**Abstract**

Self-esteem has a long history concerning its relationship with achievement and well-being, both of which are important issues in higher education. Whilst historically, high self-esteem has been touted as having positive benefits for student success and well-being, the present paper explores how self-esteem, namely when it is contingent and based on one’s academic work, may be more detrimental than beneficial to these outcomes. Evidence regarding academic contingent self-worth is reviewed with the main outcomes being that it can produce deficits to one’s learning, success, and well-being. A lot of the reviewed evidence therefore goes against popular wisdom that investing in one’s academic work can produce positive outcomes. Strategies to tackle contingent self-worth are discussed including reducing levels of contingent self-worth, changing the culture of learning in higher education, the role of learning orientations and self-compassion.

*Keywords:* self-esteem, learning, well-being, achievement, contingent self-worth

**Introduction**

Two issues in higher education are that of student achievement (Pascarella et al., 2010), and student well-being (Thorley, 2017). There is general agreement that active engagement with learning, persistence toward one’s goals, and a sense of autonomy are key ingredients to success (e.g., Boud, 2012; Kolb, 1984; Kuh, 2003). Regarding student well-being, students in higher education show increased levels of depression and anxiety, and lower well-being, than the general population (Evans et al 2018; Thorley, 2017).

Scholars have often pointed to the role of self-esteem in student learning, achievement and well-being (Baumeister et al., 2003). For example, early research focused on the role of global self-esteem and how it may positively relate to academic success (Baumeister et al., 2003). Contemporary perspectives, however, propose that it matters less about having high self-esteem, and more about how one pursues this self-esteem, and what they see as relevant to it (Crocker & Park, 2004).

This review focuses on academic contingent self-worth (ACSW; Crocker & Wolfe, 2001), and how this may hinder, rather than promote, effective learning and success (Crocker et al., 2006), as well as being detrimental to well-being (e.g., Schöne et al., 2015). A domain-specific approach to self-esteem may be a more relevant construct to understanding issues in higher education, as domain-specific approaches tend to show stronger predictive value (Crocker & Wolfe, 2001). The review will discuss some potential strategies regarding how to tackle issues of self-esteem in higher education.

**Contingent self-worth**

Self-esteem is often conceptualised as one’s evaluation of the self, their personal worth or value (Greenberg, 2008). Self-esteem is both trait-like, and can regard one’s general evaluation of the self (global self-esteem), which tends to be consistent across time; and state-like, as people can experience moment-to-moment fluctuations in their self-esteem (Leary, 1999). Theoretical accounts assert that people are motivated to strive for, and maintain, high levels of self-esteem. While having high levels of self-esteem is adaptive (Pyszczynski et al., 2004), the pursuit of self-esteem is not necessarily so, and can be destructive (Greenberg, 2008). The pursuit of self-esteem can undermine one’s physical and psychological well-being (Crocker & Park, 2004), such as by striving to meet unrealistic appearance standards in pursuit of self-worth.

Of course, people often hold different beliefs about what it means to be a person of value, and as such, stake their self-worth in different domains (e.g., appearance, academic competence, virtue) (Crocker & Wolfe, 2001). By doing so, these individuals may often view their self-worth as *contingent* upon specific outcomes in that domain (Crocker et al., 2006). Contingencies of self-worth, particularly when based on external aspects of the self (i.e., academic competence, appearance), require continual and consensual validation, so are considered a more unstable source of self-esteem (Crocker & Park, 2004).

Evidence suggests that contingent self-worth can bear negative consequences for one’s psychological health. External contingencies of self-worth are negatively related with authenticity, self-compassion, well-being, and global self-esteem; and are positively related with narcissism, neuroticism, hostility, instability of self-esteem, negative affect and depression (Crocker et al., 2003a; Vonk & Smit, 2012). They are also related to maladaptive behaviour such as binge drinking, and disordered eating (Crocker, 2002).

