

## Original article

# Effect of self-concept clarity and social comparison on subjects' affect score

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## Abstract

**Background:** Self-concept clarity relates to one's self-perception as clear, consistent, and temporarily stable. Social comparison is used to define the self, especially when uncertain about their own abilities and opinions.

**Objectives:** This study aimed to examine whether a self-concept clarity threat prime (versus control) influenced affect, after being exposed to an upward comparison target.

**Methods:** The study adopted a 2 (Self-Concept Clarity Prime: Threat versus Control) × 2 (Comparison Target: Upward versus Control) between-subjects design. Subjects were randomly allocated into a self-concept clarity priming manipulation threat (or control) and read about an upward social comparison target (or control), then rated their affect.

**Results:** Subjects primed with self-concept clarity threat showed significantly lower affect than control. Exposure to upward comparison (versus control) showed no significant difference in affect. Additionally, the affect was significantly worse for threatened subjects (versus control) following upward comparison (versus control).

**Conclusion:** These findings provide broad implications and could act as a strategy to raise the affect score of those with low self-concept clarity during the social comparison procedure by boosting a reflection response from them. Future studies should diversify the sample to include a variety of cultures and ages to limit sample selection bias.

**Keywords:** Affect score, self-concept clarity, self-esteem, social comparison.

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Some people possess a clear sense of their identity and of what they want to do in life. These individuals understand their strengths and limitations, the nature behind their personalities, and their values, while others do not. Those who do not, are those without clear self-concept. They are people with low self-esteem, aren't confident in their own skills, and have no clear goal.<sup>(1)</sup> Self-concept clarity indicates an extent to which one's beliefs about their self are defined clearly and confidently, internally consistent, and firm. Basically, self-concept clarity refers to clarity, confidence, coherence, and stability of an individual's perceived personal attributes.<sup>(2)</sup> Differences in self-concept clarity suggest differences in the confidence and the reliability in one's own self-belief, content's independence or accuracy.<sup>(3)</sup> Numerous early scholars tended to treat "self-concept" as a single entity, focusing their researches on only one aspect of self-concept-self-esteem. In contrast, modern-day researchers study "self-concept" as a multifaceted dynamic construal where the self-concept is viewed as an organized cognitive framework which consist of the traits, values, episodic and semantic memories about self, and manage the processing of self-relevant knowledge.

Self-concept, according to Campbell JD, *et al.* is often linked with "self-esteem".<sup>(2, 4)</sup> Various researches in the past demonstrated that self-concept clarity differed in daily life; these findings indicate that self-concept clarity is sensitive to daily moods, events, and self-esteem.<sup>(3)</sup> The idea of individual differences in self-concept clarity came from studies conducted about self-esteem. Self-esteem could be said to be an overall sum of the evaluation of all the salient attributes of one's personality (or self)-representing the general evaluation of one's own value, worth or importance.<sup>(5)</sup> As Guadagno RE. and Burger JM. has discovered, people with high self-esteem possess a positive, well-articulated beliefs, and a more accurate sense of self (personal characteristics) than a low self-esteem individual who is portrayed as mostly neutral and is characterized by high levels of insecurity, inconsistency, and instability.<sup>(6-8)</sup> Simply put, based on the experiment of Campbell JD, *et al.*<sup>(2)</sup> they found out that individuals with high clarity were shown to have high self-esteem, while people lower in clarity were also lower in self-esteem. Furthermore, it was determined that low self-concept clarity is associated with negative affect.

