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What is wellbeing for rural South African women? Textual analysis of focus group discussion transcripts and implications for programme design and evaluation

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Policy makers' ultimate goal is to deliver the highest possible level of population welfare. Economists investigate the effect of socio-economic dimensions on wellbeing using unidimensional measures of life satisfaction or happiness as proxies for welfare. However, social psychologists have shown that wellbeing is a much broader construct and that an intervention may have opposite effects on its components. Unidimensional measures may hide these patterns. Most literature focuses on high-income countries. The growing evidence from low- and middle-income countries also largely relies on standard unidimensional measures. This study tests the validity of this reliance by exploring the wellbeing construct of South African women, quantitatively analysing textual data from focus group discussions to investigate whether unidimensional measures are appropriate in this context. It provides evidence against the indiscriminate use of unidimensional wellbeing measures. Cluster and correspondence analysis of the transcripts show that relevant domains of women's wellbeing include relations with others, autonomy, and a perception of control over their environment (environmental mastery). Results also reveal that participants have a relational view of themselves, distinct from the individuated view predominant in the US and Europe and the collectivist view found in East Asia. Such relational self-perception modifies study participants' wellbeing construct in ways that are important for policy implementation and evaluation. For example, women's autonomy and environmental mastery rely on shared peer-identity to redefine rules and meet challenges. Wellbeing measures for policy evaluation would benefit from incorporating these insights to meaningfully measure progress towards Sustainable Development Goal 3 on 'good health and wellbeing' in South Africa and other contexts that exhibit similar concepts of wellbeing.

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Background

The absence of pain (hedonia) and meaning-making (eudaimonia)—within ourselves (psychological wellbeing) or with others (social wellbeing)—are fundamental drivers in our lives. They are also a high policy priority, especially for health, social, and economic policies or interventions—as these focus on improving population quality of life in specific domains. An improvement in one or more domain is likely to positively impact individuals' hedonia or eudaimonia. Each type of policy or intervention will impact distinct dimensions of hedonia or eudaimonia, potentially in opposite directions (Cornaglia et al., 2015). Policy design and targeting can be improved by an understanding of the relationships between life-domains and distinct hedonic and eudaimonic dimensions in the population. For example, there may be evidence of a microfinance intervention's positive impact on women's life satisfaction, a subset of hedonia. However, this evidence cannot tell us anything about the intervention's impact on women's perception of their own autonomy, or of their ability to positively contribute to others' lives—both relevant policy objectives, and both aspects of eudaimonia (Fig. 1). Evidence of opposing impact of socio-economic outcomes on mental wellbeing dimensions dates back to the early 1990s: Graetz (1991) showed that the 12-item General Health Questionnaire (GHQ12) had a three-factor structure (anxiety, loss of confidence, and anhedonia and social dysfunction—i.e., global happiness evaluation, ability to carry out daily tasks, make decisions and feel one is contributing, etc.) alongside its widely used unidimensional version. He also showed that, among Australian youths, unemployment impacted all three factors in the same direction only in recent graduates, while those who had been in employment for some time suffered differential impact in the three factors. This inconsistent association between GHQ12 subscales in some population subgroups, Graetz argued, could result in null associations between the unidimensional GHQ12 measure and other socio-economic phenomena. Related research in the UK in 2015 found that in boys, only loss of confidence explained the negative association between the unidimensional GHQ12 scale and GCSE results, while in girls the negative association was also explained by the anhedonia and social dysfunction factor (Cornaglia et al., 2015). Knowing which aspects of mental wellbeing are affected in which populations will help policy makers and programme managers design better policies and interventions to increase population welfare.

Over almost half a century, wellbeing research in economics and the social sciences has grown from observations of income and happiness trends to studying associations between socio-economic outcomes and various dimensions of 'wellbeing', such as life satisfaction or happiness which, together with negative affect and domain satisfaction, make up the hedonic dimension of mental wellbeing (Fig. 1). Much of this literature uses the term 'wellbeing' to refer to various measures. It prefers measures of life satisfaction or happiness, on the grounds that they proxy the unidimensional utility function that the rational *homo oeconomicus* seeks to maximise (Clark, 2018), and constitute a sufficient statistic for more elaborate measures of perceived wellbeing. Contributions to this literature focus on high-income countries; and rarely explore gendered differences. However, several interventions in low- and middle-income countries are designed to improve the wellbeing of poor women, whose understanding of a good life remains unexplored in this literature. A better understanding of poor women's concept of wellbeing in low- and middle-income countries is a priority.

Over time, social science scholars have investigated how several 'wellbeing' dimensions relate to socio-economic outcomes, uncovering a variety of patterns in these association. The preferred measures change over time and across disciplines, often without a rationale being offered. This can be confusing, not least because some of the results are contradictory, as discussed below. For clarity, this paper synthesises its own findings using the conceptual model of Mental wellbeing (MWB) recently proposed by Joshanloo and co-authors (Joshanloo et al., 2016). The MWB model offers a complete and coherent taxonomy of the 'wellbeing' measures often used in the social sciences (see Fig. 1 for a graphical representation of the model), and captures the facets that matter to poor South African women. When discussing contributions to the literature, this study uses the 'wellbeing' terms found in each paper, to avoid altering scholars' original message.

Mental wellbeing distinguishes between hedonia and eudaimonia (Fig. 1). Hedonia comprises positive and negative affect (often labelled 'happiness' in the social sciences literature) and LS alongside affect and domain-specific satisfaction. Hedonia is often referred to as subjective wellbeing (SWB) in the social sciences literature. Eudaimonia includes psychological (Ryff, 1989) and social (Keyes, 1998) wellbeing. Evidence that hedonia and eudaimonia are highly correlated (Kashdan et al., 2008) has been used to justify economists' preference for unidimensional measures. However, recent empirical evidence supports separate hedonic versus eudaimonic constructs within MWB (Joshanloo et al., 2016; Joshanloo and Weijers, 2019) s previously argued in the psychology literature (Ryan and Deci, 2001; Waterman et al., 2008). Within eudaimonia, psychological wellbeing comprises autonomy, environmental mastery, and positive relationships; social wellbeing includes social contribution, integration, and

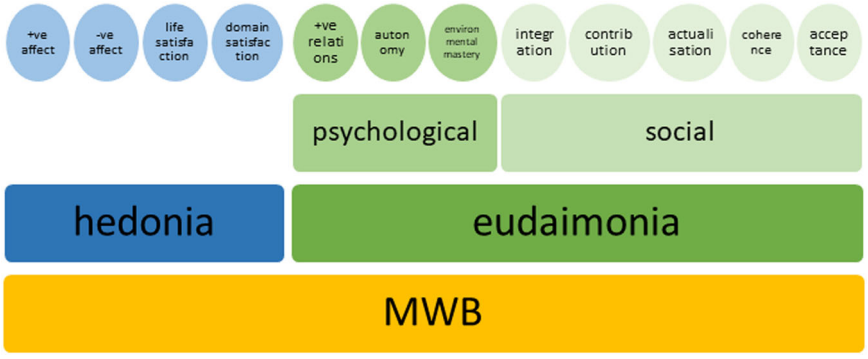

Fig. 1 Author's graphical representation of Joshanloo et al. (2016) mental wellbeing (MWB) framework. The concept of mental wellbeing includes hedonic and eudaimonic concepts of wellbeing. Hedonia subsumes positive and negative affect, and life and domain satisfaction. Eudaimonia is split into psychological and social wellbeing. Psychological wellbeing encompasses positive relations with others, autonomy and environmental mastery. Social wellbeing comprises integration, contribution, actualisation, coherence and acceptance.

acceptance. Social contribution encompasses feeling useful and valued, integration captures the sense of belonging to a community and being supported by it, and acceptance involves trust (Fig. 1).

This paper is only concerned with mental wellbeing as just described. It does not investigate measures of objective wellbeing, for which several multidimensional measures do exist—see, for example, the Multidimensional Poverty Index (Alkire and Foster, 2011) and the Individual Deprivation Measure (IDM) (Bessell, 2015). Nor does it explore health measures, such as life expectancy or health-related quality of life measures see, for example, the EQ-5D (Dolan, 1997) or the ICE-CAP measures (Coast et al., 2015). Arguably, objective wellbeing indicators are arguments in a function of mental wellbeing. Policies and interventions maximise mental wellbeing, or some aspect of mental wellbeing, by improving one or more areas of objective wellbeing. Understanding the features of mental wellbeing and which life-domains are related to these in different populations is of paramount importance to competent, relevant and effective policy design. This study seeks to aid policy design and the choice of quantitative measures of hedonia and eudaimonia for policy evaluation by drawing insights from the exploration of mental wellbeing among rural South African women.

Perceptions of mental wellbeing are influenced by self-construal, a person's concept of self, which ranges from individuated to relational and collectivist (Brewer and Chen, 2007). A person with a predominantly individuated self-construal feels independent from others, finds self-realisation by pursuing their inner talent and associates with individuals with similar interests (Kitayama et al., 2007; Kitayama and Markus, 2000). In an experiment with US and Chinese competitive swimmers, Markus and co-authors found that US athletes ascribed their victories to their own talent and skills (Markus et al., 2006). Adams found that people in the US prune their networks of enemies (Adams, 2005). A person with a predominantly collective self-construal feels part of a monolithic community from which the self is not distinct, finding self-realisation in the harmony and achievements of the community as a whole: in the same experiment, Markus et al. found that Chinese athletes attributed their victory to the team as a whole, rather than their own talent or skill (2006). A person with a predominantly relational self-construal feels connected to others via a network of dyadic relationships (or relationship pairs) that imply reciprocity and are mostly predetermined, finding self-realisation by fulfilling their role-relationships (Brewer and Chen, 2007) as, for example, a mother, an aunt, a member of the same women's group. Adams found that Ghanaian women would not eliminate enemies from their network, and instead integrated these relationships into their lives (2005). Persons with predominantly individuated self-construal can feel strong affinity with members of a monolithic community, such as the affinity with an alumna of their school solely on the basis of their respective connection with the abstract community of alumni, even without having met her or anyone directly connected to her via sets of pairs (dyads) of acquaintances. It is one's predominant self-construal, however, that drives one's worldview and, consequently, one's concept of mental wellbeing (Kitayama and Markus, 2000; Markus and Kitayama, 1991).

Several African cultures have worldviews based on philosophical premises (Eze, 2008; Metz, 2007) and self-construals (Adams and Dzokoto, 2003) that differ from European, US, and East Asian cultures (Lu and Gilmour, 2004; Markus et al., 2006). Therefore, sub-Saharan African's self-construal likely differs from that of North Americans and East Asians (Brewer and Chen, 2007). Wissing et al. (2014) baTswana study supports the interdependent view of self that is characteristic of South Africans, whose construct of mental wellbeing is influenced by Ubuntu, i.e., the idea that an individual's humanity is reciprocally determined by that of others (Hoffmann and Metz, 2017). Society through the lens of Ubuntu is a network of distinct individuals connected through dyads of reciprocity ('I am because we are'). It differs from the monolithic perception of society characteristic of collective societies in East Asia, according to which the self is merged with the community, whose 'harmony' takes precedence over individual aspirations.