**Goal setting and persistence towards one’s goals**

ACSW can produce some temporary benefits to one’s learning as it can motivate goal pursuit within the domain that it is staked (Crocker & Park, 2004). For example, ACSW positively predicted students’ self-reported time spent studying during their first term, when controlling for gender, ethnicity and trait self-esteem (Crocker et al., 2003a). The motivational boost that accompanies basing one’s sense of self on their academic work is argued to be a way to improve student learning and success (e.g., Osborne & Jones, 2011).

However, this motivational boost is fragile and often temporary (Crocker et al., 2006). While people may be motivated to experience the highs of success, contingent self-worth makes failure even more difficult. As such, ACSW students may abandon their goals quickly. For example, whilst ACSW was positively correlated with self-reported time studying during first term (i.e., students were engaged with their goals), it was uncorrelated with studying in term two (i.e., this engagement with goals faded) (Crocker et al., 2003a). Similarly, ACSW is correlated with persistence in one’s studies in first year, but unrelated to persistence in years 2 and 3 (Butler-Barnes et al., 2017). ACSW is related to fragile persistence because that individual’s motivation is based on introjected (i.e., need to do well) rather than intrinsic (i.e., interest) reasons (Kaap-Deeder et al., 2016). When one’s ability to succeed is threatened, the motivational boost that accompanies ACSW fades.

Further support for the idea that ACSW provides a fragile motivational boost comes from experimental evidence. Brook (2005) gave students either an easy or a difficult task to complete, and then learning goals were measured. When students had completed the easy test, there was a strong relationship between their ACSW and investment in their goals. This relationship was not present when having taken the difficult test. In another study, those high in ACSW after a difficult test showed lower levels of intrinsic motivation (Brook, 2005).

ACSW students not only show little persistence with their goals, but also select goals that are self-validating (Crocker & Park, 2004). These are goals that aim to demonstrate one’s competence, rather than goals that aim to improve and develop one’s competence. From a learning perspective, this may limit development because they are reluctant to stray outside of their comfort zone (Crocker et al., 2006).

 Crocker and Park (2004) report a series of findings that support how ACSW leads to behaviours seeking to validate one’s own abilities. First, ACSW is positively correlated with self-validation goals regarding one’s intelligence. ACSW is also more strongly correlated with performance and ability validation goals, than mastery goals. Finally, for those high in ACSW, acceptance to a graduate school is viewed as reflecting one’s personal value and competence. Taken together, this suggests that people who stake their self-worth on their academic studies, are more interested in setting goals that aim to demonstrate to themselves or others that they are competent, rather than striving to develop and master their domain.

**Coping with failure**

 As ACSW implies that one’s self-esteem is dependent on academic outcomes, individuals may experience greater fluctuations to their self-worth depending on their successes and failures in their academic studies. For example, acceptance to a graduate school increases state self-esteem, whilst rejection by a graduate school decreases state self-esteem, with this effect being most pronounced amongst those high in ACSW (Crocker et al., 2002). Similar findings have been obtained in response to receiving good and bad grades (Crocker et al., 2003b). This decrease in self-esteem in response to failure may be one reason that ACSW leads to little persistence with goals and is a fragile source of motivation.

ACSW does not just make it difficult to deal with failure when it occurs, but also makes people more concerned about the *prospect* of failing. To reduce the sting of potential failure, people may engage in self-handicapping strategies such as withdrawing effort (Covington, 1992). Self-handicapping strategies work by providing the person with a ready excuse for failure if failure was to occur. The use of self-handicapping strategies articulately illustrate the point that the need for self-esteem may often trump other needs such as competence (Crocker & Park, 2004).

Crocker et al. (2006) provide evidence that people with ACSW are more likely to self-handicap when they perceive the possibility of failure to be likely. In one study, students were instructed that they could practice for an upcoming test as many times as they liked. The sample questions were manipulated to be either easy or difficult. Those low in ACSW practiced significantly more when the test was difficult in comparison to easy. In comparison, those high in ACSW practiced significantly more when the test was easy rather than difficult, suggesting that they withdrew effort when the chance of failure was increased.

