preventative health services, leading to RQ1.

2.3 Customer vulnerability and primary preventative health service use over time

Men’s poor health outcomes persist across the lifespan and compared to women, health service use is low across all adult age groups until old age (World Health Organization, 2018a). While customer experiences of vulnerability in some transformative services are temporary (Riedel et al., 2021), when the experience is a result of an inherent individual characteristic, such as gender or gender identity, the experience has been found to be ongoing or perpetual (Harrison et al., 2016; McKeage et al., 2018). In contexts such as homelessness, vulnerability can be prolonged rather than permanent as people can eventually transition to a more stable state (Hamilton et al., 2011). There lacks longitudinal examination of the temporal nature of customer vulnerability, particularly in healthcare and other complex services where it is important to establish if the vulnerability experiences of a cohort are temporary, prolonged or ongoing across time. In the context of masculinity segments, this research deficit leads to RQ2.

2.4 Likely and actual vulnerability and perceived health and well-being over time

Experiences of vulnerability over time can affect an individual’s perception of self and well-being (Anderson et al., 2013; Baker et al., 2005). Subjective well-being depends on the consumer’s perceived satisfaction with life whereas objective well-being is measurable by objective or external observation (Mende and Van Doorn, 2015). High subjective well-being is known to influence better health and longevity (Kim et al., 2015). Additionally, higher life satisfaction and subjective well-being has been associated with health service use, including increased preventative health service use (Kim et al., 2015). As transformative services, primary preventative health services have the potential to enrich customers’ experiences and improve health and well-being, both subjective and objective (Anderson et al., 2013). Improved subjective health and well-being may also mean reduced potential for likely customer vulnerability whereby there is a risk but the state is forecasted, and can be considered ex ante (Maeda and Ishida, 2021). However, when customers perceive ongoing low health and well-being, vulnerability experiences become pre-existing or static, ex post or actual vulnerability (Alwang et al., 2001).

Across the lifespan, men risk reduced health and well-being by avoiding or not regularly accessing, health care and primary preventative health services such as routine health check-ups (Courtenay, 2000). Furthermore, mental health concerns such as experiences of depression, anxiety and thoughts of suicide reduce well-being and might also be detected through regular health checks with a general practitioner (GP) (Australian Government, 2019). It would be useful for services to identify over long time frames if the overall subjective well-being and
perceived health for masculine norm segments of customers is related to ex ante or ex post customer vulnerability.

There is limited quantitative examination of overall subjective health and well-being in TSR and no known literature linking well-being with customer vulnerability over an extended timeframe. Specific dimensions of well-being, such as financial well-being, have been examined over time in the context of financial counselling services but not directly associated with vulnerability (Mende and van Doorn, 2015), while the hedonic and eudaimonic well-being of vulnerable mental health-care consumers have been examined cross-sectionally (Sharma et al., 2017). Overall well-being, encompassing multiple well-being indicators, has not yet been associated with customers’ experiences of vulnerability over time. This gap leads to RQ3, the final research question for this study.

3. Method

3.1 Study background

Analyses were conducted using secondary data sets from the study Ten to Men: the Australian longitudinal study for male health (Ten to Men) (Pirkis et al., 2016). The Ten to Men study collects data on Australian male health behaviours, health service use and attitudes to social norms such as masculinity norms (Pirkis et al., 2016). The study was commissioned by the Australian Government in 2011 (Currier et al., 2016). Participants were recruited from over 104,800 households (Pirkis et al., 2016).

3.2 Sample and data collection

The geographically large nature of Australia and its urbanised population warranted the original Ten to Men researchers to use a stratified, multi-staged, cluster random sample drawing samples from each regional stratum; oversampling from regional areas as sampling from remote areas was not possible (Currier et al., 2016). Wave1 of the Ten to Men study (N = 16,021) occurred in 2013/14 and encompassed three age-based cohorts including males aged 10–14 years, 15–17 years and 18–55 years (Pirkis et al., 2016). Overall, the participant retention rate from Wave1 to Wave2 was reported as 98% and from Wave1 and Wave3 was 93% (Bandara et al., 2021). Further details of the Ten to Men study can be found in existing publications by the original investigators (Currier et al., 2016; Pirkis et al., 2016).

To understand the temporal nature of vulnerability for different masculine norm segments, likely vulnerability experience over time and subjective health and well-being over time were measured. Data were collected across three time points spanning seven years using the Ten to Men data sets of adult males aged 18–55 years at Wave1 (n = 13,891). The same participants from Wave1 who remained in the study comprised the sample for Wave2 (n = 9,242) in 2015/16, and Wave3 (n = 5,672) timepoints (Bandara et al., 2021). By Wave3 in 2020/21, participants were aged between 25 and 62 years (Bandara et al., 2021).

