

A New Global Measure (GSE-1) and a New Aspect-Based Measure (ASE-13) of Self-Esteem

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Abstract

Background: Existing measures of self-esteem are out of date and should be replaced. Global self-esteem measures need to be replaced by an efficient single-item measure suitable for everyday monitoring in clinical settings. Aspect-based measures of self-esteem need to be replaced by a measure that covers not only traditional influences on self-esteem but also contemporary influences brought about by the Internet and social media. **Purpose:** The purpose of this paper is to develop a new single-item measure of global self-esteem and a new and more modern multiple-item measure of aspect-based self-esteem. **Method:** A two-stage method was used. The first stage consisted of a search of academic studies, main media coverage, and social media coverage of self-esteem issues to identify the main traditional and contemporary ones. The second stage consisted of in-depth qualitative interviews to develop the two questionnaires. **Results:** Serious problems with the major existing measures of self-esteem were found and were taken into account in developing the two new measures. Two new measures are offered: the GSE-1, a new single-item measure of global self-esteem, and the ASE-13, a new aspect-based measure of self-esteem. **Conclusions:** The new global measure and aspect-based measure of self-esteem are suggested to be the most efficient and up-to-date measures available. They are easily translatable into other languages using Google Translate or similar, but should be checked for local wording before use.

Keywords

Global Self-Esteem, Aspect-Based Self-Esteem, Measurement Considerations

1. Introduction

Western society has changed with the unstoppable influence of the Internet—half the world's population now has at least one social media account (*GWI.com*,

2022) and, in the U.S., 69% of people are on *Facebook*, with similarly high usage across all demographics except among those adults aged 65 or older, where nevertheless a considerably high 50% use it. Young adults aged 18 to 29 also use *Instagram*, 71%, and *Snapchat*, 65%, and almost all adults in the professional job market use *LinkedIn* (Pew Research Center, 2021). Internet-connected mobile phones also have played an enormous role, with adolescents in the U.S now spending an average of two hours a day texting and another hour and 45 minutes on social media (Twenge, Martin, & Spitzberg, 2019). Not only have our information and communication sources changed radically since the start of the century but so too have many of the issues that affect people's self-esteem. Yet researchers continue to use flawed and outdated measures of it.

For measuring overall or *global* self-esteem, researchers overwhelmingly use the original 10-item or sometimes shortened versions of the Rosenberg's (1965) Self-Esteem Scale, the RSES, or else they use total scores from what are actually *aspect-based* measures covering the suspected causes of self-esteem, such as Coopersmith's (1967) Self-Esteem Inventory, the SEI, which according to Blascovich and Tomaka's (1991) review is the second most widely used measure after Rosenberg's. The major problem with the Rosenberg measure of global self-esteem is its emphasis on positive self-esteem. As will be shown in the present article, the RSES is incapable of measuring negative self-esteem and there are also serious content problems with the measure.

There are serious problems, too, with the main aspect-based measures of self-esteem. One problem is their dated item content, with most of them developed many years ago. These range from the Feelings of Inadequacy Scale, the FIS (Janis & Field, 1959), through to the Self-Perception Profile for Children (Harter, 1985). Another problem is that the existing aspect-based measures are far too long. The FIS, for example, has 36 items, and the Piers-Harris Children's Self-Concept Scale, the CSCS (Piers, 1963), had 80 items originally and has been reduced to the still overly long 56 items in the most recent version (Piers, Shemmassian, Herzberg, & Harris, 2018). A final problem is that these measures were designed for younger age groups, as follows: children ages 10 - 12 for the Coopersmith measure, although in 1981, still 40 years ago, an adult version was developed; children and teenagers ages 8 - 18 for the Piers-Harris measure; teenagers 13 - 17 for Harter's measure; and high school to college students between the ages of 15 and 21 for the FIS. These measures cover traditional aspects of self-esteem relevant to young people but miss newer aspects from the Internet era, and they miss those aspects that become important during adulthood and into old age.

Clearly, today's mental health professionals need 1) a single-item measure of global self-esteem that can be used for monitoring patients in clinical settings or while recovering at home; and 2) a brief multiple-item measure that can be used by social workers, counselors, life coaches, and career advisors to help with any particular self-esteem aspects that are causing problems for the individual.

The article proceeds as follows. First, the need for a single-item measure of global self-esteem is discussed and a new single-item measure is proposed. Second, the need for updating the aspects of self-esteem is discussed and a new 13-item aspect-based measure is proposed. Where appropriate, recommendations are offered for either obtaining professional help or seeking self-help for any self-esteem problems that arise.

2. Measuring Global Self-Esteem

This section begins by pointing out, for the first time in the literature, the many problems with the most widely used global measure of self-esteem, the Rosenberg Self-Esteem Scale (RSES). Next considered and dismissed is what is emerging as the main single-item measure of global self-esteem, Robins, Hendin, and Trzesnieski's (2001) Single-Item Self-Esteem measure (SISE). Lastly, the requirements for measuring global self-esteem are spelled out prior to proposing a new single-item measure.

2.1. Problems with the Rosenberg Self-Esteem Scale

The RSES in its original form is a 10-item measure consisting of five items worded in the positive self-esteem direction and five worded in the negative self-esteem direction (see Table 1(a)). The RSES is freely available for research use and the official version can be found on the website of the University of Maryland's Sociology Department (2021), where Morris Rosenberg was a professor in later life. (Readers should be careful, however, because there are many different versions of the RSES in circulation and these use different numbers of items and different answer scales with different numbers of categories on them. They are not interchangeable and will produce different scores.) In the official version of the RSES shown in the table, the items are answered on a 4-point bipolar answer scale with no midpoint, STRONGLY AGREE, AGREE, DISAGREE, STRONGLY DISAGREE. This bipolar answer scale, however, is wrongly scored unipolar as 3, 2, 1, 0 for the positive items and 0, 1, 2, 3 for the negative items. What you end up with, therefore, is a *unipolar* measure of self-esteem that ranges from low or "zero" self-esteem to very high self-esteem and therefore cannot record *negative* self-esteem. Whereas the problem could be superficially fixed by rescoring the 4-point agree/disagree scale as +2, +1, -1, -2, this change to the scoring of the answers would not solve the rest of the problems with the measure.

These problems are summarized in the parenthesized comments in the right-hand column in the top panel of the table. They include the problem of relative instead of absolute ratings, the problem of ambiguity about what disagreement means, and the problem of having two items, #2 and #9, that would be agreed with by almost everybody and thus provide little useful discrimination. These problems are hidden in coefficient alpha, which takes no account of the quality of the items.

Table 1. Problems with the leading multiple-item measure and the leading single-item measure of self-esteem. (a) Rosenberg Self-Esteem Scale, RSES; (b) Single-Item Self Esteem measure, SISE.

