Reconstruction of the Conceptualization of Self-Esteem and Methods for Measurement: Renovating Self-Esteem Research

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Abstract Self-esteem is one of the most prevalent psychological constructs and a target for improvement in environments ranging from schools to communities. However, at the beginning of this century, scientific attempts to determine whether high self-esteem is required for optimal health, adjustment, and performance concluded that it would not produce such beneficial effects. Nevertheless, research and education regarding self-esteem is still being widely conducted in many countries. Considering the current conditions, the present study reconsidered the concept of self-esteem, along with its methods of measurement. First, previous conceptualizations of self-esteem are reviewed and criticized, with a particular focus on Rosenberg's works. Our review shows that many different concepts have been established and utilized. Moreover, it is clear that even if the most widely accepted conceptualization by Rosenberg is right, his scale for assessment that has been most widely and frequently utilized is unable to accurately measure his own ideas. Next, in order to establish a more accurate conceptualization of self-esteem, after indicating various limitations of existing concepts, we discuss whether the recently established concepts of "true self-esteem" by Deci and colleagues and "secure high self-esteem" by Kernis represent viable candidates for an improved conceptualization. In doing so, we introduce nonconscious functions that have been revealed as powerful factors in the determination of human behavior according to recent neuroscience research. Consequently, we posit that the concept of self-esteem needs to be considered in terms of nonconsciousness, underscoring that it cannot be assessed utilizing consciously answered measures such as self-reports, which leads us to introduce the concept of "autonomous self-esteem" in contrast to "heteronomous self-esteem." Moreover, as another measure in place of self-report questionnaires, we describe an implicit association test that is administered to groups of children to assess nonconscious, autonomous self-esteem. Thus, new research and education with respect to this new conceptualization and measurement tool is ready to commence, hopefully renovating the current ideas related to self-esteem.

Keywords Self-esteem, Autonomous self-esteem, Nonconsciousness, Measurement, Implicit association test

1. Brief Historical Perspective

Self-esteem has been one of the most fascinating psychological research topics in terms of its great influences on human living, thus far leading to a plethora of studies. Self-esteem is also a well-known concept to the lay public, and people often regularly discuss it. Specifically, school teachers are interested in cultivating children's self-esteem, frequently assessing it and organizing various programs related to self-esteem. However, the history of research into self-esteem has included considerable confusion in terms of both its conceptualization and assessment, which has led to inconsistent findings regarding the effects of self-esteem on health, adjustment, and performance. Considering these current conditions surrounding self-esteem, there is a need to scrutinize previous research processes and conclusions.

Historically, many scholars, such as George H. Mead, Harry S. Sullivan, Karen Honey, Alfred Adler, Carl Rogers, Erich S. Fromm, Gordon Allport, and Albert Ellis have attempted to define self-esteem and have considered the special benefits of high self-esteem (cf., Coopersmith, 1967). In the domain of psychology, William James was the first psychologist to conceptualize self-esteem (see James, 1890). His simple definition as the ratio of success to pretention is well known and frequently cited, although he added various other detailed conditions determining the level of self-esteem. However, he did not conduct any empirical research regarding self-esteem by himself. If we want to consider the researchers who defined and conducted empirical studies on their own, we need to wait until the 1960s when many new concepts, measuring tools, and

empirical studies of self-esteem started to emerge.

Among several influential researchers, Rosenberg (1965) introduced his original conceptualization of self-esteem along with a questionnaire with which many studies have been conducted. He separated high self-esteem into "very good" and "good enough" categories. Those who regard themselves as "very good" are sensitive to relative outcomes compared to others and unstable in their self-esteem. Meanwhile, those who regard themselves as "good enough" usually think that they are average persons but satisfied with themselves at present. However, they acknowledge that they have imperfections and inadequacies, hoping with confident anticipation that they will overcome these deficiencies. He also developed an original questionnaire to assess his own conceptualization of self-esteem that has been widely and frequently utilized.

Around the same time as Rosenberg (1965), Coopersmith (1967) developed his original conceptualization of self-esteem: "by self-esteem we refer to the evaluation which the individual makes and customarily maintains with regard to himself: it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy" (pp. 4-5). His research is mainly associated with children's self-esteem, underscoring the developmental process of self-esteem. Moreover, he considered self-esteem in terms of general self-esteem, i.e., a unidimensional concept as Rosenberg did.