Recently, social psychologists' understanding of mental wellbeing has expanded to account for variation across cultural contexts, and increasingly includes African accounts (Delle Fave et al., 2016; Khumalo et al., 2011). Vignoles et al. (2016) also showed that sub-Saharan African populations exhibit interdependent self-construals comprising self-interest and self-containment (i.e., one's happiness is separate from that of others'), which offers a more nuanced picture of self-construal. Vignoles et al. (2016) stressed cultural variations in self-interest that are positively associated with poverty, in contrast to commitment to others, which is positively associated with economic affluence.

Various dimensions of mental wellbeing correlate with life-domains (Clark, 2018) and can be modified by socio-economic changes and interventions. For example, the positive association between income and cognitive measures of happiness (e.g., 'all things considered, how happy are you?') weakens above a certain threshold (Layard, 2005), suggesting money is not all that matters in life. Self-reported experienced utility measures (i.e., instantaneous happiness or positive affect) capture patients' true experience of health conditions more accurately than healthy people's expectations, which are likely biased by focusing illusion (i.e., the cognitive bias of only making salient one aspect of an experience) and an inability to predict future subjective wellbeing (Dolan et al., 2008; Oswald, 2008). Relationships matter to SWB. Network connections positively impact SWB in the US (Helliwell and Putnam, 2005), and most US and European studies report a positive correlation between networks and life satisfaction (LS). In a large longitudinal German sample, Lucas and Clark found a short term boost associated with marriage, but no long-term LS shifts compared to unmarried individuals (Lucas and Clark, 2006). With uncertainty related to high job turnover and unemployment rates, unemployment insurance appears to increase LS in the US (Aghion et al., 2016). However, looking at different dimensions of mental wellbeing can yield confusing results, suggesting the need to offer a clear rationale for the choice of mental wellbeing dimension measured or, preferably, transparent measurement and reporting of all relevant dimensions. For example, some European and US studies report that offspring have a negative impact on happiness, a component of hedonic wellbeing, before accounting for children's financial burden (Pollmann-Schult, 2014); however, other studies show that they are positively associated with meaningfulness (Connelly and Kimmel, 2014), a component of eudaimonic wellbeing. Reporting on all MWB dimensions would paint a consistent picture, and enable the computation of trade-offs between MWB dimensions for a more conclusive answer on how children impact parents' overall wellbeing.

No rationale for the choice of unidimensional MWB measures is offered in large-N observational studies in Africa, including South Africa. These studies investigate associations between SWB and life-domains using psychometric scales developed by Western scholars in laboratory settings (Delle Fave et al., 2016): in South Africa the relationship between LS and income is positive at low-income levels but tends to disappear above a certain threshold (Bookwalter and Dalenberg, 2004); comparators' income has a positive effect if the comparator is a neighbour, and a negative effect if the comparator lives far away (Kingdon and

Knight, 2007); satisfaction with family life is lower in lower socio-economic strata (Botha et al., 2018); old age pensions have a positive effect on LS (Møller and Radloff, 2013). LS correlates positively with education, records no association with health holding all else constant (Powdthavee, 2007), and correlates negatively with crime, though the negative effect of crime drops as more neighbours are also victims (Powdthavee, 2004). However, this information is insufficient to design effective interventions or policies. For example, to prevent crime and support victims it would be useful to understand what aspects of wellbeing are affected in what direction: victims affected in their sense of integration would need different support from those affected in their autonomy; it is possible that in closely knit communities victims help each other, enhancing their sense of contribution and integration; conversely, perpetrators' relatives may need support restoring their sense of social contribution. A comprehensive MWB measure would deliver actionable policy implications and methodological transparency.

Several health and development interventions aim to empower women in their day-to-day decision-making on consumption choices, health-seeking behaviour, and forward-looking economic decisions (i.e., investing in their children's education), and to reduce women's exposure to intimate partner violence (IPV). Poor South African women's mental wellbeing correlates may differ from those of European and US women. It is unclear whether unidimensional hedonic measures adequately capture the psychological (Diener and Biswas-Diener, 2005) and social impact of interventions in this population and similar others.

To address this question, the author conducted an exploratory analysis of the mental wellbeing construct in adult women from the three lowest income quintiles of peri-urban villages in the Limpopo Province, a population typically targeted by health and development interventions for women's empowerment in South Africa. Results showed that study participants associate life-domains with a construct of mental wellbeing encompassing autonomy, environmental mastery, and relationships with others. An unexpected, yet central, finding was that study participants' self-construal differed from the predominant US, European, and East Asian self-construals already explored in the literature. Participants' self-construal is relational (i.e., rooted in dyadic role-relationships, rather than individuated factors based on inner talents and aspirations as in the US and Europe, or on a monolithic concept of in-group as in East Asia). Relational, collective and individuated self-construal lead to different MWB structures. The findings support employing multidimensional, rather than unidimensional, MWB measures to prevent uninformative and possibly misguided information on policy effects (Graetz, 1991). Multidimensional MWB measures that separately capture relationships with others, autonomy and environmental mastery assess the policy's impact on each area, outlining a scope for complementary interventions.

Mental wellbeing constructs: South Africa and the individualism-collectivism debate. Socio-psychological theory on multidimensional wellbeing concepts highlights differences between individualistic and collectivistic culture concepts (Markus and Kitayama, 1991; Suh et al., 1998), and investigates how unidimensional wellbeing measures respond to different stimuli in collectivist versus individualist societies (Markus et al., 2006; Suh et al., 1998). The theory focusses on the US and East Asia (Diener et al., 2000a, 2000b; Suh and Oishi, 2004), with few investigations into African (Matsumoto, 1999) and South Asian (White et al., 2014) cultures. In the past, the theory assumed a dichotomy between individuated and collectivist self-construals (Christopher, 1999), and assigned collectivist worldviews and cognitive mechanisms to African cultures (Ryff and Singer, 1998).

More recently, psychological investigations of the MWB construct have taken a grounded approach, acknowledging cultural differences in the perception and importance of relationships and relationality. Findings showed that, in addition to 'inner harmony' (i.e., consistency with one's view of oneself), happiness is also determined by social relationships and family (Delle Fave et al., 2016). These investigations include in-depth mixed methods applied in a specific locale (Camfield et al., 2009), quantitative analyses of survey data and short free text (Delle Fave et al., 2016), and global quantitative survey evidence (Joshanloo, 2016; Joshanloo and Weijers, 2019), supporting the hypothesis that relationships are relevant to MWB across cultural settings. However, most of these works employed pre-existing psychometric measures of MWB items, rather than participants' descriptions, and few explored African MWB constructs.

Given that self-construal plays a role in shaping MWB (Lu and Gilmour, 2004; Markus et al., 2006), and that sub-Saharan Africans' self-construal may differ from that of East Asians (Adams and Dzokoto, 2003; Brewer and Chen, 2007), it is important to acknowledge that some aspects of sub-Saharan African MWB constructs may be unknown, and associations between hedonic and eudaimonic wellbeing and self-construal may exhibit different patterns. Exploratory analyses of MWB in sub-Saharan Africa can shed light on these relationships (Wissing, 2014), contributing to a better understanding of the sub-Saharan Africans' MWB constructs and yielding actionable policy implications to improve programme design and evaluation.

Predictors of mental wellbeing dimensions in South Africa. Some large-N studies of associations between South Africans' happiness or LS and socio-economic characteristics suggest different mechanisms from those found elsewhere. Globally, relative income is an important determinant of hedonic wellbeing (Burchardt, 2005; Clark and Senik, 2010; Ferrer-i-Carbonell, 2005). The association is generally negative and, in some contexts, the reference group may not include close neighbours (Fafchamps and Shilpi, 2008). However, in South Africa, LS is associated negatively with distant neighbours' income but positively with that of close neighbours (Cramm et al., 2012; Kingdon and Knight, 2007). This is consistent with findings from ex-communist societies, such as Russia (Senik, 2004), Eastern Europe (Caporale et al., 2009), and former East Germany (Ferrer-i-Carbonell, 2005). Kingdon and Knight (2007) explained this puzzle in South Africa as an information effect: in poor communities, a neighbour's greater wealth may suggest that one may aspire to matching that individual's wealth. In fact, individuals with a relational self-construal could exhibit increased satisfaction when an in-group member became richer, because one group member's accomplishment is an accomplishment for all members and results in a positive impact on their LS. Insofar as perceptions of self are constructed through lived experiences, it is conceivable that Eastern Europeans would experience similar connections to others in networks of direct personal relationships as do some African societies (Adams and Dzokoto, 2003).

South African adults over 50 years old reported mixed associations between access to pensions and happiness or LS: women reported larger happiness and LS gains than men when accessing financial resources in rural areas (Ralston et al., 2018). These effects seem temporary (Schatz et al., 2012) and not generalisable beyond rural areas (Lloyd-Sherlock and Agrawal, 2014). These studies employed pre-defined quantitative survey questions to assess only participants' socio-economic status and LS, and did not investigate mechanisms linking financial access and LS in these populations. Qualitative investigations of older women's mental wellbeing support using measures of social

wellbeing, beyond LS, to understand how social norms and behaviours intersect with women's MWB and contribute to health and illness (Schatz and Gilbert, 2012).

Another relevant correlate of LS in European and North American large-N studies is marital status. European studies suggest that individuals revert to mean LS levels two years after marriage, and reported reduced LS in people who marry younger and reduced LS after marriage in those who marry early, although this was not statistically significant (Lucas and Clark, 2006). Associations between marital status and SWB seem similar across the world (E. Diener et al., 2000a, 2000b). South African studies found lower LS in customary marriages than in civil marriages (Powdthavee, 2004), and no difference between couples in a civil marriage and those who cohabit, though marriage age was negatively associated with LS overall (Botha and Booysen, 2013). However, other studies found that marriage had no impact on LS (Hinks and Gruen, 2007). Unidimensional LS or happiness measures provide no insight into the mechanisms underlying these patterns and fail to identify whether marriage negatively impacts psychological or social aspects of MWB (Shapiro and Keyes, 2008), an event that could be mitigated with well-designed interventions.

Finally, emerging qualitative evidence supports a multidimensional mental wellbeing construct that encompasses subjective, psychological and social wellbeing in young people living with HIV/AIDS in South Africa (Govindasamy et al., 2020). However, exploratory evidence on South African adult women's MWB construct and its predictors is still scarce.

This study addressed this gap by employing free association techniques in natural groups to directly elicit poor South African women's views on mental wellbeing and life events. It is the first study to conduct cluster and correspondence analysis based on co-occurrences of words in textual data generated by focus groups to identify the topics of the discussions on MWB, and how MWB topics and sub-topics relate to one another and to participants' characteristics.

Methods

The socially shared perceptions of mental wellbeing were derived from focus group discussions (FGDs) with women from the population targeted by the Intervention with Microfinance for AIDS and Gender Equity (IMAGE) in Limpopo, South Africa. FGDs engaged participants in exchanges similar to day-to-day interactions, which enabled them to negotiate their views of MWB, yielding a socially produced view (Kitzinger, 1994). FGDs may also be appropriate where participants prefer to express their ideas in a group (Greco et al., 2015).