(a)

Items:	Code	Comments		
1. I feel that I am a person of worth, at least on an equal basis with others	P-1	(Relative)		
2. I feel that I have a number of good qualities	P-2	(Almost every person would have some good qualities regardless of self-esteem)		
3. All in all, I am inclined to feel that I am a failure*	N-1	(Disagreement problem)		
4. I am able to do things as well as most other people	P-3	(Relative)		
5. I feel I do not have much to be proud of*	N-2	(Disagreement problem)		
6. I take a positive attitude toward myself	P-4	(Disagreement problem)		
7. On the whole, I am satisfied with myself	P-5	(Disagreement problem)		
8. I wish I could have more respect for myself*	N-3	(Ignores present level for those with high self-esteem)		
9. I certainly feel useless at times*	N-4	(Should be “a lot of the time” and also disagreement problem)		
10. At times I think I am no good at all*	N-5	(Disagreement problem)		
Answer scale:	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

* Reverse scored because negative item.

(b)

Item: “I see myself as someone with high self-esteem”							
Answer scale:	STRONGLY DISAGREE	1	2	3	4	5	STRONGLY AGREE

But there is an even more fundamental problem with the RSES, which is that self-esteem should not be treated as a unitary construct. This point was made most convincingly by Owens (1994), who argued that there are two different and opposite constructs to be distinguished: positive self-esteem in the form of *self-worth*, and negative self-esteem in the form of *self-deprecation*, and that at any one time the individual cannot be experiencing both. To demonstrate this distinction empirically, Owens used the four positive items from the University of Michigan’s Institute for Social Research’s 8-item version of the RSES (O’Malley & Bachman, 1983) to measure self-worth, and the four negative items to measure self-deprecation. Both subscales were scored unipolar so that 1 = NEVER TRUE, 2 = SELDOM TRUE, 3 = SOMETIMES TRUE, 4 = OFTEN TRUE, 5 = ALMOST ALWAYS TRUE. Owens correlated the score on each subscale with the score on Rosenberg, Schooler, and Schoenbach’s (1989) 5-item Beck-type measure of depression symptom severity. The results showed that the self-worth score was unrelated to depression severity ($r = -.01$) whereas the self-deprecation score was strongly related ($r = .52, p < .001$). This means that global measures of self-esteem must be able to separate negative self-esteem from positive self-esteem. No existing global measures do this.

2.2. Problems with Robins et al.'s Single-Item Self-Esteem Measure

A single-item measure of global self-esteem called the Single-Item Self-Esteem measure (SISE) was proposed by Robins et al. (2001)—see Table 1(b)—which is to be answered on a 1-to-5 numerical scale with only the endpoints given, STRONGLY DISAGREE and STRONGLY AGREE. The SISE measure, however, asks only about *high* self-esteem (“I see myself as someone with high self-esteem”) and disagreement does not necessarily mean low self-esteem but rather that the person could simply be disagreeing that he or she has *high* self-esteem all of the time. In fact, as will be shown shortly, few people experience constantly high self-esteem.

A further problem is that the SISE measure, just like the Rosenberg measure, is wrongly scored unipolar, so that strong disagreement is taken as low *positive* self-esteem. This means that the SISE, like the RSES, cannot measure the individual's self-esteem when it is negative.

2.3. The Need for a New Single-Item Measure of Global Self-Esteem

A new single-item measure of self-esteem is needed, a measure that clearly records current positive self-esteem (self-worth) or current negative self-esteem (self-deprecation). This present-time emphasis is necessary because, contrary to what most researchers believe, self-esteem is *highly variable*. Even over a 1-week test-retest interval, the stability of RSES-measured self-esteem is only $r = .82$ (Fleming & Courtney, 1984) which by r^2 indicates only 67% overlap of self-esteem scores on the same measure on the same individual taken just a week later. Stability is even lower over a longer period. For example, O'Malley and Bachman (1983) found that the 1-year test-retest correlation of RSES scores is just $r = .52$, or 27% overlap, and the 3-year correlation is just $r = .41$, or 17% overlap.

Self-esteem stability also varies with *age*, forming an inverted-U shape over the average person's life-cycle. The inverted-U-shape was demonstrated in a large meta-analysis (N of about 30,000) by Trzesniewski, Donnellan, and Robins (2003). The studies included in their meta-analysis most often were based on various-length versions of the Rosenberg measure. An important feature of Trzesniewski et al.'s analysis was that it was statistically controlled to remove the effect of the differing test-retest intervals. The average test-retest stability correlation for 12 to 17-year-olds in their high school years was just $r = .48$, reaching its highest level of $r = .65$ at ages 22 to 29, then falling again to just $r = .48$ for those aged 60 and over.

2.4. New Single-Item Measure of Global Self-Esteem

A suitable single-item measure of self-esteem can be achieved by placing the positivity and negativity not in the item but in the *answer scale* (see Table 2). The new single-item measure, called the GSE-1, asks the straightforward question

Table 2. The GSE-1 measure of global self-esteem. Treatment implications are shown below.

QUESTION: “How do you feel about yourself right now? Would you say you feel...extremely good, or good, or not so good, or very down on yourself?”

Rating scale: EXTREMELY GOOD GOOD NOT SO GOOD VERY DOWN

EXTREMELY GOOD—This suggests harmless hypomania but worth monitoring in case of a possible transition to full-blown mania as in bipolar disorder. GOOD—Self-esteem obviously is normal and requires no treatment. NOT SO GOOD—A mild loss of self-esteem that is probably due to a recent perceived failure or distressing event and likely to dissipate with the passage of time provided that the failure or distressing event does not recur. If it does not go away, the person should be referred to a suitable counseling psychologist. VERY DOWN—Indicates the likely presence of a major depressive episode if the down mood has persisted “most of the day, nearly every day, for the past 2 weeks *and* is causing a marked deterioration in normal everyday functioning” as consistent with major depressive disorder as defined by the DSM-5, in which case the clinician (a physician or psychiatrist) should investigate a trial or resumption of antidepressant medication.

“How do you feel about yourself right now? Would you say that you feel...” The clinician or carer has only to choose between four colloquially worded answer alternatives. They are shown in the table along with their treatment implications.

The four answer options are sufficient because finer-grained answer options would not lead to any alteration in the treatment implications. In other words, these are the only four self-esteem states that the clinician needs to monitor, apart from noting any transition to full-blown mania. A manic episode will be obvious if it occurs in hospital but will depend on an informant’s report if the person is an outpatient because the sufferer rarely realizes it is happening.

The GSE-1, like the RSES and the SISE before it, does not measure the apparent *causes* of ups and downs in self-esteem. For this, an *aspect-based* measure is required.

3. Measuring Aspect-Based Self-Esteem

Development of the new measure of aspect-based self-esteem proceeded in two stages.

