

# Gender Differences in Subjective Well-Being

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**Abstract:**

Results regarding whether men and women differ in terms of their well-being levels have been highly inconsistent. To more conclusively understand the past research regarding on the relationship between gender and subjective well-being (i.e., life satisfaction, positive affect, and negative affect), we summarize the current body of the literature on the subject including both large, nationally representative empirical papers as well as past meta-analyses. Next, we review explanations behind the presence of gender differences in subjective well-being as well as explanations behind the lack of gender differences in subjective well-being. We conclude by addressing current limitations of the present research and propose important future directions to further disentangle the remaining questions regarding gender differences in subjective well-being

**Keywords:** Gender Differences, Sex Differences, Subjective Well-being, Affect

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Pundits, policy-makers, and lay people alike are captivated by differences between men and women. Questions of gender differences inundate both the popular press and academic journals: *how*, are men and women different, and *why*? It is not uncommon to see gender comparisons as a main emphasis in research on different psychological characteristics or drawn on as a moderator of interest. The role of gender and gender differences in well-being has also been of longstanding interest. Intriguingly, results regarding well-being differences in gender have often been inconsistent. While at times research fails to find a significant difference between men and women's well-being (e.g., Okun & George, 1984), others demonstrate significant differences between the genders in opposing directions (e.g., Stevenson & Wolfers, 2009; Haring, Stock, & Okun, 1984; Fujita, Diener, & Sandvik, 1991). Complicating matters, there are different aspects of well-being (e.g., positive affect, negative affect) that one can make comparisons on and different sub-populations within which gender comparisons are made (e.g., age, nation) (e.g., Shmotkin, 1990). Given an ongoing interest in gender differences in well-being, and the inconsistent results found in the past, there is a need to synthesize the well-being literature and provide conceptual grounding for when we might see gender differences in well-being, when we may not, and why.

In this chapter, we summarize the present state of research on gender differences in well-being. Specifically, we focus on subjective well-being (SWB) among the different possible conceptualizations of well-being. We begin by reviewing past research on gender differences on the three components of SWB (e.g., life satisfaction, positive affect, and negative affect). Next, we will discuss the findings of several large-scale meta-analyses and samples on the different SWB components. After which, we present the conceptual underpinnings that have been proposed as to why we would, or would not, expect to find differences in well-being between men and women. Drawing on the above, we conclude with limitations of current research and future directions to help address remaining unanswered questions.

## Past Research on Gender Differences in Subjective Well-being

### Subjective Well-being

Given widespread interest in gender and well-being, gender differences in SWB has been repeatedly examined over time. In a landmark review of the SWB literature, Wilson (1967) concluded that one's sex was not associated with happiness – though this conclusion was based on only two studies. One

study was commissioned by the US congress to examine the mental health of 2,460 American adults 21 years old and older (Gurin, Veroff, & Feld, 1960), and the second was a study that included data from 450 households from various social-economic statuses (Bradburn & Caplovitz, 1965). Since more research has been conducted on this issue, re-examining the initial conclusion of a lack of gender differences in SWB is necessary.

Across broader and larger samples, there have been mixed findings on whether there are gender differences in SWB. Whereas some research has found that men have significantly higher levels of SWB (e.g., Stevenson & Wolfers, 2009; Haring, Stock, & Okun, 1984), other studies have shown that women have significantly higher levels of SWB (e.g., Fujita et al., 1991). Complicating matters further, many studies have found no significant differences (Okun & George, 1984), particularly after controlling for other relevant demographic factors (e.g., age, marital status) (e.g., White, 1992; Inglehart, 1990; Shmotkin, 1990; Warr & Payne, 1982; Larson, 1978).

It has been proposed that these inconsistent and conflicting reports are in part due to SWB being comprised of three components: (1) positive affect, (2) negative affect, and (3) life satisfaction (Diener, Lucas, & Oishi, 2002; Diener, 1984). The magnitude and direction of the gender differences diverge for each component and conflating them in the analysis may reduce any observed differences – or it may lead to empirical confusion when not distinguished conceptually (Diener, Suh, Lucas, & Smith, 1999; Parker & Brotchie, 2010).

The idea that there are differences within these components has been supported by several studies that have examined the components of SWB independently. For instance, a large-scale international study by Lucas and Gohm (2000) found that in most of the nations examined, women experienced more negative affect than men. Other studies have reported similar findings that negative affect is more prevalent among women (Nolen-Hoeksema & Rusting, 2003). This is supported by research within the clinical domain that has found women experience greater levels of depression, anxiety, and mood disorders than men (Eaton et al., 2012; Grant & Weissman, 2007). Furthering the support of this explanation is the fact that women are also reported to experience higher levels of positive affect, or happiness, than men (Wood, Rhodes, & Whelan, 1989; Lee, Seccombe, & Shehan, 1991). Therefore, it is likely that the inconsistent findings may be in part attributable to conflating different dimensions of SWB – such as positive and negative affect. To avoid this potential pitfall, we will review past research on life satisfaction, positive affect, and negative affect separately.

