

Full Research Report



# Necessities and luxuries in satisfying single lives

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#### **Abstract**

Despite the growing interest in single (unpartnered) individuals' well-being, there is a lack of descriptive research providing a comprehensive understanding of what singles value in their lives. In this research, we adopted a budget allocation methodology to examine what domains are prioritized in single individuals' construal of a satisfying single life. We recruited two samples of participants, one primarily consisting of singles from Europe and America (N = 851) and the other from Korea (N = 1012). Across the two samples, we found that singles gave high priority to being mentally and physically healthy and having good family relationships. Only when those essentials were accounted for did single individuals turn significant attention to other life domains such as having good friendships, available romantic connections, and sexual opportunities. These findings have implications for understanding single individuals' life priorities and well-being and set the groundwork for further research on singlehood.

### **Keywords**

Singlehood, partnership status, life priorities, well-being

In many parts of the world, marriage rates are declining while the average age of those getting married is increasing (OECD, 2020). Although few data are available to speak to what proportion of the unmarried population are not in *any* romantic relationship (i.e., are single), some data suggest that a significant portion of unmarried people do not have a partner. For example, in a nationally representative survey of American adults (Brown, 2020), half of the adults not in a marital or committed relationship reported not currently looking for a relationship or dates. In a national survey in Korea (Byoun, 2018), more than half (55%) of unmarried adults aged 25–39 reported not being in a relationship. Given the

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rising prevalence of unmarried individuals (likely indicating a rise in singlehood), there has been growing academic and public interest worldwide in understanding single individuals' well-being (Adamczyk, 2021; Yoshida, 2016).

Previous work focusing on single individuals' well-being and its correlates has primarily taken a piecemeal approach, examining the independent roles of a small number of factors. For example, Park and colleagues' (2021) research showed that a satisfying sexual life and satisfying friendships (but not satisfying family relationships) were independently related to greater satisfaction with singlehood. Kislev (2021) and Gebhardt and colleagues' (2010) research focused on singles' romantic desires and goals, showing that having less romantic desire or commitment to finding a partner was related to higher life satisfaction. Combined, these data suggest that being content without a romantic partner, perhaps in part by getting relational needs met elsewhere, may be an important factor for single individuals' well-being. However, as often captured in qualitative work, single individuals' lives encompass experiences in a variety of domains, some of which may boost satisfaction with being single (e.g., participation in leisure; Simpson, 2016) whereas others may undermine it (e.g., issues with physical health; Band-Winterstein & Manchik-Rimon, 2014). This suggests the need to take a more comprehensive approach to understanding what makes a satisfying life for single individuals rather than focusing on individual life domains in isolation from each other.

Indeed, knowledge on the relative importance of a broad range of domains can help understand the practical implications of previous research. For example, although sexual satisfaction was found to be a consistent predictor of well-being for singles (Park et al., 2021), we do not yet know how much priority the sexual domain is given in singles' lives. Considering the finite resources people have (e.g., time, money, energy), single individuals will necessarily make trade-offs in the maintenance of a satisfying life. That is, although it would be ideal to make large investments in all valued life domains, single individuals will be forced by various practical constraints to set priorities. Such priorities in turn guide singles' major life decisions, such as whether to relocate for a new job or to remain close to their family and friends, as well as daily decisions about whether to spend their free time catching up with a friend or swiping on a dating app. Insights into single individuals' life priorities and how they align (or misalign) with factors research suggests predict well-being in life and in singlehood will thus be essential in understanding the practical relevance and value of previous work. More broadly, such insights will help understand what makes some singles more satisfied than others and identify potential domains that could be particularly important when it comes to promoting singles' wellbeing.

In the present research, we sought to investigate single individuals' life priorities by borrowing the concept of *necessities* and *luxuries* from the partner preference literature (Li et al., 2002). This literature suggests that, just like with single life, choices of romantic partners involve trade-offs between options with different features. Some partner traits are considered "necessities," or traits essential in a romantic partner (e.g., kindness; Thomas et al., 2020) and thus represent top priorities. Other traits are considered "luxuries," or traits that are nice to have in a partner but represent lower priorities (e.g., women's financial status for men attracted to women; Thomas et al., 2020). These ideas have been

researched using a budget allocation task (Li et al., 2002; Thomas et al., 2020). In this task, participants are given different "budgets" and are asked to allocate "mate dollars" to a range of traits. Researchers theorize that the most important traits (*necessities*) should be allocated a large proportion of the dollars at first, but when people are provided increasing budgets, these traits should be allocated a smaller proportion as participants turn to shop for other traits. There are also traits (*indispensables*) allocated a relatively large proportion of dollars at first and which continue to be considered as important (i.e., retain equivalent spending levels) even when budgets increase. Finally, the less essential traits (*luxuries*) would not be allocated a large proportion of the dollars when participants have a small budget but would receive an increasing proportion as participants' budgets increase (i.e., when there are leftover funds after spending on necessities).