The first stage consisted of a search of the academic research literature to identify the main traditional aspects of self-esteem, and a search of mainstream media and social media to identify the most current modern aspects of self-esteem. The mainstream media—daily and weekend newspapers and their health and lifestyle magazine inserts—were searched by the author. Social media were searched by the author’s son—a regular user of *Facebook*, *Instagram*, and *LinkedIn*—who took account of posts and conversations that seemed to be referring to self-esteem issues. After discussing the results of both searches, we chose 13 aspects to proceed to the second stage.

The second stage consisted of in-depth qualitative interviews with each other and with close relatives who could be counted on to report honestly about those aspects of self-esteem that were of concern to them personally. The author ques-

tioned his son about the self-perceptions that most influence the son's sense of self-esteem, and on a suitably later occasion the reverse questioning was used where the son questioned the author about the self-perceptions that most influence the author's sense of self-esteem. Both of us then questioned our female spouses about the self-esteem aspects that most affected them and their close female friends.

The 13 self-esteem aspects are discussed in Sections 3.1 to 3.4 below. These were grouped into four categories based on their salience in everyday life—appearance concerns, self-esteem and relevant others, abilities and self-esteem, and health and gender dissatisfaction. Their conversion into questionnaire items is discussed in Section 3.5.

3.1. Appearance Concerns

Concerns about appearance arise for most people almost every day during the years from late childhood to old age. These mostly pertain to the things we can do something about, namely facial attractiveness, hair satisfaction, and overall appearance as reflected in self-perceived body shape and body weight.

Facial Attractiveness

Facial attractiveness is perhaps of most concern for those between the ages of 16 and 24, the typical dating age bracket, although the age span of concern has been extended in recent decades by the increasing divorce rate resulting in an increasing number of adults looking for new partners, and further extended by people living longer and not wanting to look their age.

Attention to facial attractiveness is objectively evidenced by the rising sales of personal care products. While usage has always been high among women, younger men are now finding it quite normal to use them. Whereas men used to buy mainly shampoo, deodorant, and basic shaving products, they are now increasingly buying facial skincare products such as toners and moisturizers, and are switching to more elaborate shaving products to handle beards and even body-hair (see LEK survey results for the U.S., as reported in [Steingoltz & Santos, 2021](#)). Interestingly, the survey found that men's brands are the most popular and that sales are floundering for traditionally female brands such as Dove and Neutrogena that have introduced lines of their personal care products branded as "For Men."

There is reasonable scientific support for doing the best you can to improve the way you look in public and in social media. This is because facial attractiveness seems to have a small but significant effect on life success. Researchers [Judge, Hurst, and Simon \(2009\)](#) conducted a longitudinal study in which a national sample of adults in the U.S. between the ages of 25 and 75, average age 49, were interviewed initially and had their IQ tested, after which researchers obtained objective ratings of facial attractiveness from front and profile headshot photographs. The participants were followed up six months later to measure their total yearly pre-tax household income from all sources. Whereas IQ was

the strongest predictor of income at $r = .50$ ($p < .001$), followed closely by level of educational attainment at $r = .46$ ($p < .001$), rated facial attractiveness showed a not insubstantial correlation with income of $r = .24$ ($p < .01$). Perhaps more concretely, a meta-analysis by Langlois, Kalakanis, Rubinstein, Larson, Hallam, and Smoot (2000) revealed that 68% of facially attractive adults were above average in terms of occupational success, as compared with 32% of facially unattractive adults.

Facial attractiveness from photographs also has a quite considerable effect on your job prospects. Whereas it is now the norm to not include a photograph on your résumé, mainly because recruiters in large organizations are cautioned about making biased judgments due to the applicant's attractiveness or apparent age or skin color, it has become extremely common to include photos on employment service websites such as *LinkedIn* and many recruiters also check out your appearance and other personal characteristics on *Facebook* or *Instagram*. A well-conducted field experiment by Baert (2018) using mock applications for commerce degree-requiring professional jobs, though conducted only with male applicants, found that highly attractive versus averagely attractive photos on *Facebook* resulted in 30% more recruiter callbacks, and highly attractive versus unattractive photos resulted in an almost 86% callback advantage. Interestingly, and showing possibly that a subconscious mate-seeking bias still exists, the facial attractiveness effect in this male-only study was massively greater if the recruiter happened to be female! In any case, choose your best current photo and remember that you'll be found out if you photoshop it.

Good grooming and neat and fashionable clothing can also help make up for lack of facial attractiveness and lack of self-esteem. Most men—82% in one survey (see Strubel & Petrie, 2016)—said they felt more attractive when they were well-groomed, and careful but not over the top “power dressing” has long been known to help men and women in job interviews (Forsythe, Drake, & Cox, 1985). Dressing well is also readily noticed by others and is reflected in others' first impression of perceived competence (Oh, Shafir, & Todorov, 2020). In a series of cleverly designed experiments, these researchers showed that seven in 10 people will rate face and upper body photographs of the same individuals dressed in fashionable business clothing as more competent than when they are dressed in neat non-business clothing. This effect emerged even though people were shown the photographs for just 1/13th of a second, which suggests that perceived competence is an instant first impression.

Facial attractiveness, possibly related to perceived competence and thus self-esteem, has also increased in importance on the regular Internet during business hours. This is evident in Zoom meetings during Covid, which according to Hall (2020) have reportedly seen an increase in women and to a lesser extent in men undergoing facial cosmetic surgery, including eyelid lifting, wrinkle reduction, and even what is known as smile correction.

Hair Satisfaction

The hair situation has changed radically for men. Previously unheard-of amounts are spent on haircuts—it can cost young men upward of \$50 for a so-called style cut, and the fancy shaved styles can require more frequent visits to the barber for trims. Men’s balding or thinning hair, which used to mean an unsightly comb-over or easily spotted toupee, can now be solved with “the bald look,” which popular reports suggest can make men look more authoritative and intelligent à la Amazon CEO Jeff Besos and Microsoft CEO Steve Ballmer or more powerful à la Bruce Willis and Michael Jordan. Or, if you’ve got the money, you can opt for one of the increasingly sophisticated transplants or hair weaving treatments available today.

Women, on the other hand, have long been used to spending a lot of time on hair preparation to avoid the self-esteem consequences of “a bad hair day” and to paying large amounts for hairdos and hair coloring treatments. Women’s longer and thicker hair means that they can do more with it to enhance overall facial attractiveness. Many older women, too, have had to decide “whether to go grey or not” for self-esteem reasons and this has been a boon for women’s hair-dressers with the ageing of the population.

Body Shape and Body Weight

So-called body image is another almost daily concern for many people and mostly seems to boil down to concern with either *body shape* (muscularity with leanness for men, and a slim waist with at least reasonably conspicuous if not necessarily large breasts for women) or *body weight* (most adults thinking that they look too fat, all too rightly as it turns out, with the obesity rate reaching 42% in the most recent 2017/2018 national U.S. survey, up from 31% two decades ago; see [Centers for Disease Control, 2022](#)). Complacency has also set in with the fact that, due to modern medical advances, people are living longer despite their weight increase, so that overweightness and even obesity now seem to be more of an appearance concern than a health concern. More and more U.S. advertisers are using overweight models in the name of inclusiveness and this has helped to make being overweight more societally acceptable.