Some researchers have suggested that certain learning orientations may buffer from the adverse effects of failure (Dweck, 1999). Belief that one’s ability is fixed (entity theorist) in comparison to malleable (incremental theorist), may be more associated with negative affect because it implies one’s ability cannot be remedied (Dweck, 1999). To some extent, incremental beliefs may inoculate from the experience of failure. Niiya, Crocker and Bartmess (2004) found that only students high in ACSW, and who were primed with an entity theory about intelligence, showed decreases in state self-esteem after failure (when controlling for global self-esteem). Such an effect was not present in participants primed with an incremental theory.

However, incremental beliefs do not eradicate the need for self-esteem, and may only shift the boundaries of when failure implies a lack of ability (Niiya, Brook, & Crocker, 2010). This is because incremental beliefs imply that with effort should come success, thus incremental theorists should be *more* likely to self-handicap because the stakes associated with failure are greater. Supporting this, Niiya et al. (2010) found that in a series of studies that incremental theorists high in ACSW were more likely to engage in self-handicapping behaviours when faced with a difficult test (controlling for global self-esteem). This finding persisted when these theories were primed, rather than measured. Additionally, in another study when the opportunity to self-handicap was denied (i.e., practice was enforced rather than chosen), incremental theorists high in ACSW internally attributed failure and had lower levels of state self-esteem.

 Research has also explored whether mastery goals reduce the vulnerability to threat. Mastery goals concern *improving* one’s ability, rather than *proving* it, therefore reducing ego-involvement in tasks (Niiya & Crocker, 2007). For example, students high in ACSW and mastery goals are associated with increased task persistence and no change in self-esteem after experiencing failure (Niiya & Crocker, 2007; Shimizu et al., 2016). However, mastery goals, like incremental beliefs, may simply change the boundaries of when failure is threatening, as it implies that effort and outcomes are entwined. Field research shows that students high in ACSW and mastery goals are associated with increases in self-esteem in response to high grades and decreases in self-esteem in response to low grades, controlling for trait self-esteem (Niiya & Crocker, 2008). This difference in findings might represent how in novel scenarios (e.g., lab studies) where students have little time to prepare, mastery goals buffer from self-esteem threat, but in real settings where effort and time invested are likely high, mastery goals do not insulate from the effects of failure (Niiya & Crocker, 2008).

**Classroom conflict**

 ACSW may also produce further barriers to learning because ego-involvement in one’s work can be stressful (Covington, 1992). As a result, they may become defensive towards perceived criticism. For example, people often respond to self-esteem threats by externalising failure by blaming luck, the test (Greenberg et al., 1982), or the fairness of markers (Nesbit & Burton 2006). Of course, dismissing feedback designed to help improve a student’s work may limit the ability to learn from said feedback.

Moreover, teachers’ constructive criticism on student’s work may be viewed as personal attacks to one’s self-worth. Students may view teachers as obstacles, rather than a learning support, towards getting good grades (Crocker & Luhtanen, 2003). Supporting this, ACSW has been shown to predict academic problems (i.e., dissatisfaction with studies, conflict with teachers) even after personality (neuroticism and conscientiousness), global self-esteem and grades were taken into account (Crocker & Luhtanen, 2003). Similarly, findings also show that participants high in self-esteem and ACSW are viewed as less likeable after they have experienced failure, when rated by others in subsequent interactions (Park & Crocker, 2005). This is because individuals high in ACSW may become pre-occupied with their own self-relevant thoughts after experiencing ego threat. Consequently, this may limit these students’ ability to foster positive relationships with teachers, as well as other students.

**Test anxiety**

ACSW may also adversely impact students within test settings. As ACSW students feel a need to prove their competence, this can lead to feelings of pressure when being evaluated which in turn impairs performance. Supporting this, students who were informed that a test would indicate their ability (vs. control), ACSW was negatively related to test scores (Lawrence & Crocker, 2009; see also Lawrence & Smith, 2017). Subsequent studies have identified that this effect is mediated by levels of anxiety (Lawrence & Williams, 2013; Otterpohl et al., 2019).