Additionally, apart from conflating the different components of SWB, there may also be sampling variability leading to differences in observed gender SWB differences. To minimize this potential, we focus our review drawing on large-scale nationally representative studies and previous meta-analyses.

**Life Satisfaction.** Broadly, large-scale, nationally representative studies on life satisfaction have found somewhat mixed results on gender differences in life satisfaction. An early study by Clemente and Sauer (1976) found no significant differences between men and women on life satisfaction in representative sample of over 1,000 individuals from the United States. A study by Inglehart (2002) in using data from the World Values Survey that spanned more than 60 nations found that the direction of the gender difference was dependent upon on the age group, whereas younger (e.g., 18-44) women had higher levels life satisfaction than younger men, but older women (e.g., 44-65+) had lower levels of levels of life satisfaction than older men. A later study by Blanchflower and Oswald (2004) that compared over 20,000 individuals from both the United States and Great Britain, cited a small effect with women reporting higher levels of life satisfaction than men in both Great Britain and the United States. The most recent study by Tay, Ng, Kuykendall, and Diener (2014) used the Gallup dataset to examine this question for full-time workers across the United States and over 150 other countries. For the United States, they found very small effect size differences, but found larger differences across other included nations in which full-time working women had higher life satisfaction than full-time working men (Tay et al., 2014).

Study	Sample Characteristics (Number of Nations)	Sample Size	Findings
Clemente & Sauer (1976)	US representative sample (1)	1,347	No significant gender difference in life satisfaction

Inglehart (2002)	International representative sample (65)	~150,000	Young women have higher levels of life satisfaction than young men; Older women have lower levels of life satisfaction than older men.
Blanchflower & Oswald (2004)	US and UK representative samples (2)	94,574	Women have higher levels of life satisfaction than men.
Tay, Ng, Kuykendall, & Diener (2014)	International representative sample (156)	172,949	Women have higher levels of life satisfaction than men.
<i>Notes.</i> US= United States; UK = United Kingdom; ~ = approximate as reported by author			

Consistent with large-scale representative samples, past meta-analyses have also been conducted on the question of gender differences in life satisfaction and have resulted in mixed findings as well. One of the first large scale reviews conducted on the subject was done by Haring, Stock, and Okun in 1984. Haring and colleagues (1984) looked at empirical studies from the US that examined gender and social class as predictors of subjective well-being. The studies included were conducted prior to 1980 and had to include “life satisfaction, happiness, morale, quality of life, and subjective well-being” as keywords. Based on the studies that met the above criteria, their results showed that men had slightly higher levels of subjective well-being, which included life satisfaction, than women, but the magnitude of this difference was small ( $r = .03$ ;  $d = .06$ ).

A few years later, Wood, Rhodes, and Whelan (1989) conducted another meta-analysis on sex differences in positive well-being with attention paid to marital status and emotional style. They drew upon 85 studies from both US and international samples that provided a comparison between men and women on measures of life satisfaction, happiness, morale, positive affect, or general well-being. In terms of life satisfaction, it was found that men had lower levels of life satisfaction than women ( $d = -.03$ ).

Another meta-analysis conducted by Pinquart and Sörensen (2001) investigated differences between men and women over the age of 55 in psychological well-being. They included 174 studies from the developmental and gerontological literature that looked at gender differences in life satisfaction. They found that older men, as compared to older women, reported slightly higher levels of life satisfaction ( $g = .08$ ;  $d = .08$ ).

Most recently, Batz, Tay, Kuykendall, and Cheung (under review) conducted a meta-analysis that examines gender differences in life satisfaction and the influence of gender inequality on the size of this difference. Across the 281 included samples, which included over a million individuals, Batz and colleagues (under review) found that, after accounting for publication bias, men and women significantly differed in their levels of life satisfaction such that men report higher levels of life satisfaction than women ( $d = .03$ ).