Nevertheless, young people, and young women especially, are still very concerned about their body image. In a recent survey of 15 to 19-year-olds ([Mission Australia, 2021](#)) it was found that 47% of female teenagers said they were “very” or “extremely” concerned about body image, whereas the figure for male teenagers who said so was only 15%. Breast implant surgery has reportedly increased dramatically among females of all ages and Botox treatments are becoming more common among men as well as women. As well, there has been a rise in the past several years (see, e.g., [The Butterfly Foundation, 2018](#)) in what is known as *body dysmorphic disorder*, a disorder often accompanied by an eating disorder involving the self-starvation of anorexia or the bingeing and purging of bulimia. The Butterfly Foundation’s estimate (see [Critchley, 2022](#)) is that in Australia, and the figures for the U.S. may be similar or higher, about 8.4% of women and 2.2% of men have an eating disorder, with most of them sadly avoiding seeking

treatment for it.

3.2. Self-Esteem and Relevant Others

Relevant others who have a lifelong effect on self-esteem are one's parents, one's children (if any), and the reaction of rarely seen relatives, acquaintances, or strangers. (Note that we are omitting work colleagues as a source of self-esteem. Whereas they *are* relevant others with an undoubted influence on your self-esteem, the fact is that, apart from trying to be helpful whenever you can, there's really not much you can do to improve their perceptions of you.)

Parental Pride and Your Self-Esteem

Few are those of us who do not care about whether our parents are proud of us. This concern with parental pride starts at school with our schoolwork or sports performance (sporting success has long become an alternative form of achievement for those of lesser scholastic ability) and abates somewhat only in our 20s through 40s when our self-concerns about college or job performance and our early years of married life leave us little time to think about our parents. Concern about what our parents think of us returns later in life, however, and especially in older working age when it's too late to change your career, and all but the most hard-bitten of us become worried about whether we have lived up to our parents' expectations.

Your Children's Pride in You

Then there is the reverse process for those who have children or marry into this situation or adopt them. The teenage years are often the worst. Stephen L. Carter, a Yale law professor and novelist, aptly wrote that "[L]iving with [a teenager] was like climbing Everest every day" (Carter, 2008: p. 165). Anyone with teenage children will realize the truth of this. But even during this often-turbulent period you still want your children to respect you because even though they seem to ignore you, you still serve as their most important role model as they enter adulthood.

Parents have to be very careful here because there is no doubt that parents in western societies are becoming more self-indulgent. It takes only one child-witnessed transgression to do pretty much permanent damage to your children's respect for you. If you suspect you are in this position—and your children will rarely openly confront you about it—probably the best you can do is have a frank talk when they are older about what you now see as foolish and regrettable behavior.

Friends versus Strangers

Friends don't really matter for self-esteem because good friends will stick with you no matter what. What is important, however, is to have at least one or two friends close by to prevent loss of self-esteem through loneliness.

Strangers, on the other hand, do matter for your self-esteem. Most people are sensitive to how strangers react to them, and this includes virtual strangers such as relatives or acquaintances you don't meet that often but also complete strangers

such as department store or boutique store personnel, health professionals, and even service people visiting your home. A good reaction from strangers nearly always boosts your self-esteem and an apparent uncaring or “ignore you” reaction does the opposite. However, it is not feasible to cover all these different types of strangers in a brief questionnaire, and it seems sufficient to include a general question about how comfortable or uncomfortable you feel when meeting strangers.

3.3. Abilities and Self-Esteem

It has long been established in the psychological literature that one’s abilities, or lack of them, are aspects that have a big effect on one’s self-esteem. The early measures of self-esteem were developed mainly for schoolchildren where the contribution of abilities is evident, but the scope of abilities has to be extended to adulthood. The main abilities that affect one’s self-esteem as an adult appear to be college or job performance, physical fitness, handyman ability, and another that has recently come under focus because of the Internet, sexual performance.

School or Job Performance

Academic performance at school seems to be more a concern to parents than to the children themselves, most of whom are far more concerned about peer group acceptance, although it does become a concern for those teenagers attempting to get into a good college or university to enhance their career prospects. The final couple of years at high school is the main stage at which academic performance, or rather the lack of it, is likely to affect young people’s self-esteem. Just how much final grades concern college-bound students is well exemplified by the worrying rise in willingness to cheat on exams when possible and on take-home assignments, all too easy these days with the help of the Internet. A national survey of high school seniors conducted by Rutgers University just over a decade ago (James, 2008) found two-thirds admitting to “serious” academic cheating and nearly all of them saying that they cheat on homework assignments. This is truly shocking and colleges and universities could be forgiven for relying totally on proctored exams such as the SAT for college entry.

It’s different for job performance. You can’t really cheat when your work is constantly being observed in manual and service occupations and regularly being monitored in professional occupations. Poor performance can get you fired or, if you fortunately avoid this you can be overlooked for promotion or else, as the saying goes, moved sideways. For professionals, self-esteem tends to rise with every success and to dip with every perceived shortcoming or failure—see Silverman (1964) for a laboratory demonstration of this—and the old showbiz adage that “you’re only as good as your last performance” is ever present. You can’t fake good job performance and the only solution to regular loss of self-esteem in your job is to set your sights lower and be content with performing very well at the lower level.

Physical Fitness

Physical fitness is much more of a concern today than it was just a decade ago, and it's a concern at all stages of the life-cycle. This is evidenced, for example, by gym memberships, which in the U.S. rose from 50.2 million in 2010 to 64.2 million (pre-pandemic) in 2019, which is a 28% rise in just one decade (*RunRepeat.com*, accessed February 18, 2022). According to this website, the Covid pandemic, as might be expected, caused a 70% hit to gym attendance, with only about 50% of gym patrons planning to return and turning instead to outdoor exercise or purchasing home fitness equipment. This is expected to change as the pandemic dies down, especially among young people, for whom there is an evident social benefit to gym attendance.

The fitness surge, however, is far from universal. As one of the author's business school colleagues, a specialist in market segmentation, put it, "we are splitting into a nation of the fit and the fat." Anyone regularly outdoors these days will have observed that most except the very old either look on the fit side or on the fat side, and objectively confirmed physical exercise statistics support this. Self-reports of exercise are invariably overestimates so you have to look at studies in which people are told to wear a wrist-worn accelerometer or similar monitoring device (Kapteyn et al., 2018). In their accelerometer study, they found that among U.S. adults aged from 40 through to 65, approximately 40% were "active to very active," while, at the other end of the spectrum, another approximate 40% were "inactive," doing no or minimal exercise. The two exercise extremes are consistent with the comment about the fit and the fat.