3.3 Measures

The Ten to Men study drew on existing validated scales and items and used pilot testing for measures developed specifically for the study (Currier et al., 2016). Refer to Appendix Table A1 for constructs, measures and validity and reliability tests.

3.3.1 Masculinity norms

Specific masculinity norms were identified through subscales of the 22-item Conformity to Masculine Norms Inventory (CMNI-22), which has high concurrent validity with the original CMNI instrument (Akpanudo et al., 2018; Hamilton and Mahalik, 2009; Jbilou et al., 2021; McGraw et al., 2021). The CMNI-22 instrument is a short-form version of the 96-item CMNI-96 and includes 11 subscales representing 11 traditional masculine norms: emotional control, risk-taking, pursuit of status (status), dominance, playboy, power over women, primacy of work, self-reliance, violence, winning and heterosexual presentation (Mahalik et al., 2007). The CMNI-22 instrument scored slightly low reliability with the analysed data set (θ = 0.70) but is considered an acceptable range for the abbreviated scale (Kim et al., 2020) and consistent with other studies using the instrument (Jbilou et al., 2021; Nadeau et al., 2016), additional to 12 studies published from the Ten to Men data sets thus far using the CMNI-22 masculinity scale (Ten to Men, 2023).

3.3.2 Subjective health and well-being

To capture participants’ subjective health and well-being over time, overall personal wellbeing index (PWI) scores measured at all timepoints were modelled as distal outcome variables (International Wellbeing Group, 2013). The PWI is a seven-item instrument designed to measure subjective well-being across seven life domains including satisfaction with health, personal safety, personal relationships, future security, feeling part of a community, standard of living and life achievements (International Wellbeing Group, 2013). The PWI overall score and the health domain scores were provided with the data sets.

3.3.3 Likely and actual customer experience of vulnerability

As likely vulnerability (RQ1 and RQ2) in this study is an ex ante state, any measures of the concept need to have a predictive quality (Maeda and Ishida, 2021; Naudé et al., 2009). Therefore, for this research, male customers’ predicted likely experiences of vulnerability are defined as occurring when male customers do not regularly access or avoid transformative preventative health services, increasing the susceptibility to diminished health outcomes and well-being (Baker et al., 2005; Raciti et al., 2022). Because customer vulnerability is a highly contextual construct, there are many indicators in the literature (Riedel et al., 2021). Customer vulnerability is theoretically defined in this paper as likely to occur when male customers do not regularly access/avoid primary preventative health services. The proxy item in the secondary panel data set that aligns with this definition is one indicator in Wave1 (dichotomous categorical variable): “I only go to the doctor when I feel unwell: true/false.” A “true” response indicates avoidance of a primary preventative health service and a likely (but not certain) customer experience of vulnerability in a health service context. Agreement with the statement indicates that the person only attends the doctor when they are sick rather than for preventative purposes. Preventive action is necessary to minimise the likelihood of future health problems (harm), and thus, people who go to the doctor for preventative purposes are
more likely to be able to obtain early treatment, minimizing or avoiding future harm (World Health Organization, 2018b).

To address RQ3, an additional variable of vulnerability state was created using the data set variables overall subjective well-being and satisfaction with health, a subscale of the PWI (International Wellbeing Group, 2013). Scores of 50–69 for overall subjective well-being indicate compromised subjective well-being and, thus, actual vulnerability (ex post), while scores 49 or less indicate challenged levels of subjective well-being, also actual vulnerability (Tomyn et al., 2015). Scores under the lower bound of the Australian normative subjective well-being score range (based on average levels of satisfaction found in a sample of the Australian population) including 74.13 for overall, 72.79 for health and above 69 but below or equal to 74.13 indicate likely vulnerability (Khor et al., 2020; Tomyn et al., 2015). Conditional growth modelling was conducted to identify the change over time for men moving from likely to actual experience of vulnerability.

3.3.4 Likely vulnerability over time
To capture likely male customer experience of vulnerability over time (RQ2), a variable measuring access to a primary preventative health service at each timepoint was determined as the distal outcome variable for the construct. Responses to the item; “How often do you see your family doctor just for a check-up? That is, not because you are sick or injured, but to check on your general health: More than once a year, once a year, less frequently, never?” were dummy coded into a dichotomous categorical variable where “once a year” and “more than once a year” became “regular use of preventative health service” and “less frequently” and “never” became “not regular use of preventative health service.” “Not regular use of the service” responses operationalise likely customer experience of vulnerability over time in a primary preventative health service. This proxy measure is a different indicator to that for “likely customer experience of vulnerability” (operationalised in latent class analysis [LCA]) as it is worded specifically to the frequency of use to operationalise the construct over time.