After Rosenberg and Coopersmith's works, Branden's (1969) work on self-esteem is essential, because it became one of the most crucial factors leading to the self-esteem movement in the USA. His work strongly influenced education and people's individual lives. According to Branden (1992), self-esteem is: "1. confidence in our ability to think and cope with the challenges of life, and 2. confidence in our right to be happy, the feeling of being worthy, deserving, entitled to assert our needs and wants and to enjoy the fruits of our efforts" (p. 8). The first feature is associated with a sense of personal efficacy leading to self-confidence, while the second one is associated with a sense of personal worth leading to self-respect.

Finally, around two decades after the emergence of Rosenberg and others' works, Pope and colleagues (Pope, McHale, & Craighead, 1988), who were interested in children's self-esteem, defined self-esteem as "an evaluation of the information contained in the self-concept, and is derived from a child's feelings about all the things he is" (p. 2). This evaluation is conducted by thinking about the perceived self and the ideal self, as James (1890) did. They considered that children tend to be fairly similar to each other in terms of which areas they value about themselves, due to the structure of their lives and to the developmental tasks facing them. Therefore, they set five areas to assess self-esteem: social, academic, family, body image, and global self-esteem. Although it has been controversial whether self-esteem represents a single factor or plural factors (e.g., Kaplan & Prokorny, 1969;

Richardson, Ratner, & Zumbo, 2009), a plausible answer would be that it includes both a single factor and plural factors. In line with this consideration, research that compares global self-esteem with the one in specific areas in terms of various outcomes should be possible.

2. Relationships between Self-Esteem and Various Outcomes

After many researchers developed conceptualizations and assessment tools for self-esteem, a great number of studies have examined the relationships between self-esteem and various outcomes in terms of health, adjustment, and performance. Most findings appear relatively positive in this regard, promoting the social norm that self-esteem is good and an entity to cultivate. For instance, with regard to mental health, self-esteem is negatively associated with depression (e.g., Murrell, Meeks, & Walker, 1991; Sowislo & Orh, 2013). Regarding aggression, Walker and Bright (2009) reviewed nineteen studies, and reported that twelve of them revealed negative relations between self-esteem and aggression. Moreover, self-esteem is repeatedly found to be associated with academic performance (e.g., Bowles, 1999; Davies & Brember, 1999). It seems likely that self-esteem brings about broad beneficial influences in human life.

However, we cannot ignore the fact that the same number or possibly more studies have provided negative or null findings regarding the relationship between self-esteem and beneficial outcomes. In particular, studies in which causal relationships can be inferred seem to describe an absence of positive relationships. For instance, Baumeister and colleagues repeatedly describe negative findings regarding the assumed positive relationship between low self-esteem and aggression (e.g., Baumeister, Bushman, & Campbell, 2000; Baumeister, Smart, & Boden, 1996). Bushman, Baumeister, Thomaes, Ryu, Begeer, and West (2009) revealed that self-esteem conferred no independent effects on aggression, suggesting instead that those with high self-esteem and high narcissism become most aggressive when insulted. In relation to academic performance, studies that were conducted utilizing longitudinal research designs to enhance the predictive power of causality (e.g., Bachman & O'Malley, 1986; Pottbaum, Keith, & Ehly, 1986) revealed that self-esteem has no direct causal relationships with academic performance, but that socio-economic status, IQ, and initial academic performance improve both self-esteem and academic performance. Moreover, intervention research provided clearer data that programs for enhancing self-esteem decreased academic performance (Skaalvil & Hagtvet, 1990) or at least did not enhance academic performance (Scheirer & Karut, 1979).

Meanwhile, the positive relationships between self-esteem and happiness or life satisfaction (e.g., Diener & Diener, 1995; Furnham & Cheng, 2000) as well as the above-mentioned negative relationships between self-esteem and depression have been relatively stable

phenomena. However, these stable relationships might have arisen from faults in measuring the variables. The items in the questionnaires for self-esteem and happiness or life satisfaction include similar contents, while those in the questionnaires for self-esteem and depression incorporate reverse contents, which suggests that the findings would have been naturally obtained due to the prediction of their positive or negative relationships in advance. Additionally, self-esteem, happiness, life-satisfaction, and depression have usually been assessed utilizing self-reports that include common distortion factors (such as social desirability), which could apparently enhance the relationships.