 However, there may also be limited circumstances where ACSW may actually *improve* performance. Lawrence and Smith (2017) identified that whilst ACSW was associated with increased anxiety, which in turn predicted decreased performance; when this anxiety was statistically controlled for, ACSW was also positively related to performance. What this finding may show is that whilst anxiety may be a common outcome for those high in ACSW, if this anxiety is managed, contingent self-worth may have some performance-related benefits. Possibly, test anxiety management strategies (e.g., Gregor, 2005), may help get the best out of academically contingent students and increase their chance of success.

**Academic misconduct**

 Contingent self-worth may also encourage students to cheat in attempt to gain unfair advantages in their academic studies. In particular, with external contingencies of self-worth, their sense of self-worth is often derived from outperforming others, as well as having a high need for approval (Crocker et al., 2003). As such, these students may try to get the competitive edge through unfair means.

Supporting this, Niiya et al. (2008) had students take part in a test where the top 10% would receive bonus credit. Students were informed that they could find out the answers after completing the test by looking at the answer sheet (the experimenter left the room before the test began). The test itself included five unsolvable questions, of which if the student had gotten correct would indicate that they had cheated.

The findings demonstrated that when controlling for performance and mastery goals, those with an external contingency of self-worth were more likely to cheat on the test, although the effect was only present in males. It is not entirely clear why such an effect was limited to males, though the authors note it is consistent with broader evidence of males being more susceptible to cheat than females. One possibility is that males feel more expectation to do well in academic tests than females (Lobel & Lebanon, 1988; Williamson & Assadi, 2005). Alternatively, the Niiya et al. (2008) study included a male confederate participant who encouraged cheating behaviour, which may have had provided males with a stronger normative basis for cheating. Future research could examine this issue further.

**Well-being and mental health**

ACSW may negatively affect student well-being. This is because ACSW requires continual external validation, which if not met, can make people vulnerable to decreases in self-esteem (Burwell & Shirk, 2006). For example, as mentioned earlier, ACSW is associated with greater fluctuation in daily self-esteem in response to successes and failures in one’s academic studies (Crocker et al., 2002; Crocker et al., 2003b). Moreover, ACSW has been linked with decreased levels of global self-esteem (Chen-Bouck & Patterson, 2016). These decreases in self-esteem may pose problems for ACSW students as self-esteem appears to be a protective factor for sound psychological health. For example, global self-esteem has been shown to positively relate to happiness, positive affect and well-being; and negatively relate to depression and anxiety (Baumeister et al., 2003; Pyszczynski et al., 2004).

 Research has identified that external (including ACSW), but not internal, contingencies of self-worth predict depressive symptoms (Burwell & Shirk, 2006; Chen-Bouck & Patterson, 2016; Sargent et al., 2006; Schöne et al., 2015; Wouters et al., 2013), with strength of associations ranging from small effects (*r* = .14; Chen-Bouck & Patterson, 2016) to medium-large effects (*r*’s = .30-.45; Burwell & Shirk, 2006; Schöne et al., 2015; Sturman et al., 2009). This work has also shown that external contingent self-worth is related to changes in depression over time, but depression does not predict changes in contingent self-worth (e.g., Burwell & Shirk, 2006), which helps to provide causality to this relationship and supporting the idea that contingent self-worth may be a risk factor in depression.

More directly, ACSW has been shown to affect both positive and negative aspects of well-being (Chen-Bouck & Patterson, 2016; Liao & Wei, 2014; Schöne et al., 2015). For example, Liao & Wei (2014) found in a sample of Chinese international students, that for those high in ACSW, academic stress was negatively related to positive affect when controlling for family values. Extending this, Schöne et al. (2015) conducted longitudinal research with college students and found that academic stress predicted depression only amongst students who had high levels of ACSW. This relationship also predicted depression scores over and above levels of global self-esteem. These findings suggest that contingent self-worth is, potentially, a more important marker for depression than global self-esteem, and that the combination of a diathesis (ACSW) and a stressor (academic studies) may make individuals vulnerable to the onset of depression. Given that ACSW may make students feel more stressed about their studies (Crocker & Luhtanen, 2003), this may pose a worrying sign.