3.3.5 Personal health communication avoidance and mental health indicators
Indicators of personal health communication avoidance and potential mental health concerns from Wave1 were included in the first analysis to measure health and well-being characteristics. The indicators comprised four dichotomous categorical variables measuring experiences of depression in the last 12 months, experiences of anxiety in the last 12 months, suicidal thoughts in the lifetime and personal health communication avoidance. Riedel et al. (2021) found the experience of vulnerability can be driven by multiple characteristics. Therefore, the mental health and personal health communication indicators impact latent class groupings with gender norms to elicit a segment potentially more likely of experiencing customer vulnerability.

3.4 Analysis
3.4.1 Latent class analysis to understand different segments of customers
LCA was conducted in Mplus version 8.4. LCA is a person-centred approach to identify and classify segments of a population whose members have similar characteristics and responses (Kongsted and Nielsen, 2017). LCA is becoming increasingly popular in psychological research and other health research disciplines to understand segment heterogeneity specific to a phenomenon (Kongsted and Nielsen, 2017; Nylund-Gibson and Choi, 2018). LCA is also applied in service research to identify customer segments and subgroups of interest (Lariviere et al., 2014). LCA groups similar people according to their responses to chosen indicators (Nylund-Gibson and Choi, 2018).

Using the Wave1 sample, five final models were assessed by LCA. The best class solution was selected to identify the homogenous vulnerability experiences of male customers and the masculinity norms specific to each segment. Key fit indices, such as entropy, classification probabilities, Bayesian information criterion (BIC) and bootstrap likelihood ratio test (BLRT), as well as each model’s meaningfulness, determined the preferred latent class model. Characteristics of each class included eleven CMNI-22 subscale mean scores representing masculinity norms, an indicator for likely customer experience of vulnerability and probabilities for personal health communication avoidance and potential mental health concerns indicators.

3.4.2 Conditional growth mixture modelling with the latent class model and distal outcomes
To measure customer experience of vulnerability over time for each segment, distal outcomes were included with the preferred latent class-model. Conditional growth mixture modelling using the preferred LCA model was conducted in Mplus to predict changes of experience of vulnerability for each class over time, subjective well-being over time and subjective health over time. The Bolck, Croons and Hagenaars (BCH) method is one of the preferred approaches for mixture modelling when modelling for latent class groups with continuous and categorical distal outcomes (Asparouhov and Muthén, 2021; Bolck et al., 2004). Once the preferred latent class model was identified, subsequent analyses were run with the preferred model including model indicator variables and auxiliary observed variables collected at each timepoint. Independent distal outcomes measured regular primary preventative health service use, subjective health and overall subjective well-being.

4. Results
4.1 Descriptive frequency statistics
The mean age of participants at Wave1 was 38 years (SD = 10.62) and 67% were married/de facto. A majority of participants (81%) had visited a GP in the last 12 months, and 80% also reported they only go to the doctor when they feel unwell. Most (91%) participants self-rated their health as “good” or “excellent” with 9% rating it “fair” or “poor.” The highest means for the CMNI-22 masculinity subscales were for Status (M = 3.30, SD = 1.03) and Emotional control (M = 3.17, SD = 1.36). Reliability scores for specific subscales ranged from 0.44 (work/school) to 0.86 (emotional control) (see Appendix), consistent with other studies using this data set (Milner et al., 2018). Overall, PWI mean percentage score for the sample was lower than the Australian normative range (M = 70.23, SD = 17.26 vs 74.13–76.79) (International Wellbeing Group, 2013; Khor et al., 2020).

4.2 Selection of latent class model
The sample for the LCA analysis was 13,854 of the 13,891 adult participants, excluding those who did not respond to all
4.3 Male customers of primary preventative health services

Latent class analysis found a three-class solution was most meaningful and best fit with the data to identify masculinity norms of male customers likely to be experiencing vulnerability using a primary preventative health service (Figure 1). The latent classes are named to reflect the distinguishing masculinity norm subscales, where class members are more likely to have scores showing conformity to those specific norms (mean scores of 3.00 or more) [Figure 1(a)]. All mean estimates of the CMNI-22 subscales were significant at $p < 0.001$. Class 1’s CMNI-22 mean scores indicate members show conformity to the traditional masculinity norms of self-reliance, status and emotional control, and has been named the traditional self-reliant segment as the norms indicate being tough, stoic and not wanting help. The traditional self-reliant segment also had a higher likelihood of experiencing mental health concerns compared to the other segments, which supports previous men’s health literature (McCreary et al., 2019; Wong et al., 2017). At Wave1, 52% of traditional self-reliant members were married, 56% had lower socioeconomic advantage, 40% had private health insurance, 36.5% were smokers, 21.5% had a disability and 32% had never been to a GP just for a check-up. Mean scores for Class 2 indicated members are likely to have conformity to only one traditional masculine norm, status and non-conformity to the other 10 norms, so it has been named modern status segment (the term modern represents non-traditional). Seventy-two per cent of modern status members were married, 55% had higher socioeconomic advantage, 57% had private health insurance, 16% were smokers, 4.5% had a disability and 32% had never been to the GP just for a check-up. Class 3 member’s mean scores indicate members conform to the traditional masculine norms of heterosexual presentation, status and emotional control. This class has been named traditional bravado as the characteristics indicate not wanting to show feelings or appear weak, seeking prestige or fame and wanting to present as macho. Traditional bravado members were slightly younger than the other classes with a mean age of 37.4 years (compared to 39 years), 66% were married, 54% had higher socioeconomic advantage, 51% had private health insurance, 20% were smokers, 6% had a disability and 35% had never been to the GP just for a check-up.