Of note in this regard, the task force by Baumeister and colleagues that was commissioned by the American Psychological Society (currently the Association for Psychological Science) was conducted to determine whether self-esteem is effective, and if effective, which domain is responsible. In 2001, they found more than 15,000 articles regarding self-esteem utilizing various databases. Thereafter, through their restrictive criteria, they revealed that most of the articles did not employ appropriate methods to predict causality between self-esteem and various personal and social criteria. As a result, they selected relatively few studies that survived the initial screen. As a consequence, they concluded that self-esteem did not decrease aggression, smoking, drinking, illicit drug use, or early sexual behaviors, forming a negative conclusion with respect to self-esteem's effectiveness. They also denied the effectiveness of the programs for promoting self-esteem in clinical and educational settings (Baumeister, Campbell, Kureger, & Vohs, 2003).

Thus, many prior studies revealed negative or null relationships between self-esteem and personal and social benefits, suggesting the potential risks inherent in programs that aim to cultivate self-esteem in schools and communities. However, despite these negative scientific findings, research and educational efforts related to self-esteem have continued. Regarding this trend, Slater (2002) wrote: "Self-esteem, as a construct, as a quasi religion, is woven into a tradition that both defines and confines us as Americans. If we were to deconstruct self-esteem, to question its value, we would be, in a sense, questioning who we are, nationally and individually" (p. 2). It seems likely that many schools and communities have detached from the scientific truth.

3. Recent Terminologies for Self-Esteem and Related Concepts

Given the confounding previous findings related to self-esteem, several researchers have started to reconsider the concept of self-esteem. Rosenberg's conceptualization of high self-esteem that discriminated between "very good" and "good enough" individuals seems to be the origin of this recent trend.

Kernis (2003) divided high self-esteem into "fragile high self-esteem" and "secure high self-esteem." Fragile high self-esteem is contingent on external factors such as comparison with others, and is changeable, maladaptive, and inconsistent with nonconscious self-worth, while secure high self-esteem is not contingent on external factors, and is stable, adaptive, and consistent with nonconscious self-worth. He termed secure high self-esteem as "optimal self-esteem." The core characteristic of optimal self-esteem is authenticity. According to Kernis (2003), "authenticity can be characterized as reflecting the unobstructed operation of one's true, or core, self in one's daily enterprise" (p. 13).

Deci and colleagues (e.g., Deci & Ryan, 1995) introduced new concepts of "true self-esteem" and "contingent self-esteem." According to Moller, Friedman, and Deci (2006), true self-esteem is a form of intrinsic satisfaction, and is relatively stable. Those with high true self-esteem are not conscious of their high true self-esteem. Meanwhile, contingent self-esteem is a contrary conceptualization of true self-esteem, and depends on external achievements or standards the individual sets. True self-esteem leads to beneficial outcomes in terms of both health and performance, while contingent self-esteem leads to unbeneficial outcomes.

These new concepts of self-esteem might resolve prior inconsistent findings. That is, it is plausible that many prior studies with negative results might have utilized measures focusing on contingent self-esteem. However, it is true, as Baumeister et al. (2003) indicated, that many previous studies contained flaws in their methodology to predict causality. Namely, many studies seem to include faults in both assessment tools and research designs, which might in total bring about inconsistent findings.

Yamasaki, Yokoshima, and Uchida (2017) have recently developed new concepts of self-esteem after Kernis' and Deci and colleagues' conceptualizations (Fig. 1). They divided self-esteem into "autonomous and heteronomous self-esteem." These new concepts seem to be similar to Deci and colleagues' constructs. However, although heteronomous self-esteem is almost the same as contingent self-esteem, autonomous self-esteem is different from true self-esteem, despite some similar characteristics. According to Yamasaki et al. (2017), autonomous self-esteem consists of self-confidence, confidence in others, and intrinsic motivation. These three components are in sum termed "autonomy." Moreover, they considered that any of these three components cannot be missing for autonomous self-esteem to be complete. It is noted that the term "autonomy" includes different meanings by researchers and educators (cf. Ryan & Deci, 2006). Ryan and Deci (2000) considered competence, autonomy, and relatedness to affect intrinsic motivation. They termed these three components as "basic needs", and true self-esteem accrues in the context of satisfied basic needs. However, they did not underscore that any of the three basic needs affecting intrinsic motivation cannot be missing for true self-esteem. Moreover, Yamasaki et al. (2017) clarified that autonomous

self-esteem can only be measured nonconsciously. That is, methods relying on conscious reporting (such as self-reports) cannot measure autonomous self-esteem. This notion is so outstanding that we describe it in detail in the next section, in addition to other faults of the previous self-report types of questionnaires.