<u>Meta-Analysis</u>	<u>Sample Characteristics</u>	<u>Sample Size</u>	<u>Findings</u>	<u>Effect Size**</u>
Haring, Stock, & Okun (1984)	US samples ( $k=146$ )	52	Men have higher levels of life satisfaction.	.06
Wood, Rhodes, & Whelan (1989)	US and international samples ( $k= 85$ )	1,505*	Women have higher levels of life satisfaction than men.	-.03
Pinquart and Sörensen (2001)	US sample; Over age 55 ( $k= 174$ )	27,186	Men have higher levels of life satisfaction.	.08

Batz, Tay, Kuykendall, & Cheung (under review)	US and international samples (k= 281)	1,001,802	Men have higher levels of life satisfaction.	.03
<i>Notes.</i> US = United States; k = number of samples; a positive effect size indicates men having greater life satisfaction; * = median number of participants among all included studies, total was not reported; **All effect sizes converted to Cohen's d for interpretation				

Taken together, the majority of the results from meta-analyses on this subject favor the conclusion that men and women do significantly differ in life satisfaction, such that men have higher levels of life satisfaction than women, though the size of the difference is small.

**Positive Affect.** Across large, nationally representative samples, the discrete emotion of ‘happy’ or ‘happiness’ is often the operationalization of positive affect. An example of this is first seen in Inglehart’s (2002) examination of the World Values Survey of individual from over 60 nations. Inglehart (2002) found that gender differences in happiness levels were dependent upon age, whereas young (18-44) women are happier than young men, middle aged (45-54) women and men do not differ in terms of happiness, but older (55+) women are less happy than older men. Another example of this is research by Easterlin (2003) who looked at gender differences in happiness using the internationally representative sample from the General Social Survey. Easterlin’s results (2003) mirrored that of Inglehart (2002), finding that younger women are happier than younger men, while older women are less happy than older men. A more recent study Zuckerman, Li, and Diener (2017) examined gender differences in positive affect, measured by using a range of positive emotions beyond just happiness, using data from the Gallup World Poll, a globally representative data set of over 150 countries. Their results indicated that men and women did not statistically differ in terms of positive affect.

<b>Table 3.</b>			
<b>Summary of Large Scale, Nationally Representative Studies on Positive Affect</b>			
<u>Study</u>	<u>Sample Characteristics</u> <u>(Number of Nations)</u>	<u>Sample Size</u>	<u>Findings</u>
Inglehart (2002)	International representative sample (65)	~150,000	Young women have higher levels of happiness than young men; Middle aged women and men do not significantly differ in levels of happiness; Older women have lower levels of happiness than older men.
Easterlin (2003)	International representative sample (Not reported)	Not Reported	Young women have higher levels of happiness than young men; Older women have lower levels of happiness than older men.
Zuckerman, Li, & Diener (2017)	International representative sample (162)	455,104*	No significant difference between men and women.
<i>Notes.</i> US= United States; ~ = approximate as reported by author; * = total sample size for study overall			

Meta-analyses have strived to summarize the rather large body of empirical studies that focus on both happiness and positive affect. For example, Wood, Rhodes, and Whelan (1989) conducted a meta-analysis based on 96 studies from both US and international samples. They found that women reported higher levels of happiness ( $d = -0.07$ ), but that when examined more broadly, there was not a non-significant gender difference for positive affect overall. Another meta-analysis conducted by Pinqart and Sørensen (2001) used 58 studies to investigated differences between men and women over the age of 55 in happiness. They found that older women, as compared to older men, reported slightly lower levels of happiness ( $g = .06$ ;  $d = .06$ ).

**Table 4.**  
**Summary of Meta-Analyses on Gender Differences in Positive Affect**

<u>Meta-Analysis</u>	<u>Sample Characteristics</u>	<u>Sample Size</u>	<u>Findings</u>	<u>Effect Size**</u>
Wood, Rhodes, & Whelan (1989)	International samples (k= 85)	1,505*	Women have higher levels of happiness than men; No gender difference in positive affect overall.	-.07; <i>n.s.</i>
Pinquart and Sørensen (2001)	US sample; Over age 55 (k= 58)	53,197	Men have higher levels of happiness.	.06

*Notes.* US = United States; k = number of samples; a positive effect size indicates men having greater life satisfaction; \* = median number of participants among all included studies, total was not reported; \*\**All effect sizes converted to Cohen's d for easy interpretation*

Collectively, the results from meta-analyses on this subject come to different conclusions, whereas one finds that women report higher levels of happiness than men and the other finds the opposite to be true. One reason for this variation may be two very important differences in the studies themselves: the inclusion of international samples (Wood, Rhodes, & Whelan, 1989) versus the inclusion of samples only over the age of 55 years old (Pinquart & Sørensen, 2001). Additionally, the analyses were done over a decade apart. As such, one may conclude that the samples are so different that it is unfair to deem these results inconsistent with one another and instead address the question of gender differences in positive affect for different subsets of the population. Future work should examine this question further.