 That is not to suggest that global levels of self-esteem are unimportant. It is well established that people with low self-esteem (in comparison to high self-esteem) are more likely to internalise failure and generalise negative feedback (Van Dellen et al., 2011), which is why low self-esteem is viewed as a vulnerability marker for depression. Consequently, contingent self-worth may make people vulnerable to outcomes in a particular domain, but global self-esteem may shape how they respond to these outcomes. For example, evidence suggests that after controlling for gender and ethnicity, those high in ACSW show decreased self-esteem and positive affect after experiencing failure on a test, though this effect is present only amongst those with low trait self-esteem (Park, Crocker, & Kiefer, 2007). These responses to failure may in turn compromise their well-being.

Other researchers have suggested self-esteem instability (fluctuations in one’s level of self-esteem), rather than low self-esteem, is a stronger marker of depression (Butler et al., 1994). As contingent self-worth is characterised as unstable due to it being prone to fluctuations in self-esteem based on external events (Crocker et al., 2002; Crocker et al., 2003b), this instability may increase vulnerability to lower well-being and increased depression.

 Supporting this, Crocker and colleagues’ (2003b) longitudinal research found that ACSW predicted instability of self-esteem in response to academic failures and successes. This instability subsequently predicted an increase in depression levels (controlling for original levels of depression). This effect was also most pronounced amongst those who originally had high levels of depressive symptoms. Similarly, research has also shown that amongst college students, external contingent self-worth predicted levels of depression, which was mediated by instability of self-esteem (Lopez et al., 2014). These findings suggest that academically contingent students, because of continual assessment may experience fluctuations in self-esteem, which may drive depressive symptomology.

**Perfectionism**

ACSW may also impact well-being because of its association with perfectionism. Perfectionism is a multi-dimensional construct whereby one places excessively high standards of performance on oneself. Perfectionism has been identified as a vulnerability marker for depression (Hewitt & Flett, 1993). This is because perfectionism can cause stress due to an increased critical evaluation of one’s performance and excessive focus on the negative aspects of one’s performance. Contingent self-worth has been connected theoretically with perfectionism because both constructs involve an element of positive self-regard that is conditional on meeting externally imposed standards (Flett et al., 2003).

 Studies have identified that external contingencies of self-worth (including academic competence and outperforming others) are related to levels of perfectionism (Hill et al., 2011; Sturman et al., 2009). More specifically, these studies suggest that external contingent self-worth appears to be more strongly related to socially prescribed perfectionism (belief that others impose high standards) than self-orientated perfectionism (self-imposed high standards). Moreover, contingent self-worth appears to mediate the relationship between socially prescribed perfectionism and depressive symptoms (Sturman et al., 2009). Similarly, other research has also found that whilst perfectionism can be adaptive (e.g., highly organised) (Stoeber et al., 2007), contingent self-worth is associated with the maladaptive aspects of perfectionism (e.g., concern over mistakes and doubt about actions) which are more problematic from a well-being standpoint (Shih, 2011).

**Burnout**

 ACSW may also explain why some students experience burnout with their studies. As mentioned earlier, academically contingent students are likely to experience high levels of stress, and feel tense and anxious in performance settings, which may in the long-run lead to students feeling burnt out.

Supporting this, Herrman et al (2019) found that ACSW mediated the relationship of gender to burnout, after controlling for grades and global self-esteem. Girls had higher levels of ACSW and burnout, compared to boys. Findings have also shown that performance contingent self-esteem (self-worth based on one’s general competence) positively predicts burnout amongst medical students (Dahlin et al., 2007).

 Experiencing burnout can compromise student success and well-being. First, burnout is negatively related to engagement with studies, and in the long-term may to students dropping out of education (Robins et al., 2015). Second, burnout can pose issues for one’s physical and psychological health. Burnout may lead to increased absenteeism and illness (Toppinen-Tanner et al., 2005). It has also been shown to predict decreased self-esteem, and increased depression and suicidal ideation (Robins et al., 2015)

**Summary**

Despite suggestions that identifying and basing one’s self-worth on their academic work may have positive benefits for student learning (e.g., Osborne & Jones, 2011), this review has suggested that whilst some short-term benefits may exist, these short-terms gains are outweighed by the long-term costs (Crocker & Park, 2