Physical activity level is strongly correlated with overall self-esteem. Among adults, a direct correlation of $r = .50$ was found in a recent study, and even after controlling for BMI and associated body-image dissatisfaction the correlation remained almost as strong at $r = .42$ (Sani et al., 2016). It is clear that the effect is immediate and causal because moderate to vigorous exercising, at a level at which you find it hard to talk at the same time, drives oxygen to the blood and can release feel-good endorphins, and also can reduce anxiety and depression by "taking your mind off things" and preventing harmful mental rumination (Mayo Clinic, 2022). In the long-term, regular exercise can also aid self-esteem by reducing your weight and keeping the weight off, as long as you don't overeat when not exercising, and has also been shown to improve your posture and balance.

These benefits, along with a substantially reduced risk of contracting cardiovascular disease, can be achieved with regular moderate exercise (150 minutes a week is recommended by the World Health Organization) or a shorter period of vigorous exercise (70 minutes a week, even if it's only done once a week in the "weekend warrior" mode; see O'Donovan, Lee, Hamer, & Stamatakis, 2017). Almost certainly when you reach your 60s you will have to cut back to moderate exercise and reduce your carbohydrate intake. Of all the ways to boost and maintain self-esteem, exercise is the most reliable.

Handyman Ability

Handyman ability, or more neutrally do-it-yourself ability, has increased in importance largely as a result of the DIY craze. Traditionally a male domain, DIY is now becoming unisex, stimulated by the home renovation programs so popular on TV and on the Internet at present (see, e.g., *Familyhandyman.com*, 2022, for the currently top-rated home improvement shows). DIY activities are a self-esteem booster for all except perhaps the very wealthy or very successful who would see them as poor use of their time. Other factors contributing to the rise in DIY are the bleak economic situation in many areas, the high cost of hiring professional trades workers, and the cost of repairs to household electronic items almost reaching replacement costs. You can make yourself more accomplished at almost any DIY task by looking up “how to do it” on *YouTube*.

Sexual Performance

Sexual performance and sexual satisfaction, according to the *World Health Organization* (2006), are major contributors to health and well-being, especially sex in the context of a loving relationship. Sexual behavior, however, has changed radically with the influence of the Internet.

Back when the author was young, the female body was an exciting mystery, but now younger females’ clothing leaves little to the imagination. Much of the mystery has also gone out of nudity, and it is commonplace to be exposed to the naked body, usually female but now occasionally male, in movies and TV shows. Most interestingly, while males react strongly to female nudity, females tend not to react to male nudity when it focuses on genitalia (Bradley, Costa, & Lang, 2015). It also appears that more and more people, from a young age, are seeking out not just nudity but also pornographic sexual acts on the Internet. A recent Australian estimate (Pike, 2020) is that 69% of boys and 23% of girls had seen pornography by age 13.

The behavioral effects of greater exposure to sex have been large. It is perhaps no surprise given the above figures that exposure to explicit sexual activity has had a disproportionately negative effect on *young men*. The nationally representative General Social Survey, conducted among U.S. adults 18 years or older (Ueda, Mercer, Ghaznavi, & Herbenick, 2020), indicates that the percentage of 18 to 24-year-old men reporting having had *no* sex in the past year increased from 19% in 2001 to 31%, or almost one in three, in 2017, and the percentage reporting having sex on a weekly basis fell from 52% to just 37% in the same period. The figures for 18 to 24-year-old *women* were sharply different, with a *no* sex in the past year percentage of a low 15% in 2001 increasing marginally to 19% in 2017, and the percentage reporting having sex weekly, unlike the men’s percentage, staying relatively constant at 53% in 2001 and 51% in 2017. This trend could possibly be the result of young women’s emancipation and seemingly greater willingness initiate or consent to sex, even though there are apparently fewer willing male partners to have sex with.

The rate of participation in gay or lesbian sex by gay or lesbian identifiers also seems to be low. Despite an estimated 16% of today’s older teenage males iden-

tifying as bisexual or gay, only 3% say that have ever had gay sex (Lindberg, Firestein, & Beavin, 2021), and while the percent among older teenage females is considerably higher with 15% saying they have had gay sex, one suspects that some of this may be just kissing and cuddling as inspired by Katy Perry's hit song "I kissed a girl and I liked it".

The gender division in the causes of sexual dissatisfaction is strong. Unrealistic performance expectations seem to mainly affect men, whereas unrealistic satisfaction expectations, particularly about orgasming during intercourse, seem to mainly affect women. (For a healthy dose of reality about these things, see the excellent series on *YouTube* by U.S. surgeon Dr. Rena Malik.) Failed expectations have resulted in a large loss of self-esteem among would-be and current sexually active individuals of both genders. Overly explicit depictions of sex in movies and unrealistic pornography on the Internet are the most obvious causes and this trend is probably irreversible.

3.4. Health and Gender Dissatisfaction

There are two relatively new self-esteem related concerns here. One—self-perceived or "felt" health—has always been a concern but never so much as today with people living to an older age when health problems are most likely to catch up with them. The other is the rise in gender dissatisfaction.

Self-Perceived Health

The best predictor of life satisfaction and, one presumes, self-esteem, as people reach adulthood is self-perceived overall health. The measure used by the World Health Organization in its World Health Survey (Subramanian, Huijts, & Avendano, 2010) is the single-item measure, "In general, how would you rate your health today, VERY GOOD, GOOD, MODERATE, BAD, or VERY BAD?" This and similar verbally rated measures are usually scored binary by combining the top three categories on the good side and the last two on the bad side, with the rating on the bad side found to be the best single predictor of early mortality, quite independently of medically recorded health (Franks, Gold, & Fiscella, 2003).

Note that *mental* health is excluded from measures of self-perceived overall health, even though it is invariably taken into account if self-perceived to be bad. The prevalence of really bad mental health, so-called serious mental illness defined as those DSM-recognized disorders "that seriously impair one or more of several significant life activities and at times require hospitalization" has not changed since DSM-diagnosed recording of mental disorders began in the mid-1980s. These serious mental disorders or SMIs (see Sadock & Sadock, 2007; Wikipedia, 2021) are: *schizophrenia*, with an estimated lifetime prevalence in the U.S. of approximately 1.5%; the serious form of manic-depressive disorder known as *bipolar I*, with an estimated lifetime prevalence of 2%; *major depressive disorder*, with a lifetime prevalence of 12%, although the most serious so-called biological or melancholic form of depression would have a prevalence

of not much more than 2%; and *post-traumatic stress disorder*, with a lifetime prevalence estimated to be about 8% although reaching about 13% in combat veterans.

When you see ridiculous numbers quoted such as the claim that 50% of the population will suffer from at least one mental disorder during their lifetime, you can be sure that this is based on self-diagnosed or psychologist-judged or counselor-judged anticipatory anxiety or event-caused depression, two often mild and related disorders which, as one commentator (Ball, 2022) put it, have become a “get out of jail card” for school or job-related underperformance and for almost any social misdemeanor that public figures commit. But the numbers with physical disorders have been exaggerated too, mainly because of overdiagnosis and pressure from the pharmaceutical industry for medication of every possible complaint.