Figure 1(b) plots the probabilities of categorical indicators for health and mental health well-being. All indicator probabilities were significant at $p < 0.001$. Traditional self-reliant membership probabilities of answering “yes” to potential mental health concern indicators were higher than modern status and traditional bravado, suggesting members of traditional self-reliant are most at risk of reduced mental health well-being. traditional self-reliant and traditional bravado also had a higher likelihood of personal health communication avoidance. However, probabilities were high for all segments to answering “yes” to the indicator operationalising...
likely experience of customer vulnerability in a primary preventative health service (traditional self-reliant = 0.740, \( p < 0.001 \), modern status = 0.766, \( p < 0.001 \); traditional bravado = 0.840, \( p < 0.001 \)). These findings suggest all segments have likely customer experience of vulnerability in a primary preventative health service, thus answering RQ1 regarding masculine norm segments.

4.4 Likely customer vulnerability experience for masculinity segments over time
To Address RQ2 regarding the temporal nature of customer vulnerability, the sample for analysis was 5,672, as there was attrition across the second and third timepoints, and only those with responses on all indicators were analysed. Conditional growth mixture modelling used the preferred three-class model and compared distal outcomes for regular primary preventative health service use reported at the three timepoints: Waves 1, 2 and 3 [Figure 2(a)]. Modern status (Wave1: \( M = 0.42 \), Wave2: \( M = 0.46 \), Wave3: \( M = 0.56 \)) and traditional bravado (Wave1: \( M = 0.36 \), Wave2: \( M = 0.41 \), Wave3: \( M = 0.53 \)) had probabilities for “not regular use of primary preventative health services” at Wave1 and Wave2 timepoints but probabilities of “regular use” by Wave3 timepoint indicating temporary likely customer experience of vulnerability. However, the trend over time for the modern status segment shows members have the shortest likely customer experience of vulnerability of the three segments, while the trend for traditional bravado placed

Figure 2 State of vulnerability experience over time, subjective well-being over time and subjective health over time for three latent classes of male customers

(continued)
members starting regular use of services just before the Wave3
timepoint. Therefore, for nearly five years since baseline,
traditional bravado segment members were not regularly using
primary preventative health services, which would indicate a
prolonged likely experience of customer vulnerability for that
segment over time. The traditional self-reliant segment mirrored
the trend of the other segments towards eventual regular use of
primary preventative health services, thus, likely customer
experience of vulnerability is reducing over time. However,
traditional self-reliant members had distal outcomes with the
probability of “not regular use of primary preventative health
services” at each timepoint (Wave1: $M = 0.30$, Wave2: $M = 0.34$, Wave3: $M = 0.45$). Therefore, prolonged customer
experience of vulnerability is also likely for members of the
traditional self-reliant segment.

4.5 Perceived health and well-being over time and
customer vulnerability experience
The sample for the analyses of subjective health and well-being
over time was 5,844 (subjective health) and then 5,642
(subjective well-being) participants who responded on all
indicators across the three timepoints. Again, conditional
growth mixture modelling used the preferred three-class
model. Distal outcomes for PWI overall scores and then the
PWI health domain scores for the three classes at each
timepoint were compared (Figure 2[b] and (c)) (International
Wellbeing Group, 2013). Traditional bravado membership
showed stable overall personal well-being scores over the time,
remaining just below the Australian normative score range of
74.13–76.79 (Wave1: $M = 72.50$, Wave2: $M = 71.03$, Wave3:
$M = 72.45$) while subjective health scores were below the
Australian normative lower bound (Wave1: $M = 69.79$,
Wave2: $M = 67.89$, Wave3: $M = 68.59$) indicating likely (ex
ante) vulnerability (Khor et al., 2020). Modern status
membership overall PWI scores were within the Australian
normative range and above the lower bound score (Wave1:
$M = 76.99$, Wave2: $M = 75.23$, Wave3: $M = 75.69$) while
subjective health scores were under the lower bound of the
Australian normative (Wave1: $M = 71.23$, Wave2: $M = 69.23$,
Wave3: $M = 69.5$) indicating likely vulnerability (Khor et al.,
2020). Traditional self-reliant membership showed improved
well-being scores over time but was well below the Australian
normative range (Wave 1: $M = 76.99$, Wave 2: $M = 75.23$, Wave 3: $M = 75.69$) while subjective health scores were under the lower bound of the
Australian normative (Wave1: $M = 71.23$, Wave2: $M = 69.23$,
Wave3: $M = 69.5$) indicating likely vulnerability (Khor et al.,
2020). Traditional self-reliant membership showed improved
well-being scores over time but was well below the Australian
normative range (Wave 1: $M = 76.99$, Wave 2: $M = 75.23$, Wave 3: $M = 75.69$) while subjective health scores were under the lower bound of the
Australian normative (Wave1: $M = 71.23$, Wave2: $M = 69.23$,
Wave3: $M = 69.5$) indicating likely vulnerability (Khor et al.,
2020).
bravado, answering RQ3 regarding perceived health and well-being over time for masculine norm segments of male customers experiencing likely and actual vulnerability.

