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Learners' habitual social comparisons can hinder effective learning partner choice

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ABSTRACT

Students' achievement heavily depends on who they learn with and from in school. We investigate how the habitual tendency to compare and strategic social comparison motivation influence who students seek to learn with. Specifically, we propose that a predisposition to habitual social comparison (i.e., high Social Comparison Orientation) overrides learners' strategic social comparison motivation. In two studies, we measured students' Social Comparison Orientation and strategic social comparison motivation in the context of a coming cooperative learning task. We then assessed the influence of habitual tendencies and strategic social comparison motivation on students' choice of learning partner for an upcoming learning task. Across both studies, we found that only participants who were not predisposed to habitual social comparison benefited from strategic social comparison motivation. This finding joins a growing body of work documenting the importance and impact of habitual social comparison in the context of knowledge exchange between peers.

1. Introduction

Collaborative learning is widely employed at all levels of education (Johnson, Johnson, & Smith, 2007). Learning partners are sometimes student-selected and sometimes assigned by an instructor. Allowing students to choose their own learning partner can be useful for several reasons. First, having a choice, and thus a sense of control over a situation, motivates students to engage with learning (for an overview see Pintrich, 2003). Also, having a choice is generally a strong intrinsic motivator for learners to put effort into a task (Lewin, 1999; Patall, Cooper, & Robinson, 2008). Overall, higher levels of perceived control help students to achieve higher levels of performance, and students who feel in control of their learning are more likely to do well than students who do not feel in control of their learning (Pintrich, 2003).

When given a choice in learning partner, it would seem most effective for students to seek the most capable learning partner available – provided the gap in knowledge is not so large that communication becomes difficult, more capable learning partners will be able to share more information. At the same time, people might be intimidated by a more capable partner or might prefer another partner for social reasons. This raises the question of how learners deal with competing inclinations when choosing a learning partner. The current research sought to provide an answer to this question by studying the impact of (a) learners' habitual tendency to compare with others and (b) strategic comparison motivations that might influence learning partner choice.

While learning collaboratively, students are constantly confronted with others who provide comparison information on metrics such as grades, cognitive performance, and physical performance (Dijkstra, Kuyper, van der Werf, Buunk, & van der Zee, 2008; Levine, 1983; Pepitone, 1972). Evaluating one's self through comparison with others (i.e., social comparison) is common and often healthy (e.g., in supporting academic achievement or in coping with major illness; Dijkstra et al., 2008; Festinger, 1954; Taylor & Lobel, 1989)

At the same time, there are stable individual differences in people's habitual tendency to make use of comparison information (Gibbons & Buunk, 1999). Tests of the most common Iowa-Netherlands Comparison Orientation Measure indicate a stability of $r \geq 0.6$ across seven months and more (Gibbons & Buunk, 1999). Individual differences in Social Comparison Orientation have well-documented impacts in a variety of domains, such as satisfaction with social life, burnout among nurses, and relationship satisfaction (Buunk, Groothof, & Siero, 2007; Buunk, Zurriaga, & Peíro, 2010; Dijkstra, Buunk, Tóth, & Jager, 2007). Moreover, learner predisposition to social comparison influences information sharing during collaborative learning. Learners who are predisposed to comparison more effectively seek

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the information available from more knowledgeable learning partners during study (Neugebauer, Ray, & Sassenberg, 2016) but share less information with less knowledgeable learning partners (Ray, Neugebauer, Sassenberg, Buder, & Hesse, 2013). That is, predisposition to social comparison can both enhance and undermine cooperative learning depending on whether those predisposed to social comparison are more or less knowledgeable than learning partners.

For those predisposed to social comparison, drawing comparisons might be best viewed as habitual. Comparisons are often drawn without intention (Langer, Pirson, & Delizonna, 2010). In fact, Gilbert, Giesler, and Morris (1995) argue that unwanted social comparisons are sometimes corrected after being made automatically instead of being avoided in the first place (see also Gilbert, 1991; Wilson & Brekke, 1994). These authors suggest that comparisons can be natural and effortless reactions to the behavior of others rather than mental operations that one chooses to perform. Among those predisposed to social comparison, the use of social comparison in evaluation and decision-making appears to reflect such automatic and routine use (Jonas & Huguet, 2008).

At the same time, comparisons can be strategic and deliberate. In fact, almost everyone will utilize social comparison when comparison serves current goals (e.g., Taylor & Lobel, 1989). For example, patients struggling with life-threatening medical diagnoses routinely use comparison with less fortunate others to bolster psychological well-being (Taylor & Lobel, 1989).