Gender Dissatisfaction

An estimated 1% of people in the U.S. are born with genitalia that differ from standard male or female, with even fewer, 0.06%—that’s less than one in a thousand—having gender-incorrect male or female chromosomes (Intersex Society of North America, 2022). The abnormal genitalia problem is fairly routinely corrected in hospital after birth but the incorrect chromosome problem is at present medically if not ethically uncorrectable. The self-esteem issue is therefore mainly about *self-identified* sex or gender.

Sociologically, people in western countries have become far more accepting of trans, gay and lesbian lifestyles. In the U.S., for example, attitudes toward gay men and lesbian women have become more favorable over the last 20 years, in 2012 for the first time exceeding 50% of the public saying their attitude is favorable (Drake, 2013). The number of self-identifying gays and lesbians in the U.S. is low but growing. The most recent Gallup survey, conducted in 2021 (Jones, 2022), found that LGBT (lesbian-gay-bi-trans) identification was at 5.6% in 2020 and had increased to 7.1% in just one year. The LGBT identification trend is most dramatic among young adults in the U.S., so-called Generation Z, which comprises those born between 1997 and 2003 and therefore were 18 to 24 years old at the time of the survey. A remarkable 20.8% of these young adults, or one in five, identified as LGBT, a doubling from 10.5% just five years earlier. Of these, 15% identify as bisexual, 2.5% gay, 2% lesbian, and 2.1% transgender although it is unclear what the latter label actually means. With 3.5% not responding, this nets out to just 75% of young American adults today saying they are “straight,” that is, that they are unvaryingly heterosexual.

Note that the 2.1% transgender identifiers are the only ones likely to be dissatisfied with their birth gender. Data from the National Health Service in England (2022) suggest that very few so-called transgender identifiers actually seek treatment for what the DSM-5 calls “gender dysphoria,” suggesting that most trans teenagers and adults do *not* have serious self-esteem problems and that transgenderism is more of a psychological and sociological lifestyle choice. Children are a different matter. Hormone treatment or surgical treatment for

gender dysphoria is extremely controversial, as is the legal question of whether parental approval should be required for children to undergo gender reassignment.

Western society is beginning to normalize the idea of gender neutrality. Last year's Pew national survey indicates that 50% of Americans are comfortable with using gender-neutral pronouns (Minkin & Brown, 2021). Interestingly, as with so many social issues these days, comfort with gender-neutral pronouns is sharply divided by political identification, with 67% of Democrats versus only 31% of Republicans endorsing this usage. And it differs sharply by age group, with 61% of 18 to 29-year-olds in favor versus a still remarkably high 41% of those 65 or older. The present author, a member of the older generation, believes the use of gender-neutral pronouns is liable to worsen grammar and communications and also to have the effect of suppressing due reference to women because in neutral cases if the pronoun is ambiguous people are likely to assume that you are talking about men. Whether gender neutrality of language has self-esteem implications, however, is doubtful.

3.5. The New Aspect-Based Self-Esteem Questionnaire

Thirteen different aspects of self-esteem, as discussed above, were selected for inclusion in the ASE-13 questionnaire (see Table 3). There were two main considerations. Firstly, the aspect questions were placed in what was found in the interviews to be the least sensitive order, beginning with external influences on self-esteem and ending with the more internal and private ones. Secondly, considerable thought was given to the choice of an answer format, realizing that a standard format cannot be used because the sub-attribute differs for every sub-object of self-esteem. Chosen for use, therefore, was the *forced-choice binary* format. In this format, the answer options are customized for each aspect.

It is well worth pointing out for the benefit of researchers the advantages of the forced-choice binary answer format for measuring people's beliefs such as the self-beliefs involved in self-esteem (see Rossiter, 2011; Rossiter, Dolnicar, & Grün, 2015). The main problem with the traditional multi-point answer scales for rating beliefs is that the ratings inevitably mask individual differences in the action threshold for subsequent behavior. Take the typical 7-point numerical rating scale. For some people a rating of 5 will be sufficient for them to consider taking action, whereas for others it will be a rating of 6, and for a few the maximum rating of 7. These threshold differences are lost in the analysis. For example, consider three individuals, each one of which has a threshold at one of those numbers. The researcher would average these as a rating of 6, thus reporting an action threshold that fits only one of the three. A forced-choice binary answer, in contrast, divides everyone at his or her idiosyncratic action threshold. In the new ASE-13 questionnaire, you will see that answers on the right-hand side represent the threshold, for the *individual*, at which remedial action is indicated.

Table 3. The ASE-13 measure of aspect-based self-esteem. This measure is best self-administered before the interview with a counselor. However, the counselor can administer it if the client is likely to have difficulty answering.

YOUR NAME _____ DATE _____

For each life area, circle the *one* answer that you truly feel better describes you. Then move on to the next item, and so on, to the end. If you don't have any children, write "none" under the word "children" and leave the answer blank. However, make sure you have circled your answer for all other items.

Life area	Performance (circle <i>one</i> answer for each)	
SCHOOL/JOB	Going well	Going worse than I would like
FRIENDS	Have enough good friends	I'd like more friends that I can turn to
STRANGERS	Comfortable meeting new people	Uncomfortable
PARENTS	Proud of me, I think	They underrate me, I think
CHILDREN (IF ANY)	I think they're mostly proud of me	Actually, I think they're a bit embarrassed
FACE	Attractive enough	Needs a lot of work to be presentable
HAIR	Satisfied	A worry
BODYWEIGHT OR SHAPE	Pretty good for my age group	Bit ashamed
HEALTH	Good to excellent	Poor to fair
HANDYMAN ABILITY	Passably capable	Pretty useless
PHYSICAL FITNESS	Good	Poor
SEXUAL PERFORMANCE	Mostly good	A worry to me and I get anxious about it
GENDER	Happy with my assigned sex	Misfit and unhappy

A final note should be made about the scoring of the new aspect-based measure. Whereas it may look like a conventional multiple-item measure, it is actually not. Rather, it is a collection of single-item measures, to be used more or less as a *checklist* for recording the aspects that affect that particular person's self-esteem. Unlike with previous aspect-based measures such as Coopersmith's SEI, there is no need to score the aspects numerically and no need to compute a total score. Such total scores are meaningless in any case because they assume that the more numerous the aspects that affect the individual self-esteem the worse the individual's self-esteem will be, whereas the reality, as argued in this paper, is that one's self-esteem is typically buffeted by a single aspect at a time depending on the daily situation. For example, a reminder in the morning mirror of just how overweight you have become is self-demeaning regardless of how you are performing at school or at work and, similarly, unsatisfactory sexual performance is worrying regardless of your abilities in other areas.