In 1954, Festinger LA, anticipated that most people would often compare themselves with others when they were feeling unsure about their opinion and capacities. It was suspected that due to the unpleasant feeling that came from experiencing low self-concept clarity, these people tend to look for external sources to help them define themselves. With this theory of social comparison in their mind, numerous researchers have also proven that those individuals who usually feel less certain about several aspects of their life-such as their career, their marriage, or their fundamental understanding of some social events, are most likely to take part in social comparison. One of the experiments that support this theory is the studies of Weary G, *et al.* where they learned that people who were uncertain about their decision or belief would be more motivated to engage in social comparison. In addition, individuals with lower desire for cognition and those who have lower to no control over their own life were also found to be more fascinated with getting engaged in social comparison. Throughout all of these diverse studies, "uncertainty" has been conceptualized in many different ways, leading to a conclusion that between uncertainty and social comparison, there is a potential relationship.<sup>(9-11)</sup>

Correlational studies have indicated that individuals who are low in self-concept clarity often engage more in social comparison to superior others.<sup>(10)</sup> Previous researches have studied individuals' responses to superior others-upward social comparison targets. Typically, those results find that after making an upward comparison, the comparers (subjects) experience less positive affect.<sup>(12)</sup> However, social comparison responsive effect was usually influenced by various aspects. In accordance with the theory of Self-evaluation maintenance model (SEM) by Tesser A, *et al.*<sup>(13)</sup> it is assumed that people behave in a manner that will maintain a positive self - evaluation and one's self-evaluation is determined by one's relationship with others. This means that an individual's responses to an upward comparison depend on the attachment and importance of the target to an individual, together with the performance level of individuals themselves. The two main aspects which influences the types of responses to the targets are reflection-which enhances self-evaluations, and comparison-which threatens the self-evaluation.<sup>(14)</sup>

This current experiment will examine whether by priming the subjects' level of self-concept clarity to be low (self-concept clarity threat condition) would decrease the overall affect after reading an article regarding to an upward social comparison target (relative to the control article). Ultimately, the aim of this study is to find out that if being primed with a self-concept clarity threat (relative to a control condition) impacts the affect people will experience after being exposed to an upward comparison target. The independent variables, here, are the self-concept clarity priming condition (threat or control) and the social comparison condition (upward or control). The dependent variable of the experiment would be the affect score of the subjects. This led to three hypotheses this study would offer: 1) Subjects who undergo the self-concept clarity priming threat task will have lower overall affect scores than those that undergo the self-concept clarity control task; 2) Subjects in the upward comparison condition will have lower overall affect scores than those in the control condition; and 3) Subjects that are primed with a self-concept clarity threat will exacerbate the negative effects of exposure to the upward comparison target, compared to the control target. Thus, negative affect following upward comparison (compared with the control comparison) will be significantly worse for those who receive the self-concept threat (compared with no threat).

## **Materials and methods**

### ***Study design and population***

There were 88 undergraduate students who enrolled in Social Psychology (PSYC3017) at the University of Sydney and participated in this study. These subjects (72.7% female, 26.1% male, and 1.1% others; mean age =  $21.3 \pm 2.3$  years) were recruited via their attendance during tutorials and the majority of them identified English as their first language (77.3%).

A two by two between-subject design (Self-concept clarity prime: Threat versus control and Comparison target: Upward versus control) has been used in this study. The research subjects were randomly divided into two groups, a self-concept clarity threat condition or control condition, and were then provided with either an upward or control comparison. The outcome of this study, which is the affect score, is the dependent measure.

## ***Materials and measures***

### ***Self-concept clarity priming***

The treatment group were instructed to write down their personal traits and subsequently choose two opposing traits that have a significant impact on their life.<sup>(15)</sup> In contrast, subjects in control condition were only instructed to write about a location they had once visited.

### ***Priming manipulation check***

In this part, the subjects were asked to complete a 12-item measure of self-concept clarity scale<sup>(2)</sup> assessing the degree to which they felt they had a clear sense of self-concept clarity-with 1 as strongly disagree and 5 as strongly agree. Some items that were worded in a way that implied a lower self-concept clarity such as "My beliefs about myself often conflict with one another" will be reverse scored. Then the score would be added up, which range from 12 to 60.

### ***Social comparison target manipulation***

The target was assigned to read 2 different articles; a news article about a Young Alumni award recipient for the upward comparison group and an article about Sydney City Farm for the control group

### ***Article comprehension check***

Each subject was given a score out of 7, where a higher score indicated better comprehension of the article.