Setting. Limpopo is one of the poorest South African provinces. In 2004, unemployment was 50% (56% among study participants), and 45% of adults in the Greater Tubatse municipality (63% of participants) had at most primary education. The intervention population, the baPedi (a Southern Bantu people), constitute Limpopo's majority (Statistics South Africa, 2012). Given 500 years of area migration (Delius, 1983; Kuper, 1982) the baPedi share traits with Bantus further north (Kuper, 1982, p. 3, 5), and with Southern Bantu populations, who account for 62% of South Africans (Neff, 2007).

The Small Enterprise Foundation (SEF), a microfinance organisation, and a group of researchers and activists for women's empowerment (Sisters for Life—SfL) delivered IMAGE, offering access to micro-loans and life-skills sessions to poor women to reduce exposure to HIV and IPV (Kim et al., 2007). The IMAGE study was done in the early 2000s in eight villages of the Greater Tubatse municipality, Limpopo. It investigated the impact (Hargreaves et al., 2009; Pronyk et al., 2006) and cost-effectiveness

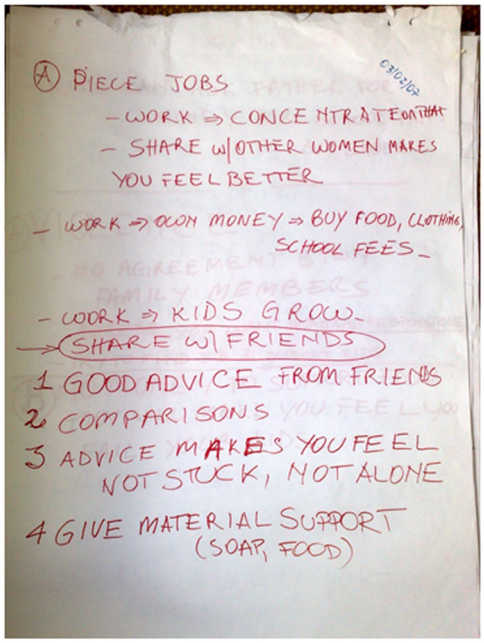

Fig. 2 Brainstorming session. Flipchart recording participants' associations with the word 'happiness' during the brainstorming session of a focus group discussion.

(Jan et al., 2011) of a combined microfinance and life-skills intervention designed to empower women from households belonging to the poorest 60% of households as identified during a participatory ranking exercise (Hargreaves et al., 2007). IMAGE's process evaluation (Hargreaves et al., 2009) showed the potential for the delivery model that exists to this day, with SEF and SfL operating as independent collaborators. The author collaborated at the economic evaluation of IMAGE (Jan et al., 2011), an assessment of the incremental impact of the life-skills training on women's economic outcomes and violence exposure (Kim et al., 2009) and conducted this investigation and a secondary data analysis of IMAGE's impact on psychological wellbeing proxies she recovered from the available survey data based on the findings of this study for her doctoral dissertation (Ferrari 2016).

The data. Thirteen FGDs took place between 2006 and 2008. Participants were purposively sampled from IMAGE clients and nearby villages, with IMAGE clients recruited at loan repayment meetings. All participants were recruited in natural groups (neighbour or loan co-recipient groups). Non-clients were recruited through neighbourhood groups and networks from the same socio-economic group as IMAGE clients. The author moderated the FGDs with simultaneous translators. FGDs were held indoors for privacy and better audio recording. On average, each lasted three hours, had six participants, and four sections: introduction, brainstorming, activities, and conclusion (Bauer and Aarts, 2000).

The brainstorming question was: 'When I say 'happiness' what first comes to your mind?' (Fig. 2). This sentence was translated in sePedi as 'Ke thabile ga…', based on consultations with key informants. The author stressed that no answer would be right or wrong and participants reflected for one minute in silence before responding. The author chose the word happiness because at the time this was the most frequent term in the economics literature (Deci and Ryan, 2008; Joshanloo and Weijers, 2019). The original aim of this explorative work was to understand if happiness' potential correlates as identified by mental association exercises

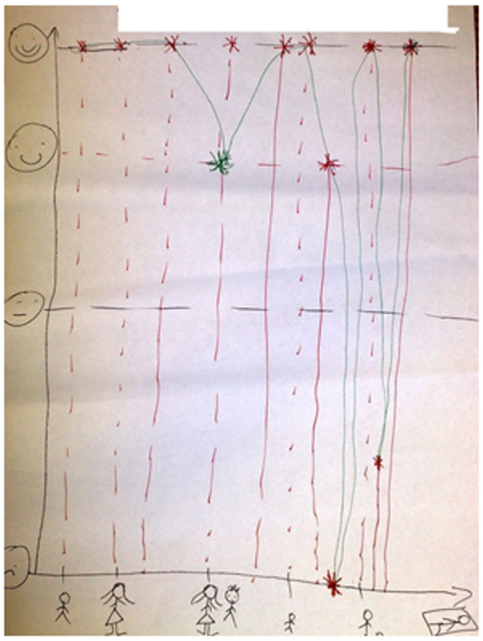

Fig. 3 Life histories. Flipchart recording one participant's evaluation of her happiness over the life cycle. From left to right on the horizontal axis: childhood, adolescence, marriage, motherhood and parenting, old age (represented by being a grandmother), and death. From bottom to top on the vertical axis, smiley faces mark levels of happiness from unhappy to neutral, happy and very happy. Participants marked their happiness level against each stage of their lives depicted on the horizontal axis with an asterisk as they shared their story with the group. Once the narration was complete, the research assistant would help participants join the asterisks, tracing participants' wellbeing over their lifetime and summarising their story. This activity served as closure and validation for the participant who had shared her personal story, and clarified any misunderstandings.

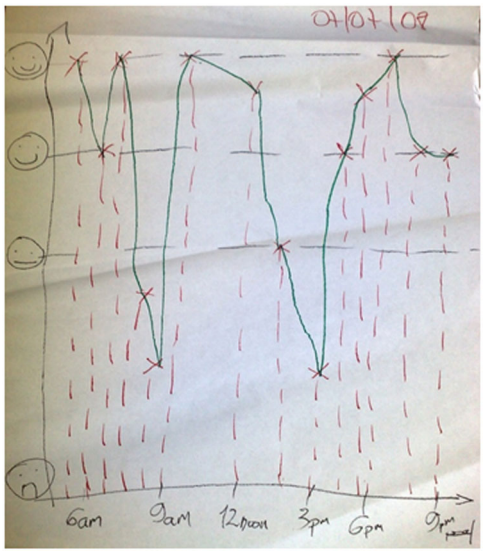

Fig. 4 Previous day. Flipchart recording one participant's evaluation of her happiness over the course of the previous day. From left to right on the horizontal axis: hours of the day in a typical day. From bottom to top on the vertical axis, smiley faces mark levels of happiness from unhappy to neutral, happy and very happy. Participants would recount their day supported by the author and the research assistants, who would ask questions about the day's events, using specific times of the day as initial reference points. For example, the author would ask: 'Taking your mind to yesterday, what were you doing at 9:00 a.m.?' 'Who were you with?' 'How did you feel?' Participants marked their happiness level against the time of day on the horizontal axis with an asterisk as they shared the story of the previous day's events with the group. Once the narration was complete, the research assistant would help participants join the asterisks, tracing participants' wellbeing during the previous day and summarising their story. This activity served as closure and validation for the participant who had shared personal events, and clarified any misunderstandings.

and structured narratives would differ from those identified large-N in European, US and Far East investigations.

Two narratives followed: 'life histories' and 'the day before'. An FGD participant populated a graph on a flipchart, illustrating how she felt at different moments. This approach enabled women to use a variety of terms to express their mental states, beyond the term 'happiness'. The life histories graph captured participants' mental wellbeing around key life events identified as predictors of subjective or psychological wellbeing in large-N studies (Clark et al., 2008; Layard et al., 2014). Events and stages over the life cycle appeared in chronological order on the *x*-axis: childhood, adolescence, marriage, motherhood and parenting, old age, and death. A three- or four-point scale measured mental wellbeing using smiling faces on the *y*-axis (Fig. 3).

The day before graph increased variation in MWB predictors and added everyday events in women's lives. Waking hours (6:00–21:00) substituted life events on the *x*-axis. The graph was populated with the emotions associated with activities and people from the previous day (Fig. 4), using the same smiling faces as the 'life histories' graphs and adapting Kahneman's Day Reconstruction Method (Kahneman et al., 2004) to an FGD setting.

During the FGDs, the author also probed for mechanisms and reasons for the issues participants mentioned to better elicit the links between happiness and women's lived experiences and aspirations.

Positionality. The author presents as white, relatively affluent, and highly educated. Study participants were 'black' African women from the three lowest quintiles of households in the study villages, with primary education levels. To mitigate these differences, and better understand the lived realities of study participants, the author lived and studied in the area over four years—regularly spending three days per week in the study villages during the study period—and learned the basics of the sePedi language to improve her awareness of the local context. Participants acknowledged these efforts by encouraging the author to use sePedi expressions, and socialising before and after FGDs. The author also dressed similarly to her collaborators, who were local women. Having been part of the same project, and in some cases on the same data collection team prior to the FGDs, the author and the research assistants built a rapport that influenced the success of the FGD. Within the local dyadic networks that underpin women's relational self-construal, the author's familiarity with the research assistants translated to familiarity between her and the groups, mitigating her status as an outsider and establishing an open atmosphere (Green and Thorogood, 2014). Moreover, participating in the FGDs familiarised her with the narratives and facilitated addressing methodological challenges.

Analysis. Following translation, the FGDs generated 52,000 words of English text. The author analysed these data with Alceste software, which identifies patterns (co-occurrences) in content word distribution (verbs, nouns, and adjectives) as participants speak, using cluster and correspondence analysis. This reduces the dimensionality of the space where the information is plotted (Greenacre and Blasius, 2006) from the high-dimensional space of individual ideas to the lower-dimensional space of synthetic

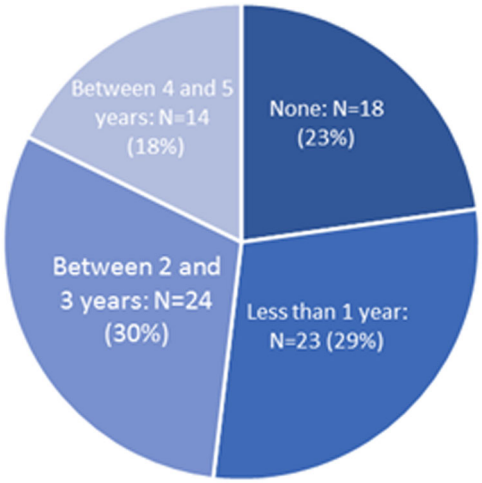

Fig. 5 Length of participation in IMAGE. Chart illustrating the distribution of participant's involvement in IMAGE.

representations, or themes, characterising respondents' worldviews. Co-occurrence analysis is preferable to topic modelling approaches of neural language programming because it accounts for the distribution of word co-occurrences as participants interact, rather than the distribution of single words across the text to determine the likelihood that a topic is present in the corpus.