4. Questionnaires and Other Methods to Assess Self-Esteem

Questionnaires have been widely and frequently utilized to assess self-esteem. Of these, the questionnaire by Rosenberg (1965) has been by far the most frequently used (see Table 1 for the question items). As stated above, he considered that (a) those with appropriate high self-esteem think themselves as average persons satisfied with themselves at present ("good enough" but not "very good") and that (b) they admit that they have many faults, expecting such faults will be improved. When scrutinizing his questionnaire in terms of his conceptualization of self-esteem, the following points are indicated: (1) the questionnaire still has a number of items that were answered in comparison to (see Table 1 for the question items). As stated above, he considered that (a) those with appropriate high self-esteem think themselves as average persons satisfied with themselves at present ("good enough" but not "very good") and that (b) they admit that they have many faults, expecting such faults will be improved. When scrutinizing his questionnaire in terms of his conceptualization of self-esteem, the following points are indicated: (1) the questionnaire still has a number of items that were answered in comparison to others, (2) most of the items cannot discriminate between "good-enough" and "very-good" persons, and (3) no items in this questionnaire can measure the above characteristic of (b).

Table 1.   Items in Rosenberg's Questionnaire (Rosenberg, 1965)

1. On the whole, I am satisfied with myself.

2. At times I think I am no good at all.

3. I feel that I have a number of good qualities.

4. I am able to do things as well as most other people.

5. I feel I do not have much to be proud of.

6. I certainly feel useless at times.

7. I feel that I'm a person of worth, at least on an equal plane with others.

8. I wish I could have more respect for myself.

9. All in all, I am inclined to feel that I am a failure.

10. I take a positive attitude toward myself.

Four-point Likert with the following responses: Strongly agree, agree, disagree, and strongly disagree.

Thus, it is clear that Rosenberg's questionnaire is unable to measure his own conceptualization of self-esteem. In other words, despite wide and frequent usage, it is not certain what his questionnaire measures, potentially leading to many inconsistent findings regarding self-esteem.

Although questionnaires are easily administered, objectively scored, and can assess a large group of people, they include a few unavoidable faults. For instance, their answers are often distorted by social desirability, such as self-deception and impression management (Paulhus, 1984). Specifically, since self-esteem is a socially desirable concept, such distortion often takes place. Moreover, personality characteristics usually work in the nonconscious domain. When required to answer question items, people consciously reflect themselves in terms of the contents of the questions. In this case, if questions include concrete behaviors, they are easily answered referring to memories directly related to the questions. For example, the personality of extraversion can be expressed as a concrete behavior such as "Do you like to talk to others?" Moreover, concepts like extraversion seldom receive distortions from social desirability, meaning that both extraversion and introversion are socially accepted as individual personalities.

However, since self-esteem, especially autonomous self-esteem, is an abstract concept, it is difficult to express concretely. Therefore, when expressed abstractly such as "Are you confident of yourself?," people attempt to refer to concrete behaviors or outcomes close to the contents of the question in memories that are often experiences in comparison to others. In this process, autonomous self-esteem is often changed into heteronomous (contingent) self-esteem. Thus, autonomous self-esteem cannot be assessed utilizing self-reports, while contingent self-esteem that is expressed as concrete behaviors can be. According to the above explanation, Fig. 2 depicts a model showing that autonomous self-esteem cannot be consciously measured.