5. Discussion

The purpose of this paper was to identify the relationship between different gender norm segments for men and likely customer vulnerability experience over time, and subjective health and well-being. We challenge assumptions about the nature of customer vulnerability and examine masculinity as an associated factor. This research is the first to introduce the terms of ex ante (the susceptibility/likelihood of vulnerability) and ex post (the actual experience of vulnerability) to the customer vulnerability TSR literature. Drawing on literature outside of marketing that regularly uses the terms, specifically in the contexts of vulnerability in labour markets and poverty (Maeda and Ishida, 2021; Naudé et al., 2009), and social protection – disaster management, environment and health (Alwang et al., 2001) – we introduce a more fine-grained approach. We have confirmed that the nature of customer vulnerability is temporal (varies over time) and, in particular, can move from likely (ex ante) to actual (ex post). This delineation of likely and actual customer vulnerability helps TSR researchers to position their research within the extant field of vulnerability beyond marketing as well as to understand the nature of the customer vulnerability being investigated. This paper also introduces to the services literature the temporal nature of customer vulnerability over an extended period, suggesting anticipatory/preventative services can adopt temporal approaches for customers experiencing vulnerability.

The study challenges assumptions about the gendered experience of vulnerability and thus contributes to the customer vulnerability stream of the TSR literature. The study also contributes through the identification of the temporal dynamics of the journey from likely (ex ante) vulnerability to actual (ex post) vulnerability. This research offers three theoretical contributions for the customer vulnerability stream of TSR research: men with higher conformity to traditional masculine norms are more likely to experience customer vulnerability over time, the experience of vulnerability is likely to be prolonged for men with traditional masculinity and perceived low health and well-being over time indicates actual vulnerability for self-reliant men.

5.1 Theoretical contributions

5.1.1 Men with higher conformity to traditional masculine norms are more likely to experience customer vulnerability over time

All customers can experience vulnerability, including groups considered privileged in other contexts. This research has revealed that regardless of masculinity characteristics, there is a high probability of Australian males having likely customer experience of vulnerability in a primary preventative health setting. However, when tracked over time, the traditional masculinity segments with higher conformity to specific masculine norms self-reliance, status, emotional control and heterosexual presentation were likely to have a prolonged experience by avoiding using primary preventative health services. Previous men’s health research has found males with high conformity to traditional masculine norms are more likely to avoid help-seeking or preventative care and have adverse physical and mental health outcomes (Wong et al., 2017). While this research also found men with non-conformity to traditional masculine norms (modern status segment) were initially likely to avoid using the service, over time, this segment moved to regular use of a primary preventative health service; thus, the experience was temporary. Therefore, as a psychosocial characteristic, this research has shown gender norms can be indicators of the temporal nature of the experience of customer vulnerability. Previous TSR examinations of customer vulnerability have not examined different gender norms as psychosocial characteristics nor where gender is a characteristic for men’s experience.

5.1.2 The probable experience of vulnerability in the customer journey is likely to be prolonged for men with traditional masculinity norms

This research found men’s likely customer experience of vulnerability in a primary preventative health service can persist over time yet does reduce for each masculinity segment. The reduction may be partly explained by ageing, as the use of health services generally increases as people get older. However, this research finds that males with traditional masculinity characteristics will have longer likely customer experience of vulnerability. TSR usually finds the customer experience of vulnerability a fleeting episode (Amine and Gafafouhi, 2019). However, in complex transformative services used across the lifespan, such as transformative preventative health services, the state had not been examined longitudinally for an extended period for segments with certain characteristics. Identification of a prolonged experience of vulnerability in the service indicates poor value experiences in the customer journey for traditional masculinity segments (Echeverri, 2021). Echeverri (2021) identified gaps in a service ecosystem and reduced value experiences leading to value co-destruction for customers of a transport and healthcare service experiencing vulnerability. Problems occur at different stages or touchpoints of the service, resulting in reduced customer well-being (Echeverri, 2021). For this research, low customer subjective health and low overall subjective well-being were evident across time for the traditional self-reliant segment. Men’s health research continues to find masculinity norms such as being self-reliant and tough are associated with life-long risky health behaviours such as smoking, poor diet and low help-seeking (McCreary et al., 2019). This research also identified distinct masculine norm segments for consumer vulnerability in a primary preventative health service. This research supports the men’s health literature and adds to TSR literature for specific gender norm segments the prolonged likely (ex ante) customer experience of vulnerability in the customer journey over an extended period of time.