**Negative Affect.** Very few researchers have examined gender differences in negative affect on a large-scale or meta-analytically. This is likely due to the overwhelming interest in gender differences in mental health, particularly the experience of depression. Which, while related to negative affectivity, is viewed as a distinct concept from negative affect in the context of subjective well-being (Luhmann, Hofmann, Eid, & Lucas, 2012). However, one large-scale study by Zuckerman, Li, and Diener (2017) did examine gender differences in negative affect using data from the Gallup World Poll, a globally representative data set of over 150 countries. Their results indicated that men and women did significantly differ in negative affect, such that women had higher levels of negative affect than men.

**Table 5.**  
**Summary of Large Scale, Nationally Representative Studies on Negative Affect**

<u>Study</u>	<u>Sample Characteristics</u> (Number of Nations)	<u>Sample Size</u>	<u>Findings</u>
Zuckerman, Li, & Diener (2017)	International representative sample (154)	455,104	Women have higher levels of negative affect than men.

*Notes.* \* = total sample size for study overall

This large analysis conducted by Zuckerman and colleagues (2017) suggests that men and women significantly differ in negative affect, such that women have report higher levels of negative affect than men. While this study provides a baseline in which examine this question using a large and representative sample, one must avoid viewing this finding as conclusive. Future work must be done to examine this question further – including future meta-analyses that seek to examine this question across more samples to provide greater confidence in these results.

**Reasons for Gender Differences in Overall Well-being**

When attempting to explain gender differences in well-being, there are several themes that emerge from the literature, including structural factors (i.e., differences in institutional arrangements and opportunities between men and women), socio-cultural factors (i.e., differences in societal expectations and norms for men versus women), and biological differences (i.e., physical and physiological differences)

(e.g., Stevenson & Wolfers, 2009; Wood et al., 1989; Tesch-Römer, Motel-Klingebiel, & Tomasik, 2008; Landers, 1988; Fujita et al., 1991; Russo & Green, 1993). These differences are summarized in Table 6. We recognize that there are likely complex interactions between these factors, but we seek to discuss them as main effects for parsimony.

<b>Table 6.</b> <b>Explanations for Gender Differences in Subjective Well-being</b>		
<u>Category</u>	<u>Psychological/Physiological Mechanisms</u>	<u>Posited Outcome</u>
Structural factors: Access to educational, economic, political, and social resources, opportunities, and power structures	Need fulfillment	Women have lowered SWB due to limited opportunities to fulfill basic and psychological needs from current structural inequalities between men and women
Social factors: Societal expectations and norms	Gender role fulfillment (prescription & description)	Violations of gender roles lead to lowered SWB where women seeking to move into the workplace or traditionally male-dominated industries have lower SWB.  Emotional expressiveness is more acceptable for women rather than men meaning they are more willing to display and report higher levels of positive affect and negative affect than men.
Biological factors: Physiological	Hormones Genetics	Hormonal differences, both in the type and fluctuation, between men and women lead to variations in the experiences of both positive and negative emotions  Genetic differences between men and women may led women to develop personality types that make them more susceptible to the experience of positive and negative affect.

### **Structural Factors: Gender Inequalities & Need Fulfillment**

One potential key to understanding gender differences in SWB is Need Fulfillment theory. This has often been implicitly, or explicitly, invoked in the examination of gender differences particularly for the evaluative components of SWB (e.g., Diener & Lucas, 2000; Tay & Diener, 2011). Substantively, this theory posits that SWB levels are dependent on the extent an individual's physical and psychological needs (e.g., autonomy, competence, relatedness) are fulfilled (Ryan & Deci, 2000; Ryff & Keyes, 1995; Maslow, 1943). This theory considers not only external, objective structural realities that influence the ability to meet one's needs, but also personal perceptions that physical and psychological needs are being met.

Based on this theory, gender differences in SWB may be understood in terms of the variation in men and women's experiences of global inequality within economic, educational, political, and social structures. More specifically, differences in access to opportunity structures (e.g., access to education), resources (e.g., income differences), and power systems (e.g., representation in government) for men and women would lead to difference in their respective perceptions of their ability to meet their needs. Such that women would not only be less able, but also feel less enabled to meet their needs as compared to men. Subsequently this would result in gender differences in SWB, but the size of this difference likely would be dependent upon the degree of inequality within these societal structures. Specifically, in nations and communities where there is equality within these structures (i.e., opportunity, resource, power) there will likely little to no difference in gender SWB but where inequality is high there will likely be greater differences between the sexes.