Alceste first generates a matrix of lexemes (the root-form of content words) and sentences, where element a_{ij} is equal to one if the i-th lexeme is present in the j-th sentence, and zero otherwise. The text is then split into two sub-matrices (or clusters/themes) using descending hierarchical classification. This process is repeated over the larger sub-matrix, until an optimal number of smaller and more homogeneous themes, synthesising the information in the text, is obtained (Guérin-Pace, 1998). For each lexeme and characteristic sentence, a chi-squared statistic quantifies the association with its corresponding theme. A higher chi-squared signifies a stronger association between the lexeme and the cluster it belongs to. No thresholds of significance are set. The results section reports the lexeme characteristic of each theme in bold. Participants' names have been changed to preserve anonymity. The author named the themes to reflect the words they contained, using her familiarity with the text to ensure their relevance.

Alceste also performs correspondence analysis, plotting themes and participants' groups on a two-dimensional vectorial plane. Distances on this plane indicate strength of association, where closer themes and/or groups are more strongly associated (Greenacre and Blasius, 2006). The plane synthesises individuals' representations of the world (Bourdieu, 1984; Lahlou, 2008), with its axes capturing the underlying structural dimensions of the discourse (Guérin-Pace, 1998).

Finally, a graph illustrating the distribution of mental wellbeing words significantly associated with each theme provides insights into the relationships between themes and mental wellbeing.

Results

Saturation of ideas was achieved by the 13th FGD, as no new ideas were emerging (Patton, 2015, pp. 300–301), and data collection ended. Seventy-nine Pedi women between 22 and 65 years old participated in the FGDs. Most had basic literacy. Participation in IMAGE varied from none ('community' participants) to five years ('long-term' clients). 'Recent' clients were from the original IMAGE control group (who had two to three years' exposure) and 'new' clients belonged to centres opened in 2006, so had less than one year exposure to the intervention (Fig. 5).

Overview. The analysis yielded five themes: 'female socialisation' describes key moments in women's lives; 'community' refers to networks and knowledge diffusion; 'household' focuses on the physical body, chores and leisure time; 'parenting' describes women bringing up children in a violent society afflicted by HIV; '*mulier oeconomica*' describes women as economic agents, providing for their family and engaging with the community.

Themes

Female socialisation. Verbs characteristic of this theme capture the course of a biological life and socially codified interactions around life events.

The naive child is a recurrent *topos* in women's narrations of their younger self. However, women who had suffered major childhood adversities reported an overall lack of happiness during that period.

Women's initial experience of marriage could be traumatic and associated with negative affect and low autonomy.

> because you have just **met** a **man** and he has to **teach** you certain things so that you get **used** to them. so it takes longer. because when he comes he greets you and he **tells** you to kiss him and you are **scared** to kiss him. and when you have to have **sex** you do not know what to **expect**.
>
> (Chi^2: 25; 'new' group, 08/2006, 35 y.o.)

Peers are sent in support of young brides when the prospect of sexual encounters with the new husband is daunting:

> […] when I became a lady I **met** a **man**, but I was **scared** of him because when we were **married** I did not know people shared a bed, so they **sent** a girl to **help** me.
>
> (Chi^2: 14, 'long-term' group, 07/2008, ca. 40 y.o.)
>
> this made me feel happy because I felt that she was **helping** me as I was **scared** of that **man**. When I became **used** to him and the girl had gone I was very happy.
>
> (Chi^2: 6, 'long-term' group, 07/2008, ca. 40 y.o.)

However, for some, experiences become so bleak that they must leave:

> And when he beats you up he would also beat the **child** you are **carrying**. So I used to live like an **animal**. I have never been **happy** at all. I just **experienced** now when I got a **new** partner. So that is when I **started** to **see** that here is **life**. But with my ex-**husband** I have never **experienced happiness**.
>
> (Chi^2:16; 'new' group, 30/08/2006, 48 y.o.)

Parenting. Although the wider discussion is couched in the social status conferred by having children, the focus is on crime and young people, including the women's offspring:

> So we are always **worried** because we do not know which house they will **want** to **break into** next. So you are **worried** as to what will happen when he **breaks** in and he **finds** you in the house.
>
> (Chi^2:23; 'long-term' group, 07/07/2008, 53 y.o.)

Women feel hopeless for failing to prevent their children from committing crimes. This powerlessness triggers high negative affect:

> Even when you always **try** to **reprimand** the child from doing wrong and the child continues doing wrong, you will then get unhappy. Because when you keep on **reprimanding** her and the child does not **want** to **listen** you might **end** up **assaulting** her. So you get **worried** the whole day.
>
> (Chi^2:23; 'new' group, 30/08/2006, 52 y.o.)

This quote is representative of a wider discussion on feelings of inadequacy as parents, following changes in the legislation on corporal punishment for children.

The HIV/AIDS sub-theme conveys tension between mothers' attempts to protect their children and their fear that children might not listen. Here, however, women know how to tackle the problem and express a sense of competence:

> When you see that they are **heading** for **trouble** and **try** to warn them they do not **want** to understand. I do agree with Mpho concerning the children. **Right** now we know that there is a **disease** called **AIDS**, so you tell the children […] take **care** of **yourselves** and **stop** sleeping around.
>
> (Chi^2:35; 'new' group, 30/08/2006, 44 y.o.)

The community. The social relationships that matter for women's mental wellbeing are family, neighbours, peers, and church groups. Characteristic verbs suggest mutually supportive relationships. However, relationships are not uniformly benign, as indicated by the most characteristic nouns (in bold).

> Women are selective about including neighbours in their network:
>
> […] **everyone** has **neighbours**; […] But if I have a **problem**, there is only one **amongst** my four **neighbours** who I am going to **tell** about my **problems**.
>
> ('new' group, 30/08/2006, 53 y.o.)
>
> A breach of trust has a negative impact:
>
> Because when I am **stressed** I would **tell** you everything **thinking** that you are my **friend**. But then I get a lot of stress when she goes and **tells** other **people**. I feel unhappy because you would be confiding in that **person thinking** that she is a **friend** and you can **tell** her your **secrets** but then she goes **around telling everyone**.
>
> ('long-term' group, 08/07/2008, 54 y.o.)
>
> Women avoid conflict because it may imply exclusion from support networks:
>
> So when you are always in **conflict** with **people** they would be reluctant to come and **help** you, asking themselves why do you always **fight** with **people**.
>
> ('long-term' group, 07/07/2008, 45 y.o.)

Interpersonal comparisons can generate envy but as women support one another, they experience positive affect when facilitating a friend's empowerment:

> **Helping** a **neighbour** makes me happy because she will also get **out** of a **difficult** situation.
>
> ('recent' group, 55 y.o.)

The household. Characteristic lexemes describe a woman householder in rural South Africa. Physical experiences are prominent, including direct references to procuring water for the household, a strenuous task. Physical health and perceived ability to achieve goals foster mental wellbeing, and tiredness that accompanies a sense of accomplishment is associated with happiness:

> At **7am** I opened the windows at work and I was happy. **thereafter** I **cleaned** the office until **12** when I **went** to **lunch** by then I was happy, but my **body** was **tired**.
>
> (Chi^2:25; 'recent' group, 02/07/2008, 57 y.o.)
>
> Most household activities are for the benefit of the family and intrinsically relational:
>
> At four **pm** I had to **wake up** and I had to **cook** again. […] and then I **finished cooking** at six **pm** and I **bathed** the children.
>
> (Chi^2:37; 'new' group, 30/08/2006, 35 y.o.)

Low or negative affective states are associated with this theme. Parental responsibilities can trigger negative affect:

> Taking care of children can give you stress because they stress your mind. The next **day** you **wake up** the children have to **go** to school, you have to **wake up** and **bath[e]** them, **prepare** breakfast for them, do their laundry; all these things stress your mind.
>
> (Chi^2:4; 'new' group, 15/08/2006, 23 y.o.)

In contrast, associating with other women to solve problems fostered positive and empowering role-relationships:

> When you feel **stressed**, you go and meet with other **women**, you **sit down** with them and then explain your **problem** to them. […]
>
> (Chi^2:30; 'new' group, 15/08/2006, 23 y.o.)

Finally, the sub-theme on socialising with children and adults captures affective, rather than purposeful, relationships:

> I was very happy because my **aunt** and my **brother came**. […] then I started **cooking**. I then **watched** news on TV and then **watched** a **story** with my children and a neighbour's child and I was happy.
>
> (Chi^2:31; 'recent' group, 02/07/2008, 33 y.o.)

Mulier oeconomica. This theme describes the woman business holder, *mulier oeconomica*, or female economic agent. The sub-themes capture health, spirituality, and gratefulness. Verbs and nouns refer to economic transactions and production. Instrumental words indicate possession. The women work to provide for their families:

> It is important **to** be **employed**. **Employment brings** happiness in the **house** because at the end of the **month** when you get **paid** there is happiness, you are **able to take** care of the children; **buy** them **food** and **clothes** and they can even have a good uniform **to go to school**.
>
> (Chi^2:14; 'new' group, 30/08/2006, 37 y.o.)

In contrast, the unequal distribution of financial responsibilities and husbands' lack of co-operation causes unhappiness:

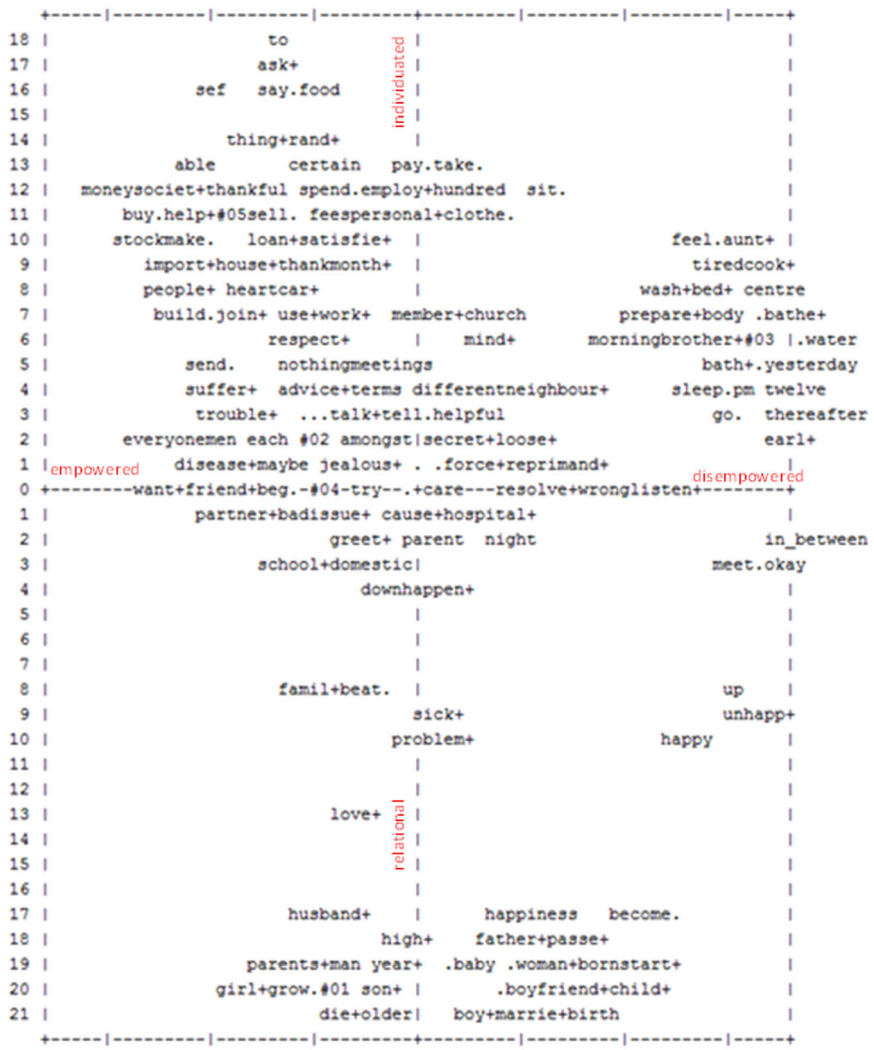

Fig. 6 Vectorial Plane: the two axes represent the first (self-construal) and second (empowerment) latent factors that summarise the content of the focus group discussions. This illustration shows the relationships between the themes, arranged from the most individuated *mulier oeconomica* at the top of the *y*-axis to the most relational *female socialisation* theme at the bottom of the *y*-axis; and from the most empowered *mulier oeconomica* on the left-hand side of the *x*-axis to the most disempowered *parenting* theme on the right-hand side of the *y*-axis.