The present research adopted this budget allocation task to examine what features of single life single individuals may construe as necessities, indispensables, and luxuries. Compared to alternative approaches, the key strength of this approach is that it can better capture how participants make trade-offs between important life domains. For example, had participants been asked to rate the importance of each life domain one by one, they may be less likely to think about the relative importance of the domains in the comparative way that real life demands. Further, participants may overestimate the importance of domains that are more salient to them and they think about more ("focusing illusion"; Kahneman & Sugden, 2005). Certain domains may be more salient for different reasons. For example, more salient domains may be those within which participants currently feel dissatisfaction. That is, for a healthy person, the importance of physical health may not be as salient as that of leisure because the healthy person thinks about improving their leisure life more often than repairing their health. However, to someone with chronic pain, the importance of physical health is more immediately obvious. By explicitly asking participants to consider priorities using the budget task, we can more easily encourage participants to weigh the relative importance of various domains, even those that may not currently be front of mind.

An alternative way to approach this question would be asking participants to rank the importance of the domains. However, this methodology does not allow us to examine the relative weight given to each domain. For example, if participants are asked to rank whether oxygen or candy is more important, it would not be clear exactly how essential to well-being oxygen is relative to candy (also see Li et al., 2002 for more discussion on the advantages of the present approach). Accordingly, to better examine the relative importance (not just ranking) of various domains in a way that accounts to some degree for the trade-offs single people make in real life, we conducted two studies incorporating the budget allocation task.

#### Research overview

The present research was intended to be exploratory and descriptive, and as such, we did not form any specific hypotheses about potential patterns of budget allocation. In addition to examining participants' budget allocation, we also explored how the pattern may vary by individual differences, including gender, age, and current satisfaction with singlehood.

We recruited one sample primarily consisting of European and American participants and another exclusively of participants from Korea. We were interested in examining our research question in different cultural contexts given that how individuals experience singlehood and what they prioritize as singles may vary depending on social and cultural norms and practices. For example, in East Asian societies where strong value is placed on family relationships and interdependence, one's single life may be more interconnected with other family members' lives. Indeed, research suggests that children's unmarried status has implications for parents' mental health in these societies (Bai et al., 2022; Ko & Sung, 2022). As such, being a satisfied single in Korea might require a good relationship with family to a greater extent than it does in Western cultures. Nevertheless, there is a lack of research directly speaking to the relative importance of multiple life domains for singles (in either culture, not to mention across cultures). Thus, our primary interest was providing descriptive data regarding singles' necessities and luxuries in each cultural context rather than making direct cross-cultural comparisons.

Also of note, we acknowledge that our sample recruitment represented an assumption of the existence of a relatively simplistic East-West dichotomy, which is likely limited in describing the full scope of cultural differences (e.g., Vignoles et al., 2016). Indeed, our data collection approach was driven largely by practical reasons – that is, Study 1 was conducted first on a platform primarily consisting of European/American participants and motivated the follow-up Study 2 in which we aimed to test our research question in a different cultural context.

## **Methods**

# **Participants**

European/American sample. Participants were recruited online through Prolific in April – May 2021. Participants were required to be at least 20 years old and not currently in a relationship. The initial targeted sample size was 900, equally distributed across men and women and across four age groups (20s, 30s, 40s, and 50s). Given the limited availability of eligible participants in their 50s, however, we loosened the criteria for the last age group to anyone younger than 65. We excluded individuals who either failed at least one attention check or reported having provided any dishonest responses (n = 31), and individuals who reported having primarily grown up and/or currently living in an Asian country (to keep the sample culturally distinct from the Korean Sample; n = 18). Power to detect an interaction effect (the focus of our study) and calculating adequate sample size to achieve high power depend on the precise pattern of means, which were hard to predict in our case. Thus, our sample size was primarily targeted to be maximal within our practical constraints.

The final sample consisted of 419 men, 427 women, two non-binary, and three unidentified individuals. Participants' average age was 38.68 (SD = 11.82; range = 20–64). With multiple responses allowed, the racial/ethnic background of the participants were as follows: White (n = 662), Latino/Hispanic (n = 73), African (n = 38), Other (n = 32), South Asian (n = 24), East Asian (n = 19), Middle Eastern (n = 14), and Caribbean (n = 16).