A substantial amount of research has shown support for the idea that a greater provision of human rights (e.g., civil, political) and greater equality (e.g., education, income) is related to higher levels of SWB (Diener, Diener, & Diener, 1995; Oishi, Kesebir, & Diener, 2011; Oishi & Diener, 2014). Similarly, it has been found that in societies with greater gender equality, individuals have higher levels of overall happiness (e.g., Bjørnskov, Dreher, & Fischer, 2007; Inglehart & Welzel, 2005; Inglehart, Foa, Peterson, & Welzel, 2008; Jorm & Ryan, 2014; Ruth & Napier, 2014; Schyns, 1998). This prior work is supportive of the proposition that variations in the experiences of inequality may improve well-being for women and so enhance overall well-being nationally.

More direct evidence has been found in an empirical study that examined whether gender differences in life satisfaction were explained by variability in the experiences of gender inequality. The study, conducted by Tesch-Römer and colleagues (2008), examined the influence in differences of cultural inequality on the magnitude of gender differences in SWB in over 50 countries. They found that the greater societal gender inequality, the greater the difference between men and women on levels of SWB, but only in countries that valued gender equality.

However, some studies have found the opposite to be true to some degree. A study using data from over 90 countries by Meisenberg and Woodley (2015) found that although some indicators of gender equality and female status are related to higher life satisfaction for women, some indicators, including women's involvement in gainful employment and prolonged schooling, are negatively related to women's well-being. This may be explained by the fact that along with increases in opportunities and rights, women's aspirations and responsibilities have also increased, particularly in the workforce (Patten & Parker, 2012; Regan & Roland, 1982). These shifting standards and increased demands may cause gender differences in SWB to persist despite equality. The expansion of opportunities may have come at a cost for women, and ended up benefiting men more than women (Stevenson & Wolfers, 2009). This idea is consistent with work by Blanchflower & Oswald (2004) who found that women's happiness decreased over time in the United States and Britain despite women's rise in resources, opportunities, and power. Therefore, policies aimed at equality may have had an inadvertent negative impact on women's levels of SWB. Also, as women have taken on additional roles that were once reserved for only men, their comparison group may have expanded, and thus their perception of their relative success possesses a more negative connotation (Stevenson & Wolfers, 2009). Clearly, the relationship between culture, equality, and need fulfillment may be complex and will require future research to disentangle why we do not see vastly different effects despite these sometimes large disparities between men and women in terms of opportunities and resources

### **Social Factors: Societal Expectations and Norms**

Social factors may also help explain gender differences in SWB via the differences in the norms and expectations for men and women, referred to in the literature as 'gender roles.' Gender roles are socially held, descriptive and/or prescriptive stereotypes regarding the characteristics of each sex as well as the subsequent acceptable, expected behaviors for men and women (Eagly & Karau, 2002). These expectations and norms in gender roles influence the perceptions regarding the appropriate occupations for men and women, the type of traits men and women should possess, and even the type of emotions that are acceptable to experience and demonstrate for men and women. Researchers have explored the consequences of violating gender role expectations and find that men and women who engage in behaviors counter to these expectations often face backlash from others, which can subsequently have a negative impact on both their successes and well-being (e.g., Eagly & Karau, 2002; Blazina & Watkins, 1996; Good & Wood, 1995). For instance, research has shown that women experience backlash that impacts their job satisfaction when they take on roles in organizations that are not traditionally feminine or require them to behave in traditionally masculine ways (Garcia-Retamero & López-Zafra, 2006).

A significant part of gender role expectations is that it is more acceptable for women than men to be emotionally expressive, which may also help explain why women report experiencing both positive and negative affect more often than men (e.g., Simon & Nath, 2004; Plant, Hyde, Keltner, & Devine, 2000). Men may be more reluctant than women to *report* the degree to which they feel specific positive and negative emotions, which may influence the self-report based findings on gender differences in positive and negative affect (Nolen-Hoeksema & Rusting, 2003). Moreover, these expectations may impact the degree to which men and women allow themselves to actually *feel* and express these emotions (Nolen-Hoeksema & Rusting, 2003).

Research by Grossman and Wood (1993) has supported this idea, finding that women report more extreme emotions than men without being prompted. However, when emotional responses were manipulated for a person to be either more, or less, emotionally expressive, no sex differences were obtained, which may be indicative of initial conformity to gender role expectations. Other research has

examined this question and found that women engage in more non-verbal expressions of positive emotions (e.g., smiling, laughing) than men particularly when gender was made more salient (LaFrance, Hecht, & Paluck, 2003). Similarly, a study by Fujita, Diener, and Sandvik (1991) examined the case for emotional intensity further, finding that gender alone accounted for less than 1% in the variance in the valence dimension of happiness-sadness, whereas gender accounted for approximately 13% of the variance on the emotional intensity dimension, suggesting that women are more open to intense emotional experiences than men.