> He wants me **to** be the one **buying** all the time with my **money**, and he keeps his safe. So that **makes** you unhappy because his **money** is not **used**. […] What **makes** me unhappy then is the **fact** that we do not co-operate.
>
> (Chi^2:5; 'new' group, 30/08/2006, 34 y.o.)

The gratitude to God sub-theme expresses the idea that God supports women in achieving economic wellbeing and meeting their families' needs:

> You pray that **God** help you **to get work** so that you can **send** him **to school**. He would then be **able to help** the younger siblings. […].
>
> (Chi^2:18; 'recent' group, 02/07/2008, 33 y.o.)

Relational self-construal and empowerment. The vectorial space in Fig. 6 synthesises the relationships between themes. The *mulier oeconomica* theme describing empowered women is on the left-hand side of the *x*-axis. Moving further to the right along the *x*-axis, the 'community' and 'parenting' themes report instances of power negotiated with greater effort and frustration. Furthermost to the right on this axis are the 'female socialisation' and 'household' themes, where women have progressively less transformatory power (Kabeer, 1999).

At the top of the *y*-axis, the *mulier oeconomica* theme contains the highest degree of (relational) individualism, where women are breadwinners and entrepreneurs. Further down the *y*-axis, the 'household' theme reflects women making independent choices on resource use or individuated decision-making. On either side of the origin, the 'community' theme describes women as peers in a web of dyadic relationships; and the 'parenting' theme reflects the mother-son dyad. The 'female socialisation' theme, with the lowest *y* values, describes role-relationships dictated by local patriarchal norms.

The dimensions underpinning women's MWB are self-perception, shifting from purely relational to individuated along the *y*-axis, and empowerment perception, ranging from disempowered to transformatory roles along the *x*-axis.

Mental wellbeing and worldviews. Correspondence analysis links respondents and themes. The community groups display the highest association with the female socialisation theme ($chi^2 = 31$); the older IMAGE groups with the 'community'

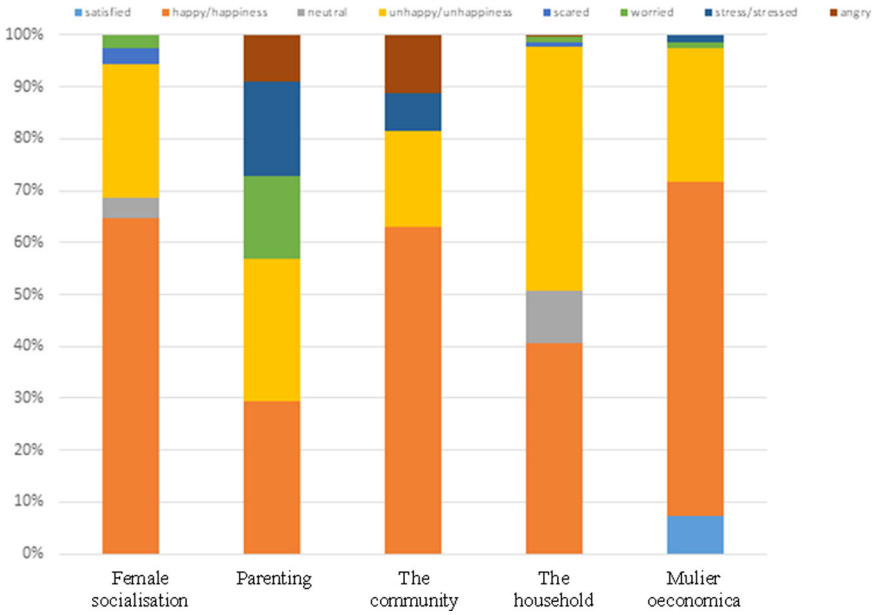

Fig. 7 Distribution of wellbeing words in each theme: this graph illustrates the relative frequency, within each theme, of the adjectives or nouns describing participants' mood or cognitive assessments of their lived experiences. It conveys the mood associated with each theme.

($chi^2 = 42$) and 'parenting' themes ($chi^2 = 12$); the 'younger' IMAGE groups with the *mulier oeconomica* ($chi^2 = 13$) and 'household' themes ($chi^2 = 17$).

The MWB state distribution was similar in the female socialisation and household themes (Fig. 7). However, neutral MWB states were more frequently reported for the latter. The household theme also recorded a proportionally larger number of negative states. After the parenting theme, the household theme had the highest proportion of unhappy mentions (50%).

The parenting theme collected the highest portion of extreme negative affect: 43% of MWB words were stressed, worried, or angry. This increased to 70% when 'unhappy' was included, suggesting a gloomier mood than the other themes. By contrast, 60% of the MWB words associated with the community theme were positive and 20% negative (angry or stressed). Reports of being 'satisfied' are statistically significant only for the *mulier oeconomica* theme, which also recorded the highest percentage of positive MWB states (71%).

Discussion

A simple question on happiness revealed not only a list of associated life events and life-domains that could be targeted by interventions to improve respondents' wellbeing. It also revealed the outline of the mental wellbeing construct and the self-construal of respondents. The two unexpected findings emerged thanks to the clustering of the text-mining approach, because hedonic and eudaimonic accounts of life converge (O'Neill, 2006) in different ways in individuated, relational and collectivist cultures (Joshanloo and Weijers, 2019; Vignoles et al., 2016). The following paragraphs discuss these three findings.

Results support associations found in large-N studies; parenting is associated with negative affect, income-related activities and networks are positively associated with LS, and day-to-day task performance dictated by gender roles has a more negative impact on MWB than 'essentialised' gender role perceptions. However, these results bring further nuance to these associations.

First, they suggest that women's mental wellbeing is rooted in an interdependent self-construal, hinging on women's fulfilment of their roles as mothers, entrepreneurs, and wives. It is rooted in dyadic relationship networks (Brewer and Chen, 2007) that women cannot shed, but rather negotiate by either abiding by or jointly challenging patriarchal norms (James, 1999; Jewkes et al., 2015).

The interdependent self emerges across the five themes, explaining the links between the themes and dimensions of women's social wellbeing. In the 'female socialisation' theme, women speak of socially codified role-relationships rather than aspirations, with several examples of social contribution and integration. They discuss how changing social status affects social wellbeing, highlighting the negative implications of patriarchal rules. The examples of mutual peer support are consistent with patriarchal tradition; they do not lead to transformative social integration or agency, which remains hard to achieve (Hatcher et al., 2011), but are consistent with pre-defined family roles, as in the comfort offered to the inexperienced bride (Mönnig, 1967, pp. 203–204).

Role-relationships emerge in the household theme through women's role as carers in local patriarchal structures (Morrell et al., 2012). Caring roles are associated with relational autonomy and social contribution, because women decide with others and for their children.

Marriage is another important role-relationship in this theme. Women describe two marriage phases, 'newlywed' and 'longer-term'. Women who reported experiencing sharp drops in happiness as newlyweds described episodes of abuse, revealing the lack of a trusting and warm relationship with their spouse (positive relations with others), and reporting loneliness or a lack of comfort or support from the community (social integration). Women associated these episodes with their youth, an older spouse, and a lack of knowledge on sexuality relative to their spouse—all evidence of traditional marriages, consistent with women being forced to engage in sex and comply with male versions of desire (Wood et al., 2007), unable to manage their environment according to their own needs (environmental mastery). These accounts are consistent with evidence that median age at marriage is five to nine years lower for women and up to three years lower for men in customary marriages, compared to civil marriages or unions. The age gap between spouses in traditional marriages is also the widest (Statistics South Africa,

2018). Women's accounts of how customary marriages impact their MWB are important for intervention design, given that 93% of married women in IMAGE villages were in a traditional union.

Women's role-relationships as mothers are described in the parenting theme. It has a negative impact on their psychological wellbeing through their sense of competence in relation to the challenges of keeping their children away from crime and HIV. The use of multidimensional MWB measures would capture the MWB impact of crime in different population groups according to their relationship to the crime and the criminal, providing contextually relevant information to maximise policy effectiveness.

The community theme explored role-relationships within informal networks, rooted in trust among peers. Networks have both a negative and positive impact on social wellbeing's acceptance and integration dimensions because networks are not disposable, compared to contexts where self-perception is individuated and enemies are eliminated from one's network (Adams, 2005).

Women's relational self-construal changes the impact mechanisms of networks on MWB. This study's participant views contradict Helliwell's observation regarding the 'greater importance of the social variables in the richer countries', since 'many of the poorest countries are also afflicted with […] weaker supports from family, friends and public institutions' (Helliwell and Barrington-Leigh, 2010). The views are instead consistent with recent findings among adolescents in KwaZulu Natal (Govindasamy et al., 2020), with other South African studies reporting an association between social capital and satisfaction with life among the very poor, even after income is accounted for (50), and with the impact of social protection interventions on positive relations, self-acceptance, and purpose in life (72). Helliwell's finding that social networks do not matter in low- and middle-income countries' (LMICs) LS may be explained by the opposite effects on different MWB dimensions of the inescapable networks the women are connected to (Adams and Dzokoto, 2003). Such opposite effects may cancel out in a unidimensional LS measure, and only emerge in a multidimensional MWB instrument (Graetz, 1991). Women's empowerment interventions such as women's self-help groups and microfinance interventions implemented in relational societies would benefit from fostering relational, rather than individuated, forms of empowerment. In addition to focusing on the women's groups within their programmes, organisations may consider how programme participation affects beneficiaries' sense of integration in the broader community. Organisations may offer strategies to help beneficiaries increase their social contribution to compensate for any reduction in integration. For example, community mobilisation components supporting beneficiaries in bringing constructive change in their communities could be developed and maintained alongside the main intervention. Though costly, these components may prove cost-effective if assessed through the lens of multidimensional MWB.