People engage in strategic social comparisons for a variety of reasons (Dijkstra et al., 2008). Historically, researchers proposed that people seek comparisons in order to accurately evaluate their abilities, that is, to acquire information about the self (e.g., Festinger, 1954). According to this idea, social comparisons serve to reduce a state of uncertainty about one's standing. More recent theories suggest that people also engage in social comparison with the motives of self-improvement (learn from others and improve one's performance) and self-enhancement (preserve or enhance self-esteem; Wayment & Taylor, 1995; Wood, 1989). When social comparisons are drawn to self-improve, the aim will be to detect one's own deficits and to find strategies to make up for them. When social comparisons are drawn to self-enhance, the aim will be to improve one's self-esteem.

When used in the context of learning, strategic social comparison tends to support the aim to learn. In classroom settings students mainly seek self-improvement by comparing with better performing others, even at the cost of a less positive academic self-concept (Dijkstra et al., 2008; although other patterns can emerge in different settings, e.g., Jones & Buckingham, 2005). Furthermore, people often choose to compare upwards after experiencing failure in order to get hope and inspiration as well as to learn how they can improve their performance (Ybema & Buunk, 1993). People even choose upward comparison in order to achieve self-enhancement (i.e. increased positive self-evaluation) through self-improvement (Collins, 1996). That is, although self-enhancement might sometimes be served by downward comparison after assessments, in the long-term, self-enhancement is better served by improving one's own ability ahead of assessment. This is especially true among learners with reasonable self-efficacy (i.e., learners who believe that their learning effort will lead to improved ability; Crocker & Park, 2004). In the context of learning, different reasons for engaging in strategic social comparison are thus fairly uniform in prompting upward comparison in support of learning.

Overall, we draw a contrast between habitual and strategic tendencies to engage in social comparison. Social comparisons are often drawn indiscriminately and habitually, especially by individuals predisposed to view the world through the lens of comparison (Gibbons & Buunk, 1999). On the other hand, social comparisons are frequently deployed deliberately and strategically in the service of self-evaluation, self-improvement, and self-enhancement (Dijkstra et al., 2008; Taylor & Lobel, 1989; Wayment & Taylor, 1995; Wood, 1989).

Given this contrast, how might different reasons for social comparison ultimately influence learners' choice of a learning partner? Clearly, habitual action and strategic action might often differ in their outcomes. To our knowledge, however, no one has yet explored the intersection of these different reasons for social comparison.

We propose that the influence of strategic social comparison motives will depend on a learner's predisposition to habitual social comparison. Because habitual actions tend to overrule strategic and motivational inclinations (Ji & Wood, 2007; Neal, Wood, Wu, & Kurlander, 2011), we predict that comparison by learners predisposed to habitual social comparison will be relatively less guided by strategic concerns. That is, we expect that those in the habit of social comparison will not change their behavior in reaction to strategic concerns. In contrast, we predict that learners not predisposed to habitual social comparison will be able to accommodate strategic comparison motives because they are not guided by a habit. In sum, we predict that strategic social comparison motives will influence learning partner choice only among learners not predisposed to habitual social comparison.

We tested our hypothesis in two studies in which we created the need to choose a future learning partner, in which we measured students' predisposition to habitual social comparison, and in which we measured participants' strategic motivation for comparison. We then observed the effect of participants' predisposition to habitual comparison and participants' strategic motivation for comparison on participants' learning partner choice. In Study 1 we used a scenario methodology. In Study 2, we constructed an actual learning choice.

2. Study 1

2.1. Method

2.1.1. Participants and design

An online study with Social Comparison Orientation and strategic social comparison motives as continuous predictors was conducted. The original language of the questionnaire was German, although we report English translations here. Participants received a lottery ticket for compensation with which they could win one of five 20 € online vouchers. In this study and in Study 2, individuals that had frequently participated in past studies and were potentially familiar with the study material, as well as participants who were non-native speakers, were excluded from analyses.[1] The final sample consisted of 150 undergraduate students at a large German university (124 women, 26 men, M_{age} = 22.97 years, range: 18–34). This study was conducted in line with the ethical guidelines of the American Psychological Association. Ethical approval for this study was received from the ethics committee of the Leibniz-Institut für Wissensmedien under the number LEK 2011/005.

2.1.2. Procedure

Participants were invited to take part in two ostensibly separate studies: first some personality questionnaires and afterwards a scenario study. After receiving this information, participants completed the measures of habitual social comparison (i.e., Social Comparison Orientation) and strategic social comparison motives (for details about the measures see Section 2.1.3). Next, participants were asked to imagine that they had to pass a class involving two exams. Participants had scored a 2.7 on the first exam (on a scale of 1 to 5, with 1 being the best and 5 being the worst possible score) and now had five weeks before they have to take the final exam. Participants were then told that they could choose with whom they would like to prepare for the upcoming exam. The particular subject of study was not specified.

[1] These participants were excluded, because the text based materials required good language skills. Moreover, participants who had seen the materials before or have been debriefed about experimental manipulations in too many other studies, are likely to react differently to the current materials. Unfortunately, our participant pool did not allow us to filter ahead of time according to these criteria.