### **Biological Factors: Hormones and Genetics**

There has also been research done regarding biological factors, such as hormonal or genetic differences between men and women, that may contribute to men and women's differing levels of the affective components of SWB (e.g., Hyde, Mezulis, Abramson, 2008; McRae, Ochsner, Mauss, Gabrieli, & Gross, 2008).

First, this idea has been supported by studies that have looked at relationships between genetics and well-being. For example, a study by Weiss, Bates, and Luciano (2008) cited substantial evidence for a genetic component to well-being and happiness. Røysamb and colleagues (2002) conducted further exploration to test the heritability of happiness. In this exploration, they used a classic twin-studies design with over 5,000 individuals. Results indicated a significant gender difference in the heritability of happiness. Further, they found that women have a greater genetic determination in their happiness level as compared to men (Røysamb, Harris, Magnus, Vittersø, & Tambs, 2002). Additionally, research has revealed that there might be different sets of genes that influence women's happiness as compared to men's happiness. Research has attempted to dive further into this by identifying specific genes, such as the monoamine oxidase A (MAOA) gene that is involved in mood regulation. Researchers postulate that the presence of this gene, via its impact on mood regulation, lead women to experience moods more intensely and lead to more frequent mood shifts than women with low expression of this gene, while the gene has no impact on men (e.g., Chen et al., 2013). This may lend some insight as to why women report greater levels of both positive and negative affect than men for instance. However, when examined meta-analytically the results remain unclear as to whether there are gender differences in the genetic architecture of well-being (Bartels, 2015).

There is also some evidence that women's hormones, including estrogen and progesterone, may be tied to women's fluctuations in positive and negative affect, particularly around times which those hormones also fluctuate greatly such as their premenstrual period (Nolen-Hoeksema & Rusting, 2003). However, other studies have reported that these shifts in hormones around a woman's menstruation influence on negative affect levels is inconclusive (Golub & Harrington, 1981), though substantial work has shown that most women report mood shifts prior to menstruation (Johnson, 1987). Other work has looked at the influence of these gonadal hormone fluctuations across a woman's lifespan influence on their neurochemistry and their neuroendocrine system, which has a large impact on one's moods and mood regulation (Steiner, Dunn, & Born, 2003). The evidence from these studies support that gender differences in mood disorders, such as depression, are not as prevalent pre-puberty as they are post-puberty when these hormonal shifts are occurring and may lead to these affective differences in men and women (Kessler & Walters, 1998).

Additional work has looked at gender differences in the influence that well-being, including both affective and psychological, has on the physical and hormonal health outcomes of men and women. This line of works has found that there may be distinctive patterns of health-related outcomes from well-being in men and women, such that well-being leads to different outcomes in the male body versus female body (Steptoe, Demakakos, de Oliveira, & Wardle, 2012). For example, for men, well-being is associated with a smaller waist circumference, and women it led to fewer inflammatory markers in their body, yet both men and women had improved lung function (Steptoe et al., 2012).

Broadly, researchers conclude that while there is substantial evidence that men and women's anatomy and physiology differ, the implications of this on the experience well-being is not well-established (Savic-Berglund, 2010). So, while biological differences are commonly believed to be a contributing factor, more work needs to be done to provide greater supporting evidence.

### **Reasons for Lack of Gender Differences in Overall Well-being**

We note that it is important to explain why we might *not* expect gender differences in SWB due to the number of large-scaled studies we reported with null effects. There is a line of research that proposes why we should not expect many, if any, differences between men and women based on the gender similarity hypothesis proposed by Hyde (2005). This hypothesis proposes that many gender differences are extremely small, if not totally non-existent. Hyde (2005) proposes that men and women are more similar

than they are different. She bases this conclusion on a review of many meta-analyses on gender differences across a wide array of outcomes and characteristics. In this review, she finds that most mean difference effect sizes are small, if not non-significant, on the outcomes of interest. She states that these overly endorsed claims harm men and women by propagating expectations of differences that can have detrimental impact on the lives of men and women, and as such people should be wary of making these conclusions (Hyde, 2005). We propose that it may not necessary be the case that these effects are inherently small, but rather are potentially minimized by other psychological processes that contribute to a rather static baseline of well-being and influence the evaluations one makes in determining their well-being levels. These psychological processes are summarized in Table 7.