Although relational self-construal dominates, women move between an individuated and a relational self. This shift is most evident in the *mulier oeconomica* theme, where individuated self-construal subsumes women's efforts to repay loans and conduct business, while relational self-construal emerges in their decisions regarding household resources for the children or negotiating with husbands. This is confirmed in recent investigations that show that interdependent self-construal and self-interest coexist in sub-Saharan Africa (Vignoles et al., 2016).

Second, women's experience of empowerment as autonomy and environmental mastery is important to their MWB. Relational forms of autonomy—reciprocal empowerment through peer groups—appear in the community theme, such as discussing and solving problems with peers, identifying trustworthy neighbours, and feeling rewarded when someone else heeds one's advice. Independent forms of autonomy appear mostly in the *mulier oeconomica* theme and coincide with the concept of agency in the capabilities literature (Alkire, 2005; Sen, 1985). Agency mediates income's impact on overall LS in Mozambique (Victor et al., 2013), consistent with its prevalence in the *mulier oeconomica* theme.

Regarding environmental mastery/competence, women report being overwhelmed by their child-related duties, despite the positive impact on their status of having children, supporting the hypothesis of relational mental wellbeing. Reduced LS associated with having children in high-income countries (Kohler et al., 2005) has puzzled researchers. The evidence here suggests that challenges to women's sense of mastery from raising children may explain the negative association. This is not surprising, because negative hedonic states have been recorded in individuals performing difficult tasks even when they are connected with meaningful activities (White and Dolan, 2009).

Similarly, and more explicitly related to work, the association between tiredness and happiness following prolonged physical work suggests a sense of accomplishment and purpose, a eudaimonic dimension of mental wellbeing. This is consistent with White and Dolan's (2009) findings, where work activities associated with comparatively low hedonic levels were associated with high eudaimonic levels when connected to a sense of achievement. Conversely, physical illness and tiredness cause distress and unhappiness because they limit women's ability to perform their duties. This is consistent with Camfield et al.'s (2009) findings that Bangladeshi women valued physical health in relation to the ability to carry out daily activities. This also stresses the importance of health to mental wellbeing (Greco et al., 2015), and underscores participants' relational self-construal as they associate happiness with tasks that are expected of them.

Finally, relational mastery also explains the underlying mechanism for the impact of income on women's mental wellbeing. The positive impact of impact among poorer people is well-established (Kahneman and Deaton, 2010). However, participants' explanations establish a link with their role as household providers (Duflo, 2000), suggesting income may impact the social contribution dimension of their wellbeing (i.e., feeling useful and valued) alongside their relational mastery (Møller and Theuns, 2013).

Quantitative exploratory analysis of the textual data from women's free associations enabled the author to distance herself from the data. It enabled the construct of mental wellbeing and its correlates to emerge from the data, rather than imposing predefined dimensions from existing psychometric measures (Joshanloo and Weijers, 2019), or any socio-economic correlates of econometrics studies. This flexibility facilitated identifying new correlates (e.g., being the mother, rather than the victim of a criminal) and new mechanisms linking MWB and life events (e.g., the positive and negative effects of networks on women's mental wellbeing), which yielded the unexpected finding on women's relational self-construal.

This work has limitations. As the MWB structures in this context were unknown to the author, it was important to communicate simple and open-ended questions, allowing the women to generate more complex concepts and the risk of inhibiting responses that that may have emerged with deeper questioning.

This research aimed to identify a socially shared meaning of happiness, rather than individuals' 'true' perspectives (Schneider and Palmer, 2002). To probe this, the author ran three individual in-depth interviews with other women. The content of the interviews did not differ from the information in the FGDs, and the interviews were stopped.

The translator reported her translation alongside the verbatim transcription of the simultaneous interpretation, discussing the

reasons for discrepancies, so that the author could make an informed judgement on the version to retain, and minimising the risk of losing important meaning through the translation.

Participant's perception of MWB was largely shaped by their relations with others, rather than mapped onto an individuated concept of self. Women's accounts revealed that, in addition and closely related to their perceived happiness, their MWB construct had three dimensions: autonomy, environmental mastery, and meaningful relationships with others, which maps onto positive relations with others, and the three dimensions of social wellbeing, social contribution, integration, and acceptance. Although the mental wellbeing correlates were similar to those found elsewhere, the underlying mechanisms linking life events with MWB differed from those observed in the US, Europe, and East Asia, because of women's relational self-construal. The evidence shows that accounting for these mechanisms could improve policies designed to achieve development goals.

These findings are consistent with findings from mixed gender samples among the baTswana, a closely related Southern Bantu population (Wissing et al., 2008). They also generalise to poor adult women of Southern Bantu origin who live in rural and peri-urban areas, because of the shared heritage. They are consistent with recently reported evidence on the MWB construct of adolescents in KwaZulu Natal, South Africa (Govindasamy et al., 2020). They are also broadly consistent with findings from India (White et al., 2014). However, they differ from patterns found among young third-generation migrants in Cape Town (Lee, 2009), who may have different role-models, suggesting that further research should explore the MWB construct of South Africa's metropolitan populations. Consistency with these more recent findings also allays concerns about the age of the data. Data collection for this study was carried out between 2006 and 2008. However, concepts of self and mental wellbeing are likely stable over several decades, as also suggested by the consistency between this papers' original findings and the author's recent investigations (Govindasamy et al., 2020).

More broadly, these findings are consistent with the MWB structure recently described in Joshanloo and Weijers (2019), according to which happiness is more closely related to social and psychological wellbeing in relational populations (existential relatedness) than in individuated populations (epicurean independence). Supporting the construct of epicurean independence, women frequently report positive and negative affect states connected to individuated entrepreneurial success in the *mulier oeconomica* theme. This is also consistent with Vignoles et al.'s (2016) observation that self-interest is present in relational societies affected by poverty. In contrast, affect is related to neighbourhood relationships in the community theme, supporting the existential relatedness construct when relational self-construal is salient. Existential relatedness also explains why the study's simple question about happiness revealed women's relational self-construal and the importance of psychological and social wellbeing. Consistent with Joshanloo and Weijers (Joshanloo and Weijers, 2019) and in contrast with scholars who adopt unidimensional MWB measures, this study therefore supports the call for multidimensional MWB measures and a more refined understanding of people's self-perception to monitor progress toward the mental health and wellbeing target of Sustainable Development Goal 3.

A good place to start for quantitative psychometric measures could be Keyes' Mental Health Continuum Short Form (MHC-SF), which contains questions on hedonic, psychological and social aspects of wellbeing and has been validated in the baTswana (Keyes et al., 2008). The GHQ12 (Graetz, 1991) may be a valid alternative. It has been validated in several countries (Gao et al., 2004; Hankins, 2008; Kilic et al., 1997; Penninkilampi-Kerola et al., 2006; Sanchez-Lopez and Dresch, 2008), and validations seem to present an empirical regularity: the happiness question loads on the anxiety/depression factor in individuated societies (Graetz, 1991), and on the social dysfunction dimension in societies that have a more relational or collective make up (Gao et al., 2004; Sanchez-Lopez and Dresch, 2008) (Ferrari, 2016, p. 32), echoing Joshanloo and Weijer's findings with other measures (Joshanloo and Weijers, 2019) and further supporting their finding that positive affect is associated with existential relatedness in collective societies, and with epicurean independence in individuated groups. More exploratory studies of the MWB and self-construals of African populations remain necessary, however.

Conclusion

This study questions the usefulness of unidimensional measures of MWB to inform policy on achieving sustainable development goals and proposes a quantitative analysis of textual data based on words' co-occurrences to identify shared constructs (Sanders et al., 2018).

The study identified three components for a multidimensional policy evaluation measure in addition to happiness or LS: agency; environmental mastery; and meaningful relationships with others, which subsume psychological—positive relationships—and social wellbeing dimensions—social contribution, integration, and acceptance. Such a measure would acknowledge overlaps between hedonic and eudaimonic wellbeing (O'Neill, 2006) and reflect relational and individuated self-construals (Joshanloo and Weijers, 2019).

Moreover, among rural South African women MWB is a relational construct, with several implications for the mechanisms linking MWB and socio-economic outcomes. Central is the implication that networks are not always good for mental wellbeing, expanding on findings in US and European SWB studies in economics. Networks can be positive or negative for MWB, depending on whether they are transformative or oppressive, because they cannot be disposed of (Adams and Dzokoto, 2003). This improves our understanding of the relationship between networks and MWB. The importance of relationships for SWB is a mainstay of the economics literature. A more nuanced understanding of how networks impact MWB will support better policy design and evaluation, aiding in the identification of empowering versus disempowering network effects in three ways.

First, multidimensional measures of MWB that account for relationality should be used to monitor interventions' effectiveness in South Africa and similar contexts because they better reflect the nuances of beneficiaries' worldviews compared to unidimensional measures. By disaggregating MWB components, multidimensional measures reveal any discordant impact, providing richer insights for policy action. Second, policies and interventions should explicitly account for relationality to both reduce the harm to beneficiaries by preventing oppressive group formation, and increase interventions' potential by harnessing the power of positive, transformative networks. Third, evidence suggests that in-group versus out-group tensions may exclude some individuals and increase inequality. However, given the intrinsic relational nature of self-perception in some contexts, reshaping groups' potential through, for example, group-focused transformative empowerment programmes that reach into local community networks can be a successful and locally sensitive strategy. For women's empowerment interventions, it is paramount to exploit groups' potential arising from interventions themselves. Small-group membership could be optimised to harness transformative potential and support women to increase their own agency and jointly reshape oppressive societal norms.

The findings of this paper question the usefulness of unidimensional MWB measures that focus on hedonia to capture

policy impact. They provide evidence that multidimensional measures could be a useful tool to evaluate socio-economic interventions designed to attain Sustainable Development Goal 3 on 'good health and wellbeing' among population groups with relational construals of self.

Further work should explore MWB constructs in other sub-Saharan Africa groups, building on a growing literature that examines variation in MWB constructs across contexts and populations in Africa. Researchers should also investigate how interventions' impact on targeted empowerment domains maps into MWB; survey data on MWB measures alongside empowerment indicators for policy evaluation would contribute to testing whether intermediate policy goals contribute to improving overall welfare.

Data availability

The datasets generated during the current study are not publicly available to protects participants' privacy and due to the sensitive nature of the issues discussed. The anonymised excerpts on which the present analysis is based are included in the text of this paper.