The new aspect-based measure is therefore what might be called a *multi-diagnostic* measure rather than a multiple-item measure like the others that have preceded it. Moreover, it is much more efficient than those previous measures because it measures each of the 13 aspects with one good single item (see Rossiter, 2011). If the person rates a particular aspect as unsatisfactory, then this is sufficient for diagnostic purposes and there is no need to distract or confuse the respondent by asking other questions about it before the checklist has been completed.

4. General Summary

Existing measures of self-esteem are outright failures and cannot be saved in any way. They are not even consistent. It was shown more than 30 years ago (Demo, 1985) that the most widely used global measure, the Rosenberg Self-Esteem Scale, and the most widely used aspect-based measure, the Coopersmith Self-Esteem Index, when both are measured on the same individuals, produce scores that are correlated only $r = .58$, thus showing only 35% agreement. Researchers' acceptance of these two very different measures as "measuring the same thing" is entirely unjustified, and can be attributed to the fact that researchers do not pay much attention to what sort of items go into the measure as long as the scores produce impressive psychometric statistics.

The Rosenberg Self-Esteem Scale, for instance, the most widely used measure of overall or global self-esteem, has very high internal consistency as measured by the coefficient alpha statistic. Yet, as shown in this article, the content of the 10 items in the RSES is clumsy—relatively worded instead of absolutely worded items, other items that would be agreed with by everyone, and complete ambiguity about what disagreement with any of the items means. There is no way of saving this famous measure, no matter how much you tweak the wording of the items or change the answer scale. Offered instead in this article is a new single-item global self-esteem measure, the GSE-1, with four clear answer options. This brief measure is intended mainly for clinical monitoring purposes and can be administered by a physician or nurse in a hospital, or counselor in the office, or a carer or close relative at home.

The situation is equally unsatisfactory with measures of what can be called aspect-based self-esteem, such as the Coopersmith measure. These measures seek to identify, at the individual level, the causes of fluctuations in self-esteem. The aspect-based measures most widely used today are outdated. They focus mainly on children and young people's self-esteem, and clearly do not accommodate the esteem-related social and cultural changes that have swept through society in this era of the Internet and social media. Offered in their place is a new and up-to-date aspect-based measure, the ASE-13, which is intended for use by social workers, school counselors, and life and career development coaches (see Wikipedia, 2022) to help individuals who come to them for help with personal problems that are affecting their self-worth.

Both measures are worded in everyday English. This makes it easy to translate them into other languages using programs such as Google Translate, with local adaptations where necessary.

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The author declares no conflicts of interest regarding the publication of this paper.

References

- Baert, S. (2018). Facebook Profile Appearance Affects Recruiters' First Hiring Decisions. *New Media & Society*, 20, 1220-1239. <https://doi.org/10.1177/1461444816687294>
- Ball, J. (2022, February 16). Therapy Generation. *The Australian*, 12.
- Blascovich, J., & Tomaka, J. (1991). Measures of Self-Esteem. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of Personality and Social Psychological Attitudes* (pp. 115-160). Academic Press. <https://doi.org/10.1016/B978-0-12-590241-0.50008-3>
- Bradley, M. M., Costa, V. D., & Lang, P. J. (2015). Selective Looking at Natural Scenes: Hedonic Content and Gender. *International Journal of Psychophysiology*, 98, 54-58. <https://doi.org/10.1016/j.ijpsycho.2015.06.008>
- Carter, S. L. (2008). *New England White*. Vintage Press.
- Centers for Disease Control (2022). *Overweight & Obesity*. Latest National Survey Conducted in 2017/18.
- Coopersmith, S. (1967). *The Antecedents of Self-Esteem*. W.H. Freeman. The SEI Questionnaire Is Conveniently Available in Blascovich and Tomaka, 1991, pp. 129-131.
- Critchley, C. (2022, May 29). Eating Disorders. *The Sunday Telegraph, Wellness Magazine Insert*, 19.
- Demo, D. H. (1985). The Measurement of Self-Esteem: Refining Our Methods. *Journal of Personality and Social Psychology*, 48, 1490-1502. <https://doi.org/10.1037/0022-3514.48.6.1490>
- Drake, B. (2013). *How LGBT Adults See Society and How the Public Sees Them*.
- Familyhandyman.com (2022). *Favorite Home Improvement Shows Ranked*.
- Fleming, J. S., & Courtney, B. E. (1984). The Dimensionality of Self-Esteem II: Hierarchical Facet Model for Revised Measurement Scales. *Journal of Personality and Social Psychology*, 46, 404-421. <https://doi.org/10.1037/0022-3514.46.2.404>
- Forsythe, S., Drake, M. F., & Cox, C. E. (1985). Influence of Applicant's Dress on Interviewers' Selection Decisions. *Journal of Applied Psychology*, 70, 374-378. <https://doi.org/10.1037/0021-9010.70.2.374>
- Franks, P., Gold, M. R., & Fiscella, K. (2003). Sociodemographics, Self-Rated Health, and Mortality in the U.S. *Social Science & Medicine*, 56, 2505-2514. [https://doi.org/10.1016/S0277-9536\(02\)00281-2](https://doi.org/10.1016/S0277-9536(02)00281-2)
- GWI.com (2022). *The Biggest Social Media Trends for 2022*.
- Hall, K. (2020, June 27). Zoom Face' Sees Surgery Spike. *The Daily Telegraph*, 10.
- Harter, S. (1985). *Self-Perception Profile for Children*. Sample Items Available in Blascovich and Tomaka, 1991, p. 141. <https://doi.org/10.1037/t05338-000>
- Intersex Society of North America (2022). *How Common Is Intersex?* <https://ISNA.org>
- James, S. D. (2008). *Cheating Scandals Rock Three Top-Tier High Schools*. <https://ABCnews.go.com>
- Janis, I. L., & Field, P. B. (1959). Sex Differences and Factors Related to Persuasive Ability. In C. I. Hovland, & I. L. Janis (Eds.), *Personality and Persuasibility* (pp. 55-68). Yale

University Press.