5.1.3 Perceived low health and well-being over time indicates actual vulnerability for self-reliant men

Actual (ex post) customer experience of vulnerability over time is apparent for the traditional self-reliant segment. Consistently low subjective health and well-being scores for the segment at three timepoints across seven years indicate this group of men is susceptible to reduced health outcomes across the lifespan and, therefore, a pre-existing ex post experience of vulnerability (Naudé et al., 2009). Well-being is concerned with people’s living experiences, and their functional being is the best it can be (Rahman, 2021). Only through personal satisfaction in the different life domains, such as health, financial security and
personal safety, can overall subjective well-being be achieved (Rahman, 2021). Very low overall subjective well-being and low subjective health across time additional to the segment’s health and mental health characteristics (e.g. potential mental health concerns and prolonged likely experience of customer vulnerability), indicate the traditional self-reliant segment’s actual experience of vulnerability. This is the first study for TSR to establish the progression from likely (ex ante) to actual (ex post) experience of customer vulnerability. Furthermore, this research contributes to TSR the association between subjective well-being, encompassing multiple well-being indicators with customer vulnerability over time.

5.2 Managerial implications

5.2.1 Identify and tailor the service offering for gender norm segments

The identification of three masculinity norm segments provides practitioners with key insights to engage specific cohorts of men and increase their participation in preventative health. Practitioners can identify and address men from each segment according to their masculine traits, such as either their propensity for showing bravado through being daring so, appealing to their sense of adventure or for self-reliant men appeal to ideals of being autonomous through resilient coping (Sharp et al., 2023). Men with modern masculinity traits will likely be more emotionally expressive and receptive of help while caring what others think of them, so practitioners could appeal to their emotional ties such as family or foster shared connections and social interaction between men (Sharp et al., 2023). GPs should adopt a proactive approach for men who only attend when sick to encourage preventative GP appointments. Opportunistic approaches such as pop-ups at places that men frequent provide easy access and can leverage social norms to encourage participation.

5.2.2 Enable self-reliant men to provide their expertise

Self-reliant men are the most challenging for practitioners to engage for primary preventative health service use. By nature, self-reliant people do not want to ask others for help or support but are willing to offer their own expertise, which allows them to maintain a sense of control, which is central to their masculine identity (McGraw et al., 2020). However, practitioners could reimagine self-reliance through a strengths-based approach whereby customers use their own resources, for example, independence characteristics such as problem-solving and goal setting, to mitigate the experience of vulnerability in a health service (Raciti et al., 2022; Sharp et al., 2023). Using insights from service users’ perspectives when accessing different touchpoints across a healthcare journey, Yap et al. (2022) mapped users’ sensory experiences to develop tactics to promote well-being. Using such strengths-based approaches, practitioners could reposition service value propositions by asking self-reliant men to help solve a service problem (e.g. messaging asking men to help reduce hospital admittances by having regular skin cancer checks), thus applying their resilience and increasing perceived autonomy rather than reducing it (Dodds et al., 2022; Raciti et al., 2022).

5.2.3 Use “status” to reach all masculinity segments

Members of all segments conformed to the masculinity norm status, suggesting the importance of social acceptance irrespective of overall masculinity ideals. As current masculinity research seeks to identify contemporary and positive gender role norms for men (Gough, 2018; McDermott et al., 2019), transformative health services practitioners wishing to reach both traditional and modern men could positively showcase the status norm. Gender-sensitive social marketing approaches using positive messaging with themes around social status (e.g. the “cool dad” keeps their health in check) using relatable male role models could encourage men’s primary preventative health service use. For instance, initiatives could use popular social media microblogging platforms to ignite challenges incorporating an underlying message for sexual health checks. Some public health organizations have already achieved high engagement with public health messages on user-driven social media platforms (Li et al., 2021).

5.3 Methodological contributions

The use of the secondary Ten to Men data set provided many method innovations in the customer vulnerability stream of TSR including the opportunity to apply TSR constructs to a large sample size with a broad range and difficult-to-access populations (e.g. men living in regional areas). It applied a rigorous recruitment process, and longitudinal data collection occurred over an extended period (Pirkis et al., 2016). Usually, TSR research uses modest, cross-sectional sample sizes to capture transformative constructs (Davey and Grönroos, 2019). This research demonstrates TSR researchers can use publicly funded largescale studies to examine a wide range of health and well-being topics (Pirkis et al., 2016).