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References

Adams G (2005) The cultural grounding of personal relationship: enemyship in North American and West African worlds. J Person Soc Psychol 88(6):20
Adams G, Dzokoto VA (2003) Self and identity in african studies. Self Identity 2:345–359
Aghion P, Akcigit U, Deaton A et al. (2016) Creative destruction and subjective well-being. Am Econ Rev 106(12):3869–3897
Alkire S (2005) Subjective quantitative studies of human agency. Soc Indic Res 74:217–260
Alkire S, Foster J (2011) Counting and multidimensional poverty measurement. J Public Econ 95(7-8):476–487. https://doi.org/10.1016/j.jpubeco.2010.11.006
Bauer MW, Aarts B (2000) Corpus construction: a principle for qualitative data collection. In: MBauer MW, Gaskell G (eds.) Qualitative researching with text, image and sound: a practical handbook for social research. SAGE. pp. 384
Bessell S (2015) The individual deprivation measure: measuring poverty as if gender and inequality matter. Gender Dev 23(2):223–240. https://doi.org/10.1080/13552074.2015.1053213
Bookwalter JT, Dalenberg D (2004) Subjective well-being and household factors in South Africa. Soc Indic Res 65(3):333–353. https://doi.org/10.1023/B:SOCI.0000003546.96008.58
Botha F, Booysen F (2013) The gold of one's ring is not far more precious than the gold of one's heart: reported life satisfaction among married and cohabitating South African adults. J Happiness Stud 14(2):433–456. https://doi.org/10.1007/s10902-012-9337-3
Botha F, Booysen F, Wouters E (2018) Satisfaction with family life in south africa: the role of socioeconomic status. J Happiness Stud 19(8):2339–2372. https://doi.org/10.1007/s10902-017-9929-z
Bourdieu P (1984) Distinction (R. Nice, Trans.). Routledge. ('La distinction, critique sociale du judgement', Les Editions de Minuit, Paris, 1979)
Brewer MB, Chen Y (2007) Where (who) are the collectives in collectivism? toward a conceptual clarification of individualism and collectivism. Psychol Rev 114(1):133–151
Burchardt T (2005) Are one man's rags another man's riches? identifying adaptive expectations using panel data. Soc Indic Res 74(1):57–102. https://doi.org/10.1007/s11205-005-6519-y
Camfield L, Choudhury K, Devine J (2009) Well-being, happiness and why relationships matter: evidence from Bangladesh. J Happiness Stud 10(1):71–91. https://doi.org/10.1007/s10902-007-9062-5
Caporale GM, Georgellis Y, Tsitsianis N et al. (2009) Income and happiness across Europe: do reference values matter? J Econ Psychol 30(1):42–51. https://doi.org/10.1016/j.joep.2008.06.004
Christopher JC (1999) Situating psychological well-being: exploring the cultural roots of its theory and research. J Counsel Dev 77(2):141–152
Clark AE (2018) Four decades of the economics of happiness: where next? Rev Income Wealth 64(2):245–269
Clark AE, Diener E, Georgellis Y, et al. (2008) Lags and leads in life satisfaction: a test of the baseline hypothesis. Econ J 118(529). https://doi.org/10.1111/j.1468-0297.2008.02150.x
Clark AE, Senik C (2010) Who compares to whom? the anatomy of income comparisons in Europe. Econ J 120(544):573–594. https://doi.org/10.1111/j.1468-0297.2010.02359.x
Coast J, Kinghorn P, Mitchell P (2015) The development of capability measures in health economics: opportunities, challenges and progress. Patient 8(2):119–126. https://doi.org/10.1007/s40271-014-0080-1
Connelly R, Kimmel J (2014) If you're happy and you know it: how do mothers and fathers in the us really feel about caring for their children. Fem Econ 21(1):1–34. https://doi.org/10.1080/13545701.2014.970210
Cornaglia F, Crivellaro E, McNally S (2015) Mental health and education decisions. Lab Econ 33:1–12
Cramm JM, Møller V, Nieboer AP (2012) Individual- and neighbourhood-level indicators of subjective well-being in a small and poor eastern cape township: the effect of health, social capital, marital status, and income. Soc Indic Res 105(3):581–593. https://doi.org/10.1007/s11205-011-9790-0
Deci EL, Ryan RM (2008) Hedonia, eudaimonia, and well-being: an introduction. J Happiness Stud 9(1):11
Delius P (1983) The land belongs to us: Pedi polity, the Boers and the British in the nineteenth century Transvaal. Ravan Press
Delle Fave A, Brdar I, Wissing MP et al. (2016) Lay definitions of happiness across nations: the primacy of inner harmony and relational connectedness. Front Psychol 7:30. https://doi.org/10.3389/fpsyg.2016.00030
Diener E, Biswas-Diener R (2005) Psychological empowerment and subjective well-being. In: Narayan D (ed.) Measuring empowerment (pp. 125–140). World Bank
Diener E, Gohm CL, Suh E et al. (2000a) Similarity of the relations between marital status and subjective well-being across cultures. J Cross-Cult Psychol 31(4):419–436. https://doi.org/10.1177/0022022100031004001
Diener ED, Scollon CKN, Oishi S et al. (2000b) Positivity and the construction of life satisfaction judgments: global happiness is not the sum of its parts. J Happiness Stud 1(2):159–176
Dolan P (1997) Modeling valuations for Euroqol health states. Medical Care 35. https://doi.org/10.1097/00005650-199711000-00002
Dolan P, Peasgood T, White M (2008) Do we really know what makes us happy? a review of the economic literature on the factors associated with subjective well-being. J Econ Psychol 29(1):94–122. https://doi.org/10.1016/j.joep.2007.09.001
Duflo E (2000) Child health and household resources in south africa: evidence from the Old Age Program. Am Econ Rev 90(2):393–398
Eze MO (2008) What is African communitarianism? Against consensus as a regulative ideal. South Afr J Philos 27(4):386–399. https://doi.org/10.4314/sajpem.v27i4.31526
Fafchamps M, Shilpi F (2008) Subjective welfare, isolation, and relative consumption. J Dev Econ 86:43–60
Ferrari G (2016) Economic evaluation of gender empowerment programmes with a violence prevention focus: objective empowerment and subjective wellbeing, mimeo. London School of Economics and Political Science, London
Ferrari, G (2016) Economic evaluation of gender empowerment programmes with a violence prevention focus: objective empowerment and subjective well-being. PhD thesis, London School of Economics and Political Science
Ferrer-i-Carbonell A (2005) Income and well-being: an empirical analysis of the comparison income effect. J Public Econom 89(5-6):997–1019
Gao F, Luo N, Thumboo J et al. (2004) Does the 12-item General Health Questionnaire contain multiple factors and do we need them? Health Qual Life Outcome 2:63–69
Govindasamy D, Ferrari G, Maruping K, Bodzo P, Mathews C, Seeley J (2020) A qualitative enquiry into the meaning and experiences of wellbeing among young people living with and without HIV in KwaZulu-Natal South Africa. Soc Sci Med 258:113103. https://doi.org/10.1016/j.socscimed.2020.113103
Graetz B (1991) Multidimensional properties of the General Health Questionnaire. Soc Psychiatry Psychiatric Epidemiol 26:132–138
Greco G, Skordis-Worrall J, Mkandawire B et al. (2015) What is a good life? selecting capabilities to assess women's quality of life in rural malawi. Soc Sci Med 130:69–78. https://doi.org/10.1016/j.socscimed.2015.01.042
Green J, Thorogood N (2014) Qualitative methods for health research (3rd edn.). Sage
Greenacre M, Blasius J (2006) Multiple correspondence analysis and related methods: statistics in the social and behavioral sciences (1st edn.). Chapman and Hall/CRC
Guérin-Pace F (1998) Textual statistics. An exploratory tool for the social sciences. Popul 1:73–95
Hankins M (2008) The reliability of the twelve-item General Health Questionnaire (GHQ-12) under realistic assumptions. BMC Public Health 8:355