14). More than half of the participants reported that they primarily grew up in the United Kingdom (n = 329) or the United States (n = 196). Full distribution of the home country of our participants can be found at <a href="https://osf.io/83m49/">https://osf.io/83m49/</a>. Most participants had never been married (n = 635), with 190 who had divorced and 26 who were widowed. Participants' employment status was as follows: 418 employed, 121 students, 116 self-employed, 96 out of work and looking for work, 38 out of work and not currently looking for work, 36 unable to work, 15 retired, and five homemakers.

Korean sample. Participants were recruited online through Gallup Korea in May – June 2021. In addition to the eligibility criteria used in Prolific (older than 20 and currently unpartnered), participants were required to be Korean and have resided in Korea for more than 80% of their lives. We aimed to recruit 1,000 individuals, equally distributed across gender and four age groups (20s, 30s, 40s, and 50s). Participants who met the study criteria received an invitation to the survey via email or text message and were further screened based on their responses to filter questions. Of note, after data collection was completed, a portion of the data (n = 320) was found to be affected by a programming error in the budgeting task; thus, a new batch of participants was recruited and replaced the erroneous data. This process was all handled by researchers at Gallup Korea who were not aware of the goal or analytic plans of the present research. Excluding individuals who failed attention checks, data from 1,012 participants were available for analysis.

The final sample consisted of 504 men and 508 women who were, on average, 38.96 years old (SD = 10.90; range = 20-59). The majority of the participants were never married (n = 942), with some divorced (n = 57), or widowed (n = 13). Participants indicated their employment status as follows: 528 employed, 149 out of work and currently looking for work, 124 students, 108 self-employed, 44 out of work and not currently looking for work, 21 retired, 11 homemakers, seven unable to work, and two militaries.

## Procedure

After providing sociodemographic information and completing a battery of questionnaires, all participants were introduced to a budgeting task (adapted from Thomas et al., 2020). On the first page, the following instruction was presented to participants: For the next task, you will basically go shopping for the characteristics you would like to have in your ideal single life. You will do so by "buying" higher rankings in certain domains compared to other single individuals' lives. Then, participants were provided with descriptions of eight domains that can be part of a single person's life and were told to allocate points to each domain depending on what percentile they wanted to be in that domain in their ideal single life. They were instructed to consider each percentile as a point (i.e., 50th percentile = 50 points) and to pay for each selection with the given budget (i.e., points). To help participants understand the task, we also provided them with a specific example (e.g., allocating 50 points to friendships indicates that in their ideal single life, their friendships would be of better quality than 50% of other singles). Participants completed this task three times using different budgets (160, 320, and 480 points for low, medium, and high budgets, respectively). The budgets mirrored those provided in previous research (Li et al., 2002; Thomas et al., 2020), although we changed the numbering system for ease of the task such that 1 point would equal a one percentile increase (whereas in previous work, 1 point equaled a 10 percentile increase). Nevertheless, functionally, our budgets were equal to those used in previous research.

Domains. The following eight domains, along with their descriptions, were presented to participants in randomized order: family relationships ("having good, close family members you enjoy spending time with and who you can give/receive support from"), friendships ("having good, close friends you enjoy spending time with and who you can give/receive support from"), leisure ("having hobbies or activities that you enjoy and free time to fully enjoy them"), mental health ("being mentally healthy and stable"), physical health ("being physically healthy and in good shape"), romance ("having available partners you can date or feel romantically connected with"), sex ("being able to meet your sexual desires, whether it involves sexual activities alone or with others"), and work/education ("having a successful, fulfilling career or being academically successful").

These domains were decided based on two separate qualitative studies in which we recruited samples from the same platforms as our primary study. Specifically, we recruited a sample of 244 primarily European singles from Prolific, and a sample of 200 Korean singles from Gallup Korea. Note that those who participated in these qualitative studies were screened out of participation in our primary study. In these studies, we asked participants what parts of their life currently make them happy being a single person or what they would need to be happy being a single person. After coding a total of 925 and 748 open-ended responses from European and Korean participants, respectively, we decided on the aforementioned eight domains that appeared to be theoretically meaningful and important in both cultures. All study materials, data, and R code can be found at https://osf.io/83m49/.

#### Measures

Satisfaction with relationship status. Participants were asked to think about their current relationship status (i.e., being single) and to report their levels of satisfaction. We used Lehmann and colleagues' (2015) scale (e.g., "In general, how satisfied are you with your current status?";  $\alpha = .92$  in European/American and .91 in Korean sample). Responses ranged from 1 (not at all) to 4 (to a great extent).