5.4 Limitations and further research

This study was quantitative and extended previous qualitative research, but was, however, limited to the psychosocial individual characteristic of gender norms. Future research could undertake exploratory research to identify other influencing factors for men’s experience of vulnerability such as external market factors as well as policy responses. We acknowledge using a secondary data set provided limitations including in the research design, which is not specific to TSR objectives and constructs such as the single-item measure for customer experience of vulnerability (i.e. only going to the doctor when feeling unwell). Future research should develop brief but multi-item scales of customer vulnerability that can be used by panel data providers. Another limitation is mixed levels of reliability in the subscales of the CMNI-22 instrument to the Australian data set. The CMNI-22 is derived from the original 96-item instrument and uses the two highest-loading items from the original subscale (Hamilton and Mahalik, 2009). Future research using the CMNI could consider using a recently updated validated short-form version, the CMNI-30, which comprises 10 subscales with three items per subscale (Levant et al., 2020). Furthermore, masculinity norms might differ for each culture. The CMNI was developed in the USA, which should be considered when interpreting results from other nationalities. Future research could also qualitatively explore the masculinity groups identified in this research to better understand why they might experience vulnerability in transformative health services. Finally, the data collected reflect the Australian healthcare system, where all citizens have free access to medical practitioners for both preventative health and illness and where there is a high quality of care available. Further
research is needed on healthcare systems where consumers have differing levels of access and quality of care. Further research is also needed in other health contexts beyond primary preventative health services.

References


Appendix

Study constructs, measures and fit indices used to decide best latent class model

Table A1  Study constructs and measures

<table>
<thead>
<tr>
<th>Construct/mean (SD)</th>
<th>Items</th>
<th>Reliability</th>
<th>Cronbach’s α</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CMNI-22 Masculinity norms (Mahalik et al., 2003)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>I would hate to be important (r)</td>
<td>0.45</td>
<td>0.59</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>3.30 (1.03)</td>
<td>I never do things to be an important person (r)</td>
<td>0.70</td>
<td>0.75</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Heterosexual presentation</td>
<td>It would be awful if someone thought I was gay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.90 (1.58)</td>
<td>It is important to me that people think I am heterosexual</td>
<td>0.44</td>
<td>0.59</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>My school/work is the most important part of my life</td>
<td>0.44</td>
<td>0.59</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>2.61 (1.21)</td>
<td>I don’t like giving all my attention to work/school (r)</td>
<td>0.66</td>
<td>0.69</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>Self-reliance</td>
<td>I never ask for help</td>
<td>0.45</td>
<td>0.59</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>2.60 (1.14)</td>
<td>It bothers me when I have to ask for help</td>
<td>0.70</td>
<td>0.75</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Playboy status</td>
<td>I would feel good if I had many sexual partners</td>
<td>0.80</td>
<td>0.78</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>1.59 (1.35)</td>
<td>If I could, I would frequently change sexual partners</td>
<td>0.54</td>
<td>0.57</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td>Dominance</td>
<td>I make sure people do as I say</td>
<td>0.45</td>
<td>0.54</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>2.48 (1.09)</td>
<td>I should be in charge</td>
<td>0.45</td>
<td>0.54</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>Power over women</td>
<td>I love it when men are in charge of women</td>
<td>0.45</td>
<td>0.54</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>1.27 (1.02)</td>
<td>Men and women should respect each other as equals (r)</td>
<td>0.61</td>
<td>0.70</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>Violence</td>
<td>I believe that violence is never justified (r)</td>
<td>0.70</td>
<td>0.75</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>2.40 (1.46)</td>
<td>Sometimes violent action is necessary</td>
<td>0.70</td>
<td>0.75</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Risk-taking</td>
<td>In general, I do not like risky situations (r)</td>
<td>0.70</td>
<td>0.75</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>2.75 (1.10)</td>
<td>I enjoy taking risks</td>
<td>0.70</td>
<td>0.75</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Emotional control</td>
<td>I like to talk about my feelings (r)</td>
<td>0.86</td>
<td>0.85</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>3.17 (1.36)</td>
<td>I tend to share my feelings (r)</td>
<td>0.86</td>
<td>0.85</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>Winning</td>
<td>Winning is the most important thing</td>
<td>0.50</td>
<td>0.62</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>2.45 (1.08)</td>
<td>More often than not, losing does not bother me (r)</td>
<td>0.50</td>
<td>0.62</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td><strong>Personal wellbeing index (International Wellbeing Group, 2013)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective well-being (at Wave1)</td>
<td>70.24 (17.26)</td>
<td>On a scale of 0 to 10 where 0 means you feel “completely dissatisfied”, 10 means you feel “completely satisfied”. . .how satisfied are you with: Your standard of living, Your health, What you are achieving in life, Your personal relationships, How safe you feel, Feeling part of your community, Your future security</td>
<td>0.89</td>
<td>0.60</td>
<td>0.91</td>
</tr>
<tr>
<td>Likely experience of customer vulnerability</td>
<td>I only go to the doctor when I feel unwell (true/false)</td>
<td>NA 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal health communication avoidance</td>
<td>I generally avoid talking about my health (true/false)</td>
<td>NA 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health indicator depression</td>
<td>Have you been treated for or had symptoms of depression in the last 12 months?</td>
<td>NA 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health indicator anxiety</td>
<td>Have you been treated for or had symptoms of anxiety disorders in the last 12 months?</td>
<td>NA 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health indicator suicidal thoughts ever</td>
<td>Have you ever seriously thought about killing yourself?</td>
<td>NA 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likely experience of customer vulnerability over time</td>
<td>How often do you see your family doctor just for a check-up? That is, not because you are sick or injured, but to check on your general health. (coded into a categorical variable where “more than once a year” and “once a year” = regular use, “less frequently” and “never” = not regular use)</td>
<td>NA 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: (r) denotes a reversed item