Hargreaves J, Hatcher A, Strange V et al. (2009) Process evaluation of the intervention with microfinance for aids and gender equity (IMAGE) in rural South Africa. Health Educ Res 25(1):27–40. https://doi.org/10.1093/her/cyp054
Hargreaves JR, Morison LA, Gear JSS et al. (2007) Hearing the voices of the poor: assigning poverty lines on the basis of local perceptions of poverty. a quantitative analysis of qualitative data from participatory wealth ranking in rural South Africa. World Dev 35(2):212–229
Hatcher A, de Wet J, Bonell CP et al. (2011) Promoting critical consciousness and social mobilization in HIV/AIDS programmes: lessons and curricular tools from a South African intervention. Health Educ Research 26(3):542–555. https://doi.org/10.1093/her/cyq057
Helliwell JF, Barrington-Leigh CP (2010) Measuring and understanding subjective well-being. Can J Econ/Revue canadienne d'économique 43(3):729–53
Helliwell JF, Putnam R (2005) The social context of well-being. In: Huppert FA, Baylis N, Keverne B (eds.) The science of well-being. Oxford University Press. 435–460
Hinks T, Gruen C (2007) What is the structure of south african happiness equations? evidence from quality of life surveys. Soc Indic Res 82(2):311–336. https://doi.org/10.1007/s11205-006-9036-8
Hoffmann N, Metz T (2017) What can the capabilities approach learn from an ubuntu ethic? a relational approach to development theory. World Dev 97:153–164. https://doi.org/10.1016/j.worlddev.2017.04.010
James D (1999) Songs of the women migrants: performance and identity in South Africa. Edinburgh University Press
Jan S, Ferrari G, Watts CH, Hargreaves JR, Kim JC, Phetla G, Morison LA, Porter JD, Barnett T, Pronyk PM (2011) Economic evaluation of a combined microfinance and gender training intervention for the prevention of intimate partner violence in rural South Africa. Health Policy Plan 26(5):366–372. https://doi.org/10.1093/heapol/czq071
Jewkes R, Morrell R, Hearn J et al. (2015) Hegemonic masculinity: combining theory and practice in gender interventions. Cult Health Sex 17(sup2):96–111
Joshanloo M (2016) A new look at the factor structure of the mhc-sf in iran and the united states using exploratory structural equation modeling. J Clin Psychol 72(7):701–713. https://doi.org/10.1002/jclp.22287
Joshanloo M, Bobowik M, Basabe N (2016) Factor structure of mental well-being: contributions of exploratory structural equation modeling. Person Individual Diff 102:107–110. https://doi.org/10.1016/j.paid.2016.06.060
Joshanloo M, Rizwan M, Khilji IA et al. (2016) Conceptions of happiness and life satisfaction: an exploratory study in 14 national groups. Person Individ Differ 102:145–148. https://doi.org/10.1016/j.paid.2016.06.065
Joshanloo M, Weijers D (2019) A two-dimensional conceptual framework for understanding mental well-being. PLOS ONE 14(3). https://doi.org/10.1371/journal.pone.0214045
Kabeer N (1999) Resources, agency, achievements: reflections on the measurement of women's empowerment. Dev Change 30:435–464
Kahneman D, Deaton A (2010) High income improves evaluation of life but not emotional well-being. Proc Natl Acad Sci USA 107(38):16489–16493
Kahneman D, Krueger AB, Schkade DA et al. (2004) A survey method for characterizing daily life experience: the day reconstruction method. Science 306:1776–1780
Kashdan TB, Biswas-Diener R, King LA (2008) Reconsidering happiness: the costs of distinguishing between hedonics and eudaimonia. J Posit Psychol 3(4):219–233. https://doi.org/10.1080/17439760802303044
Keyes CLM (1998) Social well-being. Soc Psychol Quart 61(2):121–140. https://doi.org/10.2307/2787065
Keyes CLM, Wissing M, Potgieter JP et al. (2008) Evaluation of the Mental Health Continuum–Short Form (MHC–SF) in Setswana-speaking South Africans. Clin Psychol Psychother 15:181–192
Khumalo IP, Temane QM, Wissing MP (2011) Well-being in the Batswana cultural context: constructs and measures. J Psychol Africa 21(2):277–286
Kilic C, Rezaki M, Rezaki B et al. (1997) General Health Questionnaire (GHQ-12 & GHQ-28): psychometric properties and factor structure of the scales in a turkish primary care sample. Soc Psychiatry Psychiatric Epidemiol 32:327–331
Kim J, Ferrari G, Watts C, Hargreaves J, Morison L, Phetla G, Porter J, Pronykh P, Abramsky T (2009) Assessing the incremental effects of combining economic and health interventions: the IMAGE study in South Africa. Bull World Health Org 87(11):824–832. https://doi.org/10.2471/BLT.08.056580
Kim JC, Watts CH, Hargreaves JR et al. (2007) Understanding the impact of a microfinance-based intervention on women's empowerment and the reduction of intimate partner violence in South Africa. Am J Public Health 97(10):1794–1802. https://doi.org/10.2105/AJPH.2006.095521
Kingdon GG, Knight J (2007) Community, comparisons and subjective well-being in a divided society. J Econ Behav Organiz 64(1):69–90. https://doi.org/10.1016/j.jebo.2007.03.004
Kitayama S, Duffy S, Uchida Y (2007) Self as cultural mode of being. In: Kitayama S, Cohen D (eds.) Handbook of cultural psychology, pp. 136–174
Kitayama S, Markus HR (2000) The pursuit of happiness and the realisation of sympathy: cultural patterns of self, social relations, and well-being. In: Diener E, ESuh EM (eds.) Culture and subjective well-being. The MIT Press. pp. 113–162
Kitzinger J (1994) The methodology of focus groups: the importance of interaction between research participants. Sociol Health Illn. 16(1):103–121
Kohler H-P, Behrman JR, Skytthe A (2005) Partner + children = happiness? the effects of partnerships and fertility on well-being. Popul Dev Rev 31(3):407–445. https://doi.org/10.1111/j.1728-4457.2005.00078.x
Kuper A (1982) Wives for cattle: bridewealth and marriage in Southern Africa. Routledge & Kegan Paul, London
Lahlou S (2008) Penser manger, alimentation et représentations sociales. Presses Universitaire de France
Layard R (2005) Happiness, lessons form a new science. Allen Lane, an imprint of Penguin Books
Layard R, Clark AE, Cornaglia F et al. (2014) what predicts a successful life? a life-course model of well-being. Econ J 124(580):F720–F738. https://doi.org/10.1111/ecoj.12170
Lee DS (2009) Training, wages, and sample selection: estimating sharp bounds on treatment effects. Rev Econ Stud 76(3):1071–1102. https://doi.org/10.1111/j.1467-937X.2009.00536.x
Lloyd-Sherlock P, Agrawal S (2014) Pensions and the health of older people in south africa: is there an effect. J Dev Stud 50(11):1570–1586. https://doi.org/10.1080/00220388.2014.936399
Lu L, Gilmour R (2004) Culture and conceptions of happiness: individual oriented and social oriented SWB. J Happiness Stud 5:269–291
Lucas RE, Clark AE (2006) Do people really adapt to marriage? J Happiness Stud 7(4):405–426. https://doi.org/10.1007/s10902-006-9001-x
Markus HR, Kitayama S (1991) Culture and the self: implications for cognition, emotion, and motivation. Psychol Rev 98(2):224–253
Markus HR, Uchida Y, Omoregie H et al. (2006) Going for the gold— models of agency in japanese and american contexts. Psychol Sci 17(2):103–112
Matsumoto D (1999) Culture and self: an empirical assessment of Markus and Kitayama's theory of independent and interdependent self-construals. Asian J Soc Psychol 2(3):289–310
Metz T (2007) The motivation for "toward an African moral theory". South African J Philos 26(4):331–335
Møller V, Radloff S (2013) Perceptions of fortune and misfortune in older South African Households: social assistance and the 'good life'. Soc Indic Res 111(3):633–664. https://doi.org/10.1007/s11205-012-0026-8
Møller V, Theuns P (2013) What are the best and worst times in the lives of South African township dwellers? a content analysis of the self-defined end-anchors for Bernheim's ACSA scale of subjective well-being. Soc Indic Res 112(3):611–640. https://doi.org/10.1007/s11205-012-0073-1
Mönnig HO (1967) The Pedi. Van Schaik
Morrell R, Jewkes R, Lindegger G (2012) Hegemonic masculinity/masculinities in south africa: culture, power, and gender politics. Men Masculinities 15(1):11–30
Neff DF (2007) Subjective well-being, poverty and ethnicity in South Africa: insights from an exploratory analysis. Soc Indic Res 80(2):313–341. https://doi.org/10.1007/s11205-005-5920-x
O'Neill J (2006) Citizenship, well-being and sustainability: Epicurus or Aristotle? Anal Kritik 28:158–172
Oswald AJPN (2008) Does happiness adapt? A longitudinal study of disability with implications for economists and judges. J Public Econ 92:1061–1077
Patton MQ (2015) Qualtative research & evaluation methods, 4th edn. SAGE Publications, Inc
Penninkilampi-Kerola V, Miettunen J, Ebeling H (2006) A comparative assessment of the factor structures and psychometric properties of the GHQ-12 and the GHQ-20 based on data from a Finnish population-based sample. Scand J Psychol 47:431–440
Powdthavee N (2004) Unhappiness and crime: evidence from South Africa. Economica 72:531–547
Powdthavee N (2007) Happiness and the standard of living: the case of South Africa. In: Bruni L, Porta PL, Bruni L, Porta PL (eds.) Handbook on the economics of happiness. Edward Elgar Publishing. 447–486
Pronyk PM, Hargreaves JR, Kim JC et al. (2006) Effect of a structural intervention for the prevention of intimate-partner violence and hiv in rural south africa: a cluster randomised trial. Lancet 368(9551):1973–1983. https://doi.org/10.1016/S0140-6736(06)69744-4
Ralston M, Schatz E, Naidoo N et al. (2018) Including older adults in development goals: is subjective wellbeing the answer? a case study of older South Africans. J Dev Stud 54(4):702–718. https://doi.org/10.1080/00220388.2017.1311406
Ryan RM, Deci EL (2001) On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. Ann Rev Psychol 52:141–166
Ryff C (1989) Happiness is everything, or is it? explorations on the meaning of psychological well-being. J Person Soc Psychol 57(6):1057–1081

Ryff CD, Singer B (1998) The contours of positive human health. Psycholo Inquiry 9(1):1–28. https://doi.org/10.1207/s15327965pli0901_1
Sanchez-Lopez MDP, Dresch V (2008) The 12-item General Health Questionnaire (GHQ-12): reliability, external validity and factor structure in the Spanish population. Psicothema 20(4):839–843
Sanders J, Lisi G, Schonhardt-Bailey C (2018) Themes and topics in parliamentary oversight hearings: a new direction in textual data analysis. Statistics, Polit Policy. https://doi.org/10.1515/spp-2017-0012
Schatz E, Gilbert L (2012) "My heart is very painful": physical, mental and social wellbeing of older women at the times of HIV/AIDS in rural South Africa. J Aging Stud 26(1):16–25. https://doi.org/10.1016/j.jaging.2011.05.003
Schatz E, Gómez-Olivé X, Ralston M et al. (2012) The impact of pensions on health and wellbeing in rural south africa: does gender matter? Soc Sci Med 75(10):1864–1873. https://doi.org/10.1016/j.socscimed.2012.07.004
Schneider H, Palmer N (2002) Getting to the truth? researching user views of primary health care. Health Policy Plan 17(1):32–41
Sen A (1985) Well-being, agency and freedom: the Dewey Lectures 1984. J Philos 82(4):169–221
Senik C (2004) When information dominates comparison: learning from russian subjective panel data. J Public Econ 88(9-10):2099–2123
Shapiro A, Keyes CLM (2008) Marital status and social well-being: are the married always better off? Soc Indic Res 88(2):329–346. https://doi.org/10.1007/s11205-007-9194-3
Statistics South Africa (2012) Census 2011 statistical release. Statistics South Africa
Statistics South Africa (2018) Statistical release P0307, marriages and divorces 2016. Statistics South Africa
Suh EM, Diener E, Oishi S et al. (1998) The shifting basis of life satisfaction judgments across cultures: emotions versus norms. J Person Soc Psychol 74(2):482–493
Suh EM, Oishi S (2004) Culture and subjective well-being: introduction to the special issue. J Happiness Stud 5(3):219–222. https://doi.org/10.1007/s10902-004-8783-y
Victor B, Fischer E, Cooil B et al. (2013) Frustrated freedom: the effects of agency and wealth on wellbeing in rural Mozambique. World Dev 47:30–41. https://doi.org/10.1016/j.worlddev.2013.02.005
Vignoles VL, Owe E, Becker M et al. (2016) Beyond the 'East-West' dichotomy: global variation in cultural models of selfhood. Association 145(8):966–1000. https://doi.org/10.1037/xge0000175
Waterman S, Seth JS, Conti R (2008) The implications of two conceptions of happiness (hedonic enjoyment and eudaimonia) for the understanding of intrinsic motivation. J Happiness Stud 9:41–79
White MP, Dolan P (2009) Accounting for the richness of daily activities. Psychol Sci 20(8):1000–1008
White SC, Gaines SO, Jha S (2014) Inner wellbeing: concept and validation of a new approach to subjective perceptions of wellbeing—India. Soc Indic Res 119(2):723–746. https://doi.org/10.1007/s11205-013-0504-7
Wissing JAB, Wissing MP, du Toit MM et al. (2008) Psychometric properties of various scales measuring psychological well-being in a South African context: the Fort 1 project. J Psychol Afr 18(4):511–520
Wissing MP (2014) Meaning and relational well-being: a reflection on the state of the art and a way forward. J Psychol Afr 24(1):183–192
Wissing MP, Khumalo IP, Chigeza SC (2014) Meaning as perceived and experienced by an African student group. J Psychol Afr 24(1):92–101. https://doi.org/10.1080/14330237.2014.904101
Wood K, Lambert H, Jewkes R (2007) "Showing Roughness in a Beautiful Way": talk about love, coercion, and rape in South African Youth Sexual Culture. Med Anthropol Quart 21(3):277–300. https://doi.org/10.1525/MAQ.2007.21.3.277.277

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Competing interests

The author declares no competing interests.

Ethics approval

Ethics approval was obtained from the University of the Witwatersrand, the London School of Hygiene and Tropical Medicine and the London School of Economics.

Informed consent

Informed consent was obtained from participants prior to the start of the focus groups. The information described the research, including an introduction of the researchers and their organisations. It outlined how participants' confidentiality would be guaranteed and the voluntary nature of participation. Permission to do the study was also sought from leadership structures in study villages.

Additional information

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