### ***Affect***

A total of 36 items were rated by subjects (the affect score), with an equal number of positive and negative terms. They rated with a scale where 1 represents "not at all" and 5 represents "very much". We then calculated an overall affect index score by subtracting the average composite negative score from the average composite positive score, which could range from -4 to 4. Higher scores indicate greater affect.

### ***Demographic variables***

The study collected and assessed the demographic fact about the subjects. This include their age, gender, and whether was English their first language.

### **Social comparison relevance check**

We check the significance article to the subjects using the scale which would be from 1 to 5, with the lowest as completely irrelevant and the highest as completely relevant.

### **Procedure**

Before the study start, every subject was told that the aim of this study is to find out if writing a passage would change or affect how people perceived different types of journalism. They were given the consent form, and only after signing it would they be randomly assigned to either the self-concept clarity priming manipulation task or the control task. This procedure is adapted from the study of Emery LF, *et al.*<sup>(15)</sup> where the subjects were asked to reflect on their own features, qualities, and position in society, and then to write about any tensions among them. Those in the control task were instructed to describe a location they had visited before. Then, they underwent a priming manipulation check before being randomly assigned either a social comparison target article or the control article. After they finished reading, they were presented with a brief comprehension task to assess their understanding and were asked to rate their affect. Finally, they completed some demographic questions, and rated how relevant they think the article was, before they were told more about the study and the purpose of the experiment. In terms of reliability of the questionnaire, researchers find internal consistency of the questions by means of Cronbach's Alpha, simply because of the use of only one testing of the sample. The result of the analysis shows that the reliability of this indicator is quite high, accounting for 0.72.

### **Statistical analysis**

Data were expressed as mean and standard deviation (SD).  $P < 0.05$  was considered statistically significant.

### **Results**

A two by two analysis of variance (ANOVA) was used to examine the effect of a Self-concept clarity prime (threat versus control) and Comparison target (upward versus control) on the participating undergraduate students' affect score. The mean affect score of the undergraduate students by self concept-clarity priming and comparison target conditions are presented in the table below (**Table 1**).

It was as predicted, the results showed that those in the self-concept clarity threat condition (mean =  $0.8 \pm 1.3$ ) has significantly lower affect score in comparison to those in the control condition (mean =  $1.5 \pm 0.9$ ), averaged over the exposure of all comparison target ( $P < 0.05$ ).

However, contrary to what was expected, those in the upward comparison target group (mean =  $1.0 \pm 1.3$ ) appeared to have lower affect score than those in the control condition (mean =  $1.3 \pm 1.0$ ). Nonetheless, the results has shown that the difference between the affect score is not statistically significant, ( $P = 0.46$ ) averaged over the priming manipulation.

Furthermore, as hypothesised, the overall more negative affect was significant worse following the self-concept clarity priming threat (compared to no threat) than those who were exposed to upward comparison target (compared to the control target) ( $P < 0.05$ ). It was found that the overall negative effect of self-concept threat on affect was significantly dependent on whether a subject received an upward comparison or a Control Comparison (**Table 1**). Specifically, the result indicated that the affect score was significantly worse for Threatened vs. Non-threatened subjects when exposed to Upward (vs. control) Comparison.

**Table 1.** Means and standard deviations of affect by self-concept clarity prime and comparison target (n = 88).

	Self-concept clarity threat		Self-concept clarity control	
	Mean	Standard deviation	Mean	Standard deviation
Upward comparison	0.5	1.4	1.7	0.8
Control comparison	1.2	1.1	1.3	1.0