In line with this consideration, we require measuring methods other than self-reported questionnaires. Although projection methods such as TAT and Rorschach tests represent such candidates, their administration and scoring are both time- and labor-consuming, in addition to suffering from a lack of objectivity. Semi-projection methods include similar faults. Meanwhile, in recent years, a new measuring method that does not rely on conscious attitudes to answer has been developed. The new method, termed "Implicit Association Test" (IAT; Greenwald & Banaji, 1995), attempts to measure the implicit association between two stimuli, e.g., a white (or black) person vs. a pleasant (or unpleasant) word. In this example, if reactions in the task in which a participant presses a right (or left) key when a white person or a pleasant word appears on the computer display and a left (or right) key when a black person or an unpleasant word appears are faster and more accurate than those in the task in which a participant press a left (or right key) when a white person or an unpleasant word appears and a right (or left) key when a black person or a pleasant word appears, prejudice towards black people is predicted to exist. The IAT is utilized in assessing various attitudes (e.g., Lane, Mitchell, & Banaji, 2005), affect (e.g., Quirin, Kazén, Rohrmann, & Kuhl, 2009), life satisfaction (e.g.,

Jang & Kim, 2011), and other factors. In general, implicit characteristics are considered as lying on the preconscious domain (e.g., Quirin et al., 2009). However, to put it more accurately, they should be considered as lying on the nonconscious domain, since the preconscious domain is influenced by the unconscious domain.

Although the IAT has already been applied to the measurement of self-esteem (e.g., Bosson, Brown, Zeigler-Hill, & Swann, 2003), it has never been used for autonomous self-esteem. While not limited to assessing autonomous self-esteem, we need to be careful in the selection of words regarding oneself and others in addition to words regarding positive or negative conditions in the IAT. For instance, the words for others should not refer to other people but to neutral words such as "that" and "it,"

because words regarding other people such as "friends" or "acquaintances" could cause orientation to heteronomous or contingent self-esteem (see Yokoshima, Uchiyama, Uchida, & Yamasaki, 2017, for other cautions in developing IATs for autonomous self-esteem). Moreover, it is noted that the IAT can be administered in a paper-and pencil version (e.g., Lane et al., 2005), which is useful when a group of people (such as large classes in schools) need to be tested simultaneously. In line with this consideration, Yokoshima et al. (2017) developed a paper and pencil version of the IAT for children to measure autonomous self-esteem. Utilizing this new IAT, we are now able to examine the effects of autonomous self-esteem on health, adjustment, and performance.
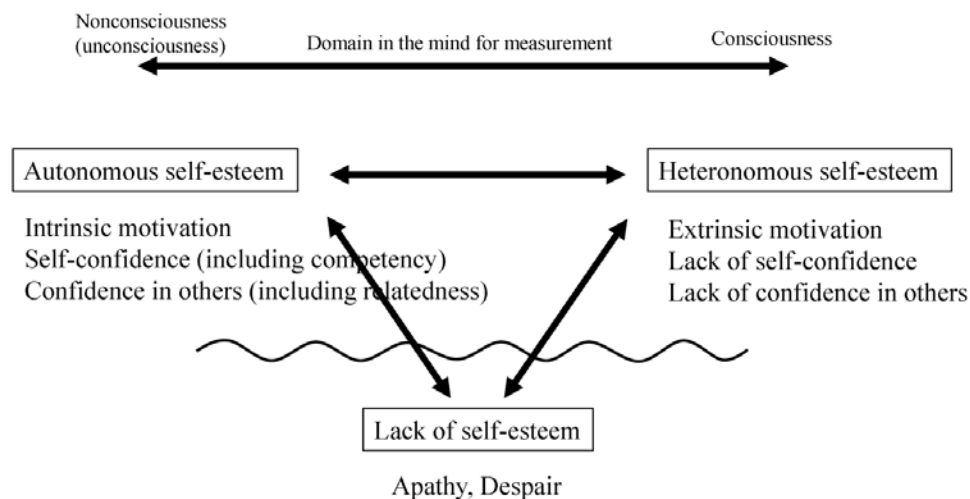