<b>Table 7.</b>		
<b>Explanations for Lack of Gender Differences in Subjective Well-being</b>		
<u>Category</u>	<u>Psychological/Physiological Mechanisms</u>	<u>Posited Outcome</u>
Return to Baseline	Adaptation Habituation	Men and women adapt to their respective surroundings leading to little gender differences in well-being overall.  Men and women are not impacted as greatly by aspects of life that become habitual in nature (e.g., inequality or stereotypes) leading to little gender differences in well-being overall.
Basis of Evaluation	In-Group Social Comparisons Values	Men and women may not consider one another part of their in-group and compare they life to others of their same sex leading to little gender differences in well-being overall.  Men and women may value different aspects of life such leading to little gender differences in well-being overall.

### **Return to Baseline**

**Adaptation.** Adaptation is another phenomenon difficult to address in our measurement of SWB that may contribute to seemingly null effects. Adaptation, also labeled the hedonic treadmill (Brickman & Campbell, 1971), is the theorized reason behind the lack of large, long-lasting influences of major life events (e.g., loss of a job, marriage, winning the lottery) on a person's levels of well-being (Luhmann, Hofmann, Eid, & Lucas, 2012; Brickman & Campbell, 1971). More specifically, researchers have found that despite major life events that intuitively one would suspect would have large, long-lasting impacts on one's well-being levels, it appears instead that individuals tend to adapt to their new-found situations and return to their original baseline levels of well-being (Luhmann, Hofmann, Eid, & Lucas, 2012; Brickman & Campbell, 1971). If men and women are not biologically predisposed to experience vastly different levels of SWB, this idea may be one reason behind why we do not see consistent or persistent differences in SWB between men and women in all samples we study. While in the moment stereotypes or restricted resources may impact women more negatively, decreasing their levels of SWB, relatively quickly – due to adaptation – women return to their baseline which may not be much different, if at all, from men's baseline levels of well-being.

**Habituation.** Habituation proposes that constant stimuli begin to fade into the background due to an evolutionary benefit of protecting our limited cognitive resources (Helson, 1948; 1964). This applies to the idea of well-being too, such that well-being is less dependent upon the desirability of the constant, ever-present circumstances (e.g., stereotypes, inequalities), but are more so reflective of changes in the *important* circumstances of life (Carver & Scheier, 1990). As such, once women become accustomed to life

circumstances, such as inequalities, these circumstances may end up having less of an influence on their well-being levels. Thus, potentially diminishing differences between men and women in SWB that would have been present had this state not become habitual in nature.

### **Basis of Evaluation**

**In-group social comparison.** Another challenge of self-reported well-being measures is the inability to determine the extent to which in-group versus out-group comparisons are being made. While some samples may find no difference between men and women, this may be due to women's in-group comparisons being comprised of only other women. Thus, it may be likely that they do not perceive themselves to be any worse off than other women, leading to relatively high levels of well-being. However, in some samples (e.g., working samples) where we do see gender differences in SWB, women's in-group social comparison may include men too, and then comparatively, due to inequalities or social expectations, they may have decreased levels of well-being from making this comparison. Unfortunately, current measures of SWB do not include a way for people to report when these sort of in-group comparisons are being made and how they go about defining their in-group members.

**Values.** Another critical issue that also needs to be considered in comparing the levels of SWB between men and women is that they may derive happiness from different sources. There has been substantial work on differences in what men and women value most in life and their sources of happiness. Past research has suggested that men and women's values differ (e.g., Beutel & Marini, 1995), which may influence the degree to which different aspects of life impact their respective levels of SWB. Work by Beutel and Marini (1995) found that women reported valuing the well-being of others and finding purpose and meaning in life more than men and value materialism and competition less than men. More specifically, some research has explored differences in perceived sources of happiness for men and women, reporting some differences among the sexes. While men reported sports, sexual activity, being liked, and having a quality social life significantly more influential on their happiness than women did. Women reported helping others, being close to family, and being loved as significantly more influential on their happiness levels than men (Crossley & Langdridge, 2005).

Some work has looked directly to differences between the sexes in terms of the influence of life factors have on their subsequent happiness. For example, in a meta-analysis by Pinquart and Sörenson (2001) found that income, education, and SES were more impactful on men's well-being levels as compared to women's, and that social networks were more impactful on women's well-being levels as compared to men's. Subsequently, women and men may go about basing their responses on SWB measures on different value structures, subsequently nullifying differences. If measures instead left less up for interpretation on what aspects of life one should be rating, or considering, in this evaluation, we may see greater gender differences in SWB.