## Discussion

The result of this study provides answers for the three hypotheses that was formulated at the beginning of this paper. The three hypotheses are that first, subjects in the self-concept clarity priming threat task (lower self-concept clarity) will have lower overall affect scores than those in the self-concept clarity control task. Secondly, subjects in the upward comparison condition will have lower overall affect scores than those in the control condition. Lastly, subjects primed with a self-concept threat will exacerbate the negative effects when they are exposed to the upward comparison target, compared to the control target. As expected, subjects that were primed with self-concept clarity threat showed a significantly lower affect than those in the control condition. On the other hand, while the subjects in the upward comparison group obtained lower affect scores when comparing to those in the control condition, the difference between their affect scores was not significant enough. The result also indicates that the negative affect following subjects that are primed with a self-concept clarity threat (versus no threat), was significantly worse following the exposure to the upward comparison target (versus control target). This means that only the second hypothesis is wrong, while the rest is correct. The fact that subjects who were primed with lower self-concept clarity showed a lower affect is consistent with the previous research of Nezlek JB, Plesko RM.<sup>(3)</sup> as low self-concept clarity is associated with higher and more persistent negative affect. Furthermore, the reason that the second hypothesis has been disproved may be because, as with the theory of SEM by Tesser A, *et al.* <sup>(13)</sup> the subject in upward social comparison condition (those who receive young alumni award in the experiment) have less or no personal attachment to the target. After all, according to this theory, the effect of the Self-evaluation is influenced by the level of performance and how important and attached the subjects are to the target. The study of Campbell JD, *et al.* <sup>(2)</sup> supported the study's finding that lower self-concept clarity is related to negative affect-such as high neuroticism, low self-esteem, low agreeableness, and low dependability as they found out that self-concept clarity is a resource which assists the regulation of affect and performance. Due to this, the reason why self-concept clarity is associated with negative affect is because there are limited resources to respond to social environment and to regulate

emotions which leads to lower affect. Based on Tesser A, *et al.*<sup>(13)</sup>'s theory of self-evaluation maintenance, reflection might have appeared within subjects with high self-concept clarity. Consequently, these subjects may have been encouraged by the article of the upward social comparison targets and thus, believed that they may also achieve the same thing. This would end up in no negative affect. In contrast, subjects with lower self-concept clarity would think that those upward social comparison targets are too high to compare themselves with and would believe that they could not achieve the same. People often tend to compare themselves with individuals similar to them, hence a target out of their league would not result in a social comparison with the target. Therefore, it would not influence the self-concept clarity of the subjects.<sup>(9)</sup>

These finding demonstrates that the interpretations of the upward social comparison may vary between people-due to their different levels of social comparison placement as they have the affinity to keep on comparing themselves with others. Hence, it is suggested that, for future study, comparison placement is another element that should be looked at and measured. The findings also provided implications that priming manipulation task could impact individual's self-concept clarity in various ways. This is a vital finding that undoubtedly needs to be taken into consideration for any future studies that observe similar relationship. Similar potential studies should contemplate measuring the self-concept clarity before and after the priming manipulation task. The present study assumes that it was the dynamic process which influences individuals' emotions and behaviours, however the individual differences among the subjects, in terms of their emotions and experiences, should also be considered. For any future researches, it is recommended that a paired samples *t* - test should be used as the test would permit changes in comparison of individuals' differences in self-concept clarity over times.

## Conclusion

If one wishes to replicate this study for future researches, he or she should also carefully examine the samples target group as undergraduate students are individuals whose life stage are at the stage where their self-concept clarity and regulation skills are not yet stable.<sup>(15)</sup> People of different life stages would yield different perspectives than just one type of target group. Accordingly, by using samples with subjects

from different age groups and backgrounds, one can explore further relationship between social comparison and self-concept clarity. It is worth noting that how different genders should be designed to proportionately represent the sample size and how factors such as social and cultural backgrounds of the subjects should be taken into consideration may moderate the impact of independent variables on affect. This is to avoid situation such as sample selection bias. In conclusion, these findings provide broad implications and could act as a strategy to raise the affect score of those with low self-concept clarity during the social comparison procedure by boosting a reflection response from them.

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### Conflicts of interest statement

Each of the authors has completed an ICMJE disclosure form. None of the authors declare any potential or actual relationship, activity, or interest related to the content of this article.

### Data sharing statement

The present review is based on the references cited. Further details, opinions, and interpretation are available from the corresponding authors on reasonable request.

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