Figure 1. Autonomous and heteronomous self-esteem, along with the mental domains (from nonconsciousness to consciousness) for measurement. Cited from Yamasaki, Yokoshima, and Uchida (2017)
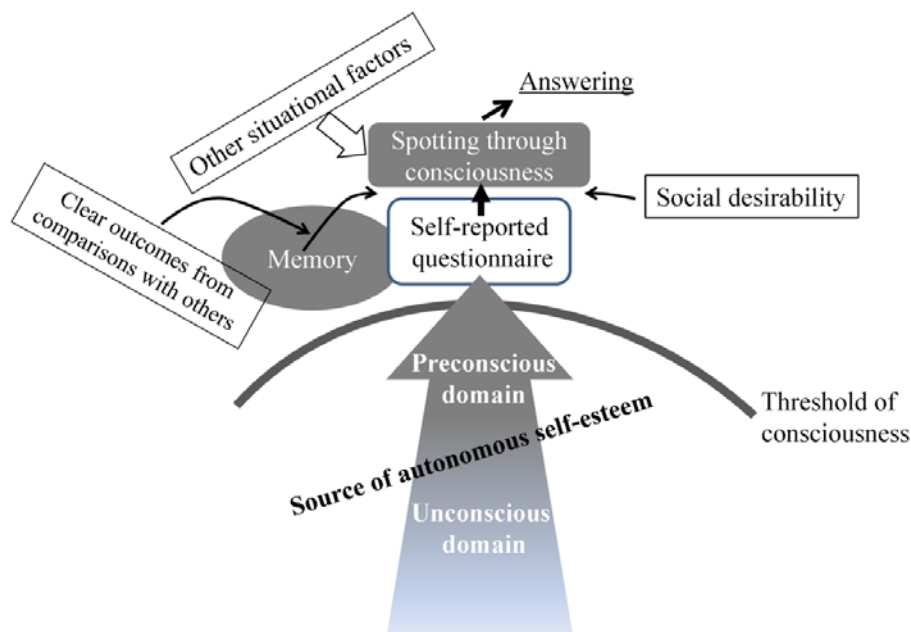

Figure 2. Model demonstrating that autonomous self-esteem cannot be consciously measured

5. Perspectives for Future Research and Education

As stated earlier, despite Baumeister and others' works denying the benefits of self-esteem for health, adjustment, and performance, research and educational programs continue to utilize previous concepts and measuring methods. We conclude that previous conceptualizations and measures for self-esteem include serious problems that require a new construct and measuring method. Psychological research and educational groups can improve their objectives by utilizing modified or novel conceptualizations and measuring methods.

Now that a new conceptualization of autonomous self-esteem has been developed as an undistorted construct that may lead to a healthy, adaptive, and high-performance status, along with the development of a new measuring method, we can commence research and educational endeavors utilizing the new concept and method. In this case, we also need to be careful with measuring health and adjustment status, because if we utilize self-reported questionnaires for these, various factors leading to distorted answers (such as social desirability) could be confounded with the restricted contents respondents consciously notice. So, like the IAT from Yokoshima et al.'s study, a new measure that can assess nonconscious characteristics is also indispensable for health and adjustment measures. Moreover, in line with this consideration, certain overt outcomes such as absences from school or companies due to illness would be useful.

In recent years, a number of studies have started to compare explicit versus implicit self-esteem with regard to their differences on health, adjustment, and performance (e.g., Kernis, Lakey, & Heppner, 2008; Spencer, Joran, Logel, & Zanna, 2005). However, it is unclear what the previous implicit and explicit measures assess, as the current review highlights. Autonomous self-esteem is only assessed utilizing implicit measures at the present time, while heteronomous self-esteem is assessed utilizing either implicit or explicit measures. Considering this distinction, there is no meaning in comparing implicit and explicit self-esteem. Rather, after developing an implicit measure of heteronomous self-esteem, we need to compare between implicit autonomous and heteronomous self-esteem, considering their interactive effects. Although these two types of self-esteem represent contrary concepts, it would be unexpected that either one is zero, which means that everyone bears certain levels of each form of self-esteem. As such, measurement of not only the main effects of autonomous or heteronomous self-esteem, but also their interactive effects, will represent fruitful future research topics.

Many psychological studies have relied too much on self-reports. Self-reports are easily administered and scored, and can target large groups of people. However, many psychological characteristics cannot be measured utilizing self-reports. If we administer self-reports to assess such characteristics, no accurate measurements would be possible. Unfortunately, such studies have often been done, while we suggest the necessity to discriminate psychological characteristics that self-report questionnaires can measure from those they cannot. Continued development and refinement of conceptualizations of autonomous self-esteem will provide the best opportunities to meet the necessity.

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