Source: Authors’ own work
Table A2  Fit indices used to decide best latent class model

<table>
<thead>
<tr>
<th>No. of classes</th>
<th>Entropy</th>
<th>BIC</th>
<th>Adjusted BIC</th>
<th>Log-likelihood (replicated)</th>
<th>LMRT significance</th>
<th>All class classification probabilities &gt; 0.700</th>
<th>Meaningful classes identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>543,474</td>
<td>543,388</td>
<td>-271,608.03</td>
<td>NA</td>
<td>NA</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>0.521</td>
<td>538,554</td>
<td>538,414</td>
<td>-269,067.01</td>
<td>Yes</td>
<td>5,050.87***</td>
<td>Yes</td>
</tr>
<tr>
<td>3#</td>
<td>0.646</td>
<td>534,892</td>
<td>534,698</td>
<td>-267,155.21</td>
<td>Yes</td>
<td>3,800.16**</td>
<td>Yes</td>
</tr>
<tr>
<td>4†</td>
<td>0.627</td>
<td>533,138</td>
<td>532,891</td>
<td>-266,197.32</td>
<td>Yes</td>
<td>1,904.05</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>0.714</td>
<td>531,642</td>
<td>531,340</td>
<td>-265,367.89</td>
<td>Yes</td>
<td>1,648.68*</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: BIC = Bayesian information criterion; LMRT = Lo-Mendell-Rubin adjusted likelihood ratio test; *p-value = 0.0287, **p-value = 0.0025, ***p-value = 0.0000; #Bootstrap likelihood ratio test (BLRT) up to 2,000 random starts, 500 final stage optimizations testing k−1 Class (2 class) versus k Class model (three class), replication successful for five bootstrap draws (Asparouhov and Muthén, 2012); †Bootstrap likelihood ratio test (BLRT) up to 2,000 random starts, 500 final stage optimizations testing k−1 Class (3 class) versus k Class Model (four class), replication successful for five bootstrap draws (Asparouhov and Muthén, 2012)

Source: Authors’ own work

About the authors

Jacquie McGraw is a postdoctoral research fellow at The University of Queensland’s Institute for Social Science Research (ISSR). Jacquie completed her PhD at Queensland University of Technology, receiving a 2022 executive dean’s commendation for Outstanding Doctoral Thesis Award in the Faculty of Business and Law. Jacquie’s thesis investigated the role of masculine norms, customer vulnerability and value destruction when younger men use preventative health services. She also completed a Master of Business (Research) in 2018, investigating men’s help-seeking behaviours and the role of masculine identities, self-conscious emotions and value destruction. Jacquie McGraw is the corresponding author and can be contacted at: j.mcgraw@uq.edu.au

Professor Rebekah Russell-Bennett is co-director of the Centre for Behavioural Economics, Society & Technology (BEST) and a professor in the School of Advertising Marketing & Public Relations at Queensland University of Technology. She has an international reputation for research and industry relevance in the field of social marketing (using commercial marketing to address social problems). Rebekah uses theories and frameworks from services marketing and social marketing to co-create innovative services and products that support people in their life, protect the planet and enable organizational success.

Professor Katherine M. White is a professor in the School of Psychology and Counselling at Queensland University of Technology. Her area of expertise is social psychology, particularly focusing on attitude-behaviour relations across a wide range of areas including health, social and organizational domains. Katherine has vast experience in examining the impact of social influence processes, norms and identity on decision-making. She is internationally recognized for her body of research examining the prediction of a range of social and health behaviours. Her many published intervention studies have resulted in people’s adoption of healthier and safer behaviours.

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