# Data analysis

Following previous research (Li et al., 2002; Thomas et al., 2020), we first examined whether each domain was given priority in the low budget condition. This was done by conducting a series of one-sample *t*-tests to examine whether each domain was given more than 12.5% of the points (i.e., what is expected to be received by chance when there are eight domains). Next, we compared how participants spent their first 160 points to how they spent their last 160 points. We used the points participants distributed when

given the minimum budget (i.e., 160) to assess how participants spent their "first" 160 points (i.e., referred to as low budget condition). Then we subtracted the number of points participants allocated to each domain when given a medium number of points (i.e., 320) from the number of points allocated to each domain when given the maximum budget (i.e., 480) to assess how they spent their "last" 160 points (i.e., referred to as high budget condition). We converted the points into percentages of the given budget for ease of interpretation. Although our data are dependent in nature, our grouping variable (participants) would capture zero variance given the study design; thus, we estimated a linear model with domain, budget, and their interaction as fixed effects. We followed up any significant interactions to examine the differences in points each domain received across the budget conditions. Specifically, we estimated marginal means for the contrasts (using the R package emmeans; Lenth, 2020), which are based on the predictions of the fitted model. We used the Benjamini-Hochberg procedure to control the false discovery rate (FDR) at  $\alpha = .05$ . Lastly, we explored if there are differences by gender, age, or levels of satisfaction with singlehood in the way singles allocate points across domains across conditions.

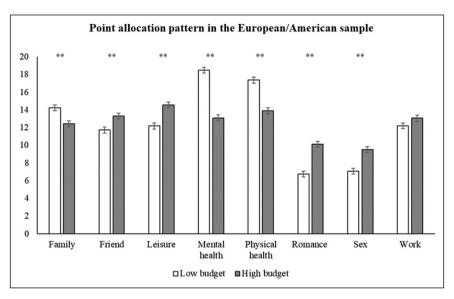
Inference. We identified necessity, indispensable, and luxury domains following previous research. First, necessity domains are ones that are given priority (i.e., receive more than 12.5% of the points) in the low budget condition but for which spending decreases in the high budget condition. Second, indispensable domains are ones that are given priority in the low budget condition and continue to receive equivalent spending in the high budget condition. Third, luxury domains are ones that are not prioritized in the low budget condition but receive increased spending in the high budget condition.

## **Results**

# European/American Sample

Priorities in the low budget condition. Three domains received more than 12.5% of the points in the low budget: mental health, t(850) = 17.57, p < .001, d = 0.60, physical health, t(850) = 14.77, p < .001, d = 0.51, and family, t(850) = 5.04, p < .001, d = 0.17), in descending order of effect size. That is, when given a tight budget, European/American singles considered their mental and physical health as well as family relationships as priorities in maintaining a satisfying single life.

Condition differences in allocation. A significant interaction between budget and domain, F(7, 13600) = 45.64, p < .001,  $\eta_p^2 = .02$ , suggested that participants' allocation patterns across the domains were different depending on the budget condition. As illustrated in Figure 1, in the high (vs. low) budget condition, participants allocated a significantly smaller proportion of points to the three domains that were given priority in the low budget condition: mental health, physical health, and family. This suggests that these domains were necessities for maintaining a satisfying single life. No domains met the criteria for being an indispensable domain (i.e., prioritized in both low and high budget



**Figure 1.** Proportion (%) of the first 160 points (low budget condition) and last 160 points (high budget condition) allocated to each domain (European/American sample). \*p < .05, \*\*p < .05.

conditions). Among the domains that were not prioritized in the low budget condition, work did not receive a greater proportion of points in the high budget condition but leisure, friend, romance, and sex did, thus meeting criteria for being a luxury domain.

Gender and age differences in allocation. Next, we examined gender and age differences in how singles allocate their budgets across domains by examining a three-way interaction between domain, budget, and gender or age. Gender analysis was conducted excluding five participants who did not identify as a man or woman. The results showed a significant three-way interaction, F(7, 13504) = 2.93, p = .005,  $\eta_p^2 = .002$ , suggesting that men and women differed in how they allocated points across domains in either (or both) condition. Specifically, men (vs. women) allocated a greater proportion of points to the sex domain in both low and high budget conditions ts(13504) > 5.36, ps < .001. Women (vs. men) allocated a greater proportion of their budget in the low budget condition to the physical health domain, t(13504) = -4.94, p < .001, and in the high budget condition to the family domain, t(13504) = -3.65, p < .001.