- Jones, J. M. (2022, February 17). *LGBT Identification in U.S. Takes Up to 7.1%*. <https://news.gallup.com/poll/389792/lgbt-identification-ticks-up.aspx>
- Judge, T. A., Hurst, C., & Simon, L. S. (2009). Does It Pay to Be Smart, Attractive, or Confident (All Three)? Relationships among General Mental Ability, Physical Attractiveness, Core Self-Evaluations, and Income. *Journal of Applied Psychology, 94*, 742-755. <https://doi.org/10.1037/a0015497>
- Kapteyn, A., Banks, J., Hamer, M., Smith, J. P., Steptoe, A., van Soest, A. et al. (2018). What They Say and What They Do: Comparing Physical Activity across the USA, England and the Netherlands. *Epidemiology & Community Health, 72*, 471-476. <https://doi.org/10.1136/jech-2017-209703>
- Langlois, J. H., Kalakanis, L., Rubinstein, A. J., Larson, A., Hallam, M., & Smoot, M. (2000). Maxims or Myths of Beauty? A Meta-Analytic and Theoretical Review. *Psychological Bulletin, 126*, 390-423. <https://doi.org/10.1037/0033-2909.126.3.390>
- Lindberg, L. D., Firestein, L., & Beavin, C. (2021). Trends in U.S. Adolescent Sexual Behavior and Contraceptive Use, 2006-2019. *Contraception: X, 3*, 1-6. <https://doi.org/10.1016/j.conx.2021.100064>
- Mayo Clinic (2022). *Depression and Anxiety: Exercise Eases Symptoms*. <https://Mayoclinic.org>
- Minkin, R., & Brown, A. (2021, July 21). *Rising Shares of U.S. Adults Know Someone Who Is Transgender or Goes by Gender-Neutral Pronouns*. <https://www.pewresearch.org/fact-tank/2021/07/27/rising-shares-of-u-s-adults-know-someone-who-is-transgender-or-goes-by-gender-neutral-pronouns/>
- Mission Australia (2021). *Youth Survey 2021*. <https://missionaustralia.com>
- National Health Service (2022). *Treatment Transgender Dysphoria*. <https://nhs.uk>
- O'Donovan, G., Lee, I.-M., Hamer, M., & Stamatakis, E. (2017). Association of "Weekend Warrior" and Other Leisure Time Physical Activity Patterns with Risks for All-Cause, Cardiovascular Disease, and Cancer Mortality. *JAMA Internal Medicine, 177*, 335-142. <https://doi.org/10.1001/jamainternmed.2016.8014>
- O'Malley, P. M., & Bachman, J. G. (1983). Self-Esteem: Change and Stability between Ages 13 and 23. *Developmental Psychology, 19*, 257-268. <https://doi.org/10.1037/0012-1649.19.2.257>
- Oh, D., Shafir, E., & Todorov, A. (2020). Economic Status Cues from Clothes Affect Perceived Competence from Faces. *Nature Human Behaviour, 4*, 287-293. <https://doi.org/10.1038/s41562-019-0782-4>
- Owens, T. J. (1994). Two Dimensions of Self-Esteem: Reciprocal Effects of Positive Self-Worth and Self-Deprecation on Adolescent Problems. *American Sociological Review, 59*, 391-407. <https://doi.org/10.2307/2095940>
- Pew Research Center (2021, April 7). *Social Media Use in 2021*. <https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021/>
- Piers, E. V. (1963). *The Piers-Harris Children's Self-Concept Scale*.
- Piers, E. V., Shemmassian, S. K., Herzberg, D. S., & Harris, D. B. (2018). *Piers-Harris Self-Concept Scale* (3rd ed.). <https://WSPublish.com>
- Pike, B. (2020, September 20). The Call for More Sex on the Internet. *The Sunday Telegraph*, 16.
- Robins, R. W., Hendin, H. M., & Trzesnieski, K. H. (2001). Measuring Global Self-Esteem: Construct Validation of a Single-Item Measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*, 151-161. <https://doi.org/10.1177/0146167201272002>

- Rosenberg, M. (1965). *Society and the Adolescent Self-Image*. Princeton University Press. <https://doi.org/10.1515/9781400876136>
- Rosenberg, M., Schooler, C., & Schoenbach, C. (1989). Self-Esteem and Adolescent Problems: Modeling Reciprocal Effects. *American Sociological Review*, *54*, 1004-1018. <https://doi.org/10.2307/2095720>
- Rossiter, J. R. (2011). *Measurement for the Social Sciences*. Springer. <https://doi.org/10.1007/978-1-4419-7158-6>
- Rossiter, J. R., Dolnicar, S., & Grün, B. (2015). Why the Level-Free Forced Choice Binary Measure of Brand Benefit Beliefs Works So Well. *International Journal of Market Research*, *57*, 239-256. <https://doi.org/10.2501/IJMR-2014-048>
- RunRepeat.com (2022). *Gym Membership Trends—U.S.A.*
- Sadock, B. J., & Sadock, V. A. (2007). *Kaplan & Sadock's Synopsis of Psychiatry* (10th ed.). Wolters Kluwer.
- Sani, S. H. Z., Fathierezaie, Z., Brand, S., Pühse, U., Hoelsboer-Trachsler, E., Gerber, M. et al. (2016). Physical Activity and Self-Esteem: Testing Direct and Indirect Relationships Associated with Psychological and Physical Mechanisms. *Neuropsychiatric Disease and Treatment*, *12*, 2617-2625. <https://doi.org/10.2147/NDT.S116811>
- Silverman, I. (1964). Self-Esteem and Differential Responsiveness to Success and Failure. *Journal of Abnormal and Social Psychology*, *69*, 115-119. <https://doi.org/10.1037/h0039858>
- Steingoltz, M., & Santos, E. (2021). *Men's Beauty and Personal Care Is Poised for Handsome Growth*. <https://LEK.com>
- Strubel, J., & Petrie, T. A. (2016). The Clothes Make the Man: The Relation of Sociocultural Factors and Sexual Orientation to Appearance and Product Involvement. *Journal of Retailing and Consumer Services*, *33*, 1-7. <https://doi.org/10.1016/j.jretconser.2016.07.015>
- Subramanian, S. V., Huijts, T., & Avendano, M. (2010). Self-Reported Health. *Bulletin of the WHO*, *88*, 131-138. <https://doi.org/10.2471/BLT.09.067058>
- The Butterfly Foundation (2018). *Insights in Body Esteem*. <https://thebutterflyfoundation.org.au>
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2003). Stability of Self-Esteem across the Lifespan. *Journal of Personality and Social Psychology*, *84*, 205-220. <https://doi.org/10.1037/0022-3514.84.1.205>
- Twenge, J. M., Martin, G. N., & Spitzberg, B. H. (2019). Trends in U.S. Adolescents' Media Use, 1976-2016: The Rise of Digital Media, the Decline of TV, and the (near) Demise of Print. *Psychology of Popular Media Culture*, *8*, 329-345. <https://doi.org/10.1037/ppm0000203>
- Ueda, P., Mercer, C. H., Ghasnavi, C., & Herbenick, D. (2020). Trends in Frequency of Sexual Activity and Number of Sexual Partners among Adults Aged 18 to 44 Years in the U.S., 2000-2018. *JAMA Network Open*, *3*, e203833. <https://doi.org/10.1001/jamanetworkopen.2020.3833>
- University of Maryland's Sociology Department (2021). *The Rosenberg Self-Esteem Scale*. <https://socy.umd.edu/about-us/using-rosenberg-self-esteem-scale>
- Wikipedia (2021). *Serious Mental Illness*.
- Wikipedia (2022). *Coaches*.
- World Health Organization (2006). *Defining Sexual Health: Report of Technical Consultation on Sexual Health*. World Health Organization.