### **Future Directions**

While work addressing the question of gender differences in well-being is not rare, there are several limitations in current research that can be addressed by future work on this subject. As is true in most areas of research, there is a concern that the literature is inundated with only results that are significant, and those that are not significant are relegated to a "file-drawer" either literally or metaphorically (Rosenthal, 1979). While this is by no means a new problem, or an issue only relevant to the study of gender differences in well-being, it is an issue that should be paid particular attention to in an area of research most interested in differences by the very nature of the question being asked. Results that do not find significant differences should be equally valued if we are to have a balanced and complete perspective on this issue and significant results should be replicated to increase confidence in these findings (Pashler & Harris, 2012; Hyde, 2007).

Along these same lines, there is a need for further empirical work on specific theoretical reasons proposed for why gender differences exist rather than simply relying on secondary analyses to answer this question. Theory is critical in providing a foundation for research questions, and it is critical to then test the theory in an empirical manner to further develop an understanding of gender differences in well-being. This may include pinning two theoretical perspectives against one another in an attempt to empirically validate one over the other as has been done some previously (e.g., Mason, 1995). Additionally, research that is more causal in nature may be beneficial to further understand why and when environmental factors, such as inequality, contribute to gender differences in well-being. This may be done by manipulating situations of perceived inequality in a laboratory setting to provide some additional evidence of a cause and effect relationship rather than relying exclusively on correlational-based theory.

Other methods may also be beneficial to incorporate further to develop our understanding of well-being differences among the sexes such as longitudinal investigations. While presently there is work that

compares gender differences across age groups (e.g., Pinquart & Sörenson, 2001; Diener, & Suh, 1997), variations in the magnitude of gender differences in well-being in these studies may be reflective of generational differences rather than differences across the lifespan. Past research has also suggested that longitudinal work may help to distinguish between the frequency by which men and women experience positive and negative emotions versus the intensity that these emotions are experienced by men and women respectively (Diener, Sandvik, & Larsen, 1985). There may be differences in well-being patterns overtime dependent upon whether one is interested in the frequency the emotions are experienced versus the intensity by which they respond to the same or similar emotional stimuli. As such, understanding the fluctuation across both the short-term and long-term using methods such as experience sampling method will provide additional insights that are critical to further understand well-being across time and help untangle the question of gender differences in well-being over time in ecological settings (Tay, Chan, & Diener, 2014).

Additionally, integrating both person-centered (e.g., looking at differences among clusters of individuals on outcomes) and variable-centered approaches in research on this subject may be beneficial to provide further insight as to why there are gender differences in well-being for some samples and not others. Integrating the adaption of a person-centric perspective on well-being will help to preserve the integrity of the person overall in order to understand the way that they shape, feel about, and understand their own well-being (Weiss & Rupp, 2011). This focus would emphasize the experience of the subjective states and experiences at both a momentary level (e.g. positive and negative affect) as well as more cumulative evaluations (e.g., life satisfaction). This would require relying more heavily on both quantitative and qualitative methods such as gathering the histories and narratives individuals create about their lives.

In adopting these methods, we will likely have an increased understanding of gender's relationship to well-being and develop ways to enhance SWB for both men and women. Lyubomirsky (2001) proposed that the greater understanding of why some people, or sexes in this case, are happier may provide the foundation for interventions to increase happiness of the less happy group by drawing on the developable traits, behaviors, and environmental factors of the happier group. Because happiness has been shown to relate to and precede numerous important life outcomes (Lyubomirsky, King, & Diener, 2005), the ability to do this could subsequently improve the long-term success of both men and women in numerous areas of life.

Beyond understanding the causes of gender differences in well-being levels, it is also important to further explore the subsequent repercussions of these differences. Substantial amounts of research have examined the numerous positive outcomes that are believed to be a result of high SWB, but research has failed to examine if these outcomes differ for men and women. This would be important for understanding further the impact differences in well-being has on the lives of men and women. As such, we believe that exploring the differential validities of SWB for the outcomes of men and women separately may be beneficial to having a more complete picture of the impact of these differences in SWB.

### **Concluding Remarks**

Despite the question's popularity in research and the work that has already been done, there is still substantial work that can, and should, continue on the subject in an effort to further our understanding of gender and well-being. While the question of whether men and women differ in levels of well-being is a seemingly straight-forward one, there are numerous complexities involved in answering it. First, it is important to consider the different types, and components, of well-being as a construct. Second, it is important to understand that depending on numerous biological, individual, and environmental factors the difference in SWB may be more or less apparent. Third, one must consider the present limitations in the research and act on the necessary future directions to provide further clarity and understanding. Thus, we hope that taken together these considerations paint a vivid picture of the complex nature of a seemingly simple question. Do men and women differ in levels of SWB? As cliché as it sounds, the answer appears to be, at least for now, "it depends."

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