We also found a significant three-way interaction between domain, budget, and age, F(7, 13584) = 11.48, p = .005,  $\eta_p^2 = .006$ . Specifically, in the low budget condition, older (+1 SD; around 51) singles allocated a greater proportion of points to physical health, t(13584) = -6.69, p < .001, and family, t(13584) = -5.38, p < .001, and a smaller proportion to work, t(13584) = 6.46, p < .001, romance, t(13584) = 3.29, p = .001, and sex, t(13584) = 2.48, p = .01, compared to younger singles (-1 SD; around 27). In the high budget condition, older (vs. younger) singles allocated a greater proportion of budget

to leisure, t(13584) = -3.35, p < .001, and a smaller proportion to romance, t(13584) = 3.66, p < .001. Overall, our results suggest the extra points allocated to sex among men were allocated to physical health or family (depending on the budget) among women. Physical health and family (as well as leisure when the budget was more generous) appeared to receive more points among older singles than younger singles who turned instead to work, romance, and sex.

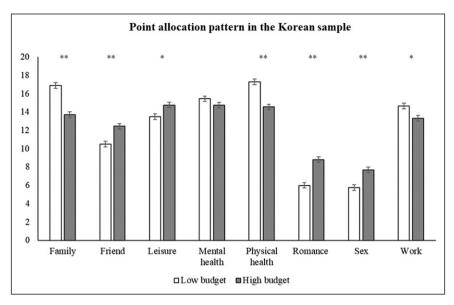
More versus less satisfied singles' differences in allocation. A three-way interaction between domain, budget, and satisfaction with singlehood was significant F(7, 13584) = 2.33, p = .02,  $\eta_p^2 = .001$ . In the low budget condition, more (+1 SD) satisfied singles allocated a greater proportion of points to family, t(13584) = -4.50, p < .001, leisure, t(13584) = -4.16, p < .001, physical, t(13584) = -3.11, p = .002, and mental health, t(13584) = -3.00, p = .003, compared to less (-1 SD) satisfied singles. In the high budget condition, they allocated a greater proportion of points to leisure, t(13584) = -4.16, p < .001, and mental health, t(13584) = -2.89, p < .001. However, in both low and high budget conditions, they allocated a smaller proportion of points to romance and sex, ts > 3.69, ps < .001. In other words, less (vs. more) satisfied singles spent more points on sex and romance when given a tight budget and continued to do so when the budget increased. More satisfied singles appeared to use the points (not spent on sex and romance) more to spend on other leisure activities or their mental health when the budget increased.

# Korean sample

*Priorities in the low budget condition.* There were five domains that were prioritized (i.e., received more than 12.5% of the points) in the low budget condition: physical health, t(1011) = 18.09, p < .001, d = 0.57, family, t(1011) = 14.86, p < .001, d = 0.47, mental health, t(1011) = 11.83, p < .001, d = 0.37, work, t(1011) = 7.53, t = 0.001, t = 0.20, and leisure, t(1011) = 3.84, t = 0.001, t = 0.12.

Condition differences in allocation. A significant interaction between domain and budget, F(7, 16176) = 29.25, p < .001,  $\eta_p^2 = .01$ , suggested that the direction or magnitude of the differences in point allocation across the budgets depended on the specific category of the domain. As shown in Figure 2, family, physical health, and work were prioritized in the low budget condition but received a significantly smaller proportion of points in the high (vs. low) budget condition, suggesting that these can be considered *necessity* domains for a satisfying single life. On the other hand, mental health was prioritized in the low budget condition and continued to receive a similar number of points in the high budget condition, suggesting that it was an *indispensable* domain. Lastly, friend, romance, and sex were *luxury* domains as they were not prioritized in the low budget condition and received a greater proportion of points in the high (vs. low) budget.

Gender and age differences in allocation. A three-way interaction between domain, budget, and gender was not significant, F(7, 16160) = 0.25, p = .97. However, a three-way interaction between domain, budget, and age did emerge as significant, F(7, 16160) = 0.25



**Figure 2.** Proportion (%) of the first 160 points (low budget condition) and last 160 points (high budget condition) allocated to each domain (Korean sample). \*p < .05, \*\*p < .001.

4.28, p < .001,  $\eta_p^2 = .002$ . In the low budget condition, older singles (+1 SD; around 50) allocated a greater proportion of points to physical health, t(16160) = -4.60, p < .001, compared to younger singles (-1 SD; around 28), and in the high budget condition they allocated a smaller proportion to romance, t(16160) = 3.07, p = .002.

More versus less satisfied singles' differences in allocation. A three-way interaction between domain, budget, and satisfaction with singlehood was significant F(7, 16160) = 3.79, p < .001,  $\eta_p^2 = .002$ . In the low budget condition, more (+1 SD) satisfied singles allocated a greater proportion of points to family, t(16160) = -3.92, p < .001, and mental health, t(16160) = -3.68, p < .001, compared to less (-1 SD) satisfied singles. In the high budget condition, they allocated a greater proportion of points to leisure, t(16160) = -2.06, p = .04, work, t(16160) = -3.11, p = .002, and physical health, t(16160) = -3.96, p < .001, compared to less satisfied singles. However, as in the European/American sample, in both low and high budget conditions, more (vs. less) satisfied singles allocated a smaller proportion of points to romance and sex, t > 4.60, p < .001.

# Cross-cultural comparisons

Although we were cautious about making direct comparisons across samples in the absence of evidence that the methodology was comparable across cultures, we did explore a three-way interaction between budget, domain, and culture in a pooled sample. The

interaction was significant, F(7, 29774) = 11.13, p < .001,  $\eta_p^2 = .003$ . In Table 1, along with a summary of the mean proportion of points allocated to each domain across budget conditions in each sample (illustrated in Figures 1 and 2), we indicated in which domain and under what budget significant cultural differences emerged. European/American individuals allocated a greater proportion of points to sex but fewer to the family domain compared to Korean individuals, regardless of the budget condition. Further, both leisure and work domains received a greater proportion of points from Korean (vs. European/American) individuals in the low budget condition but not in the high budget condition. In contrast, friend and mental health domains received a greater proportion of points from European/American (vs. Korean) individuals in the low budget condition but not in the high budget condition. Finally, the romance domain was given a similar proportion of points by the two samples in the low budget condition, but a greater proportion by European/American individuals when the budget increased.

# Additional analyses

One assumption underlying our interpretation of the budgeting task is that participants will allocate similar or more points to a given domain when provided with a higher budget (i.e., points allocated to a domain should not *decrease* when a higher budget is provided). However, our data suggested that in both cultures, there were a substantial number of participants who allocated fewer points to a given domain when they had a higher budget. For example, a participant might allocate 50 points to leisure when given a low budget but unexpectedly allocate 40 points to leisure when given a larger budget. This may be reflecting unreliable response patterns (i.e., participants were not carefully completing each task) or an interesting phenomenon in and of itself (i.e., the overall budgets changed some participants' trade-offs in a meaningful way). To examine whether these responses affected our interpretations, we re-ran all the analyses without participants who showed such a response pattern. The results did not significantly change in the reduced European/ American sample (n = 678), but one change was observed in the reduced Korean sample (n = 729). Namely, the difference in the points allocated to the mental health domain across the budgets emerged as significant, suggesting that, in the reduced sample, it was a necessity, not an indispensable domain.

# **Discussion**

Using a budget allocation methodology, we found that there was considerable similarity in what single individuals from different cultural backgrounds construe as crucial to a satisfying single life. Specifically, our results showed that both European/American and Korean singles gave high priority to being mentally and physically healthy as well as having good family relationships. Only when those essentials were accounted for did single individuals turn significant attention to other life domains such as having good friendships, available romantic connections, and sexual opportunities. At the same time, there were individual differences such that in both cultures, younger (vs. older) singles tended to turn more attention to romance when they were given the luxury to do so (i.e., in

Table 1. Mean proportion (%) of the first 160 points (low budget condition) and last 160 points (high budget condition) allocated to each domain across cultures.

	European/	European/American sample			Korean sample	nple		
	Low budget	et	High budget	;	Low budget	it	High budget	et
Domains	Mean %	95% CI	Mean %	95% CI	Mean %	95% CI	Mean %	95% CI
Family	14.23ª	[13.58, 14.88]	12.44ª	[11.79, 13.09]	16.88	[16.29, 17.47]	13.72	[13.13, 14.3]
Friend	11.72ª	[11.07, 12.37]	13.31	[12.66, 13.96]	10.50	[6.91, 11.09]	12.44	[11.86, 13.03]
Leisure	12.19ª	[11.54, 12.84]	14.55	[13.90, 15.20]	13.48	[12.90, 14.07]	14.75	[14.16, 15.34]
Mental health	18.48ª	[17.83, 19.13]	13.10ª	[12.45, 13.75]	15.45	[14.86, 16.03]	14.74	[14.15, 15.33]
Physical health	17.36	[16.71, 18.01]	13.90	[13.25, 14.55]	17.29	[16.70, 17.87]	14.55	[13.96, 15.14]
Romance	6.75	[6.09, 7.40]	10.12ª	[9.47, 10.77]	5.99	[5.40, 6.58]	8.80	[8.21, 9.39]
Sex	7.07ª	[6.42, 7.72]	9.51ª	[8.86, 10.17]	5.75	[5.16, 6.34]	7.69	[7.10, 8.27]
Work	12.20ª	[11.55, 12.85]	13.06	[12.41, 13.72]	14.66	[14.07, 15.25]	13.31	[12.72, 13.90]

andicates that the value was significantly different from its counterpart in the Korean sample. A full summary of raw scores is available at https://osf.io/83m491.

the high budget condition). Further, in both cultures, less (vs. more) satisfied singles attended more to romance and sex regardless of their budget, which aligns with previous finding that individuals less satisfied with singlehood report greater desire for a romantic partner (MacDonald & Park, 2022).

One potential implication of our necessity findings (i.e., singles did not necessarily want more from mental and physical health or family relationship domains once certain thresholds were met) is that there may be a limit in the extent to which singles' experiences in these domains can contribute to their well-being. Similar to the idea of diminishing marginal utility (e.g., of income; Jebb et al., 2018), improvement in these necessity domains may confer limited benefits to singles' well-being beyond a point at which some degree of contentment is achieved. Thus, perhaps, an investment made to promote singles' health or family relationships can be impactful particularly for singles who are struggling in these domains; for those who are already satisfied, well-being gains from further investment in these domains may not be as appreciable.

This perspective also helps understand some discrepancies in the literature concerning the role of family relationships in singles' well-being. Specifically, contrary to the portrayal of family members as single individuals' reliable source of intimacy and support in qualitative research (Band-Winterstein & Manchik-Rimon, 2014; Reilly et al., 2020), variability in satisfying family relationships has been found to have no unique association with singles' satisfaction with singlehood (Park et al., 2021). Possibly, while having good family connections may be an important element of a satisfying single life, the necessity orientation of this variable may indicate that effects are only detected below a certain threshold level. As such, they likely require a test of nonlinear effects to be captured (and hence was not observed in Park et al., 2021 which focused on examining linear associations). Of note, our findings on luxury domains, on the other hand, did mirror Park et al.'s results that satisfying friendships and sexual lives are associated with greater satisfaction with singlehood. Combined, these data suggest that investigations that assume linear associations between domain satisfaction and well-being as in Park et al. (2021) may be more prone to identifying luxuries than necessities, at least in contexts where satisfaction of those necessities is relatively widespread.

Indeed, experiences in luxury domains such as friendships or romantic and sexual connections may be what can most commonly upgrade the lives of singles who have their basic needs met. Nevertheless, one complexity that should be noted in interpreting the low proportion of points allocated to the romantic or sex domain is that improvement in this domain potentially leads to *exiting* singlehood (i.e., starting a relationship). Thus, although having good romantic opportunities may indeed be a valid characteristic of a satisfying single life from the perspective that some singles are single to enjoy the freedom to flirt around or to search for a high-quality partner (Apostolou et al., 2020), it is also possible that having a romantic interest in and of itself was perceived as a characteristic of an *un*satisfying single life, rather than a satisfying single life by some participants. Further, given some evidence of the moderation effects we found, it is worth remembering that just as people vary in how they construe satisfying singlehood, they also vary in the pathways that are most likely to promote satisfaction with singlehood. That is, there is not a universal way to make singles happy and some people (e.g., those who place great

importance on romance and sex) may be naturally more prone to be less satisfied with their relationship status as singles.

In terms of cross-cultural effects, despite the overall similarity, there were some potentially meaningful differences. For example, in the low budget condition, Korean singles attended less to mental health, friends, and sex, but more to family, leisure, and work than European/American singles. Although we again emphasize the need to interpret these comparisons with caution as the equivalence of the two tasks between the cultures has not been established, some of these findings do align with the previous work on cultural differences. For example, Confucian values institutionalized and reinforced in Korean culture help explain Korean singles placing greater value on their family relationships (Park & Chesla, 2007) as well as work (e.g., valued as means to enhance family's well-being; Shockley et al., 2017). The emphasis on leisure also seems to align with Koreans' increasing interest in enriching their leisure lives (Choi, 2020), particularly with the enforcement of the 52-hour workweek system. Nevertheless, given the overall similarity in the *pattern* of point allocation across samples, our findings suggest that the construal of a satisfying single life may not differ much between singles from the cultural contexts we examined.

Overall, by examining the relative importance of different life domains, some of which have received attention in separate work (e.g., Park et al., 2021), our research helps paint a more comprehensive picture of what singles want in their lives. This knowledge may be particularly useful in singlehood research which seems to us is in need of descriptive research ahead of premature theorizing. Indeed, we believe that one advantage of having this descriptive information on single individuals' life priorities is that it highlights what domains have (perhaps unfairly) received little attention. For example, although the work domain consistently received higher priority than the romantic or sex domain, there has been relatively little research focusing on studying singles' work lives (in contrast to the amount of work on their romantic or sexual lives). Some research has been conducted on the issue of discrimination against the unmarried population in the workplace (see Casper & DePaulo, 2012), but not much research has approached the role of work in singles' lives from the perspective that it can be a positive force. Our study highlights the need to look more closely into both positive and negative forces in the workplace that can shape single individuals' feelings about singlehood.

More broadly, our research suggests that the budget methodology may be a promising approach to study life priorities. Although it has primarily been used to study romantic partner preferences (Thomas et al., 2020; cf. Sadalla et al., 2014), when applied to study life priorities as in our research, it may help bring to the fore factors that might otherwise be overlooked. Of course, it is important to remember that choice of the domains to include in the task may itself be affected by researchers' bias; thus, much theoretical (and possibly empirical, as in our pilot qualitative study) consideration needs to be given to the domain selection process. Also, given the comparative nature of the task (i.e., participants think about their ranking on domains in terms of their standing relative to others), the composition of the group will need to be considered when interpreting findings.

The present findings on singles' life priorities also offer promising directions for future research. For example, researchers can gain insights into potential sources of singles'

dissatisfaction with singlehood by examining how their construal of a satisfying single life differs from their actual lives. If time or money can be considered as real-life budget constraints, in what ways would singles' spending correspond to or diverge from how they prioritized different domains in the current research? Drawing on large data on time use or personal spending can help elucidate how singles in real life invest their resources (what we may have captured with the points in our budgeting task) across different life domains. In doing so, it is important to note that, in reality, the budget difference also exists at the between-person level; some singles live with a tighter budget than others. For example, not only do those low in socioeconomic status lack financial resources to invest in all valued life domains, but given the nature of lower income work (e.g., blue collar positions with high levels of physical activity), they may also have relatively less energetic time available (Rasmussen et al., 2019). As one way to account for the variability in how singles spend their resources across life domains, future research can take a personcentered approach to analyzing time or spending data (e.g., Hipson et al., 2021). Identifying subpopulations of singles with different ways of living and examining how they vary in the degree of well-being can help us understand implications of the potential gap between how a satisfying single life is construed and what different types of singles' lives look like in reality.

Finally, there are some caveats to consider when interpreting the present findings. First, our data were collected during the pandemic, and it is possible that this unique historical context affected the way singles construe a satisfying single life. For example, daily exposure to news about death and diseases could have heightened the importance of the physical or mental health domains. For singles living alone, the risk of getting sick could also have loomed larger in times of social distancing (and subsequent social isolation), perhaps boosting the priority placed on family connections. Future research should examine if and how the patterns observed amid the health crisis change as we transition out of the pandemic. Second, although our research focused on singles and singlehood, we do not intend to claim that the present findings are unique to single individuals' construal of satisfying lives. Perhaps if we were to ask partnered individuals to design a satisfying life with their partner, we might observe similarities with the patterns observed among singles (e.g., family domain may be a high priority among partnered individuals as well; Ko et al., 2020). Nevertheless, we anticipate partnered individuals' pattern of point allocation to be strongly affected by the prioritization of a partnership (romantic domain) which in turn may result in some overall differences between how satisfying single and partnered lives look. Lastly, while we tried to focus on domains that are applicable to (almost) all singles, we acknowledge that certain domains may be somewhat irrelevant to some singles (e.g., the sex domain for asexual singles or the family domain for kinless singles). As research on singlehood advances, incorporating more diversity will become increasingly important.

In conclusion, our research was the first to examine how singles weigh different life domains and to identify what they construe as necessities and luxuries in a satisfying single life. By examining different cultural contexts, we could show that prioritization of (physical and mental) health and family relationships may be essential ingredients of satisfying singlehood.

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## Ethics approval

This study was reviewed and approved by the Research Ethics Board at the University of Toronto.

## Open research statement

As part of IARR's encouragement of open research practices, the authors have provided the following information: This research was not pre-registered.

The data used in the research are available. The data can be obtained at: https://osf.io/83m49/.

The materials used in the research are available. The materials can be obtained at: https://osf.io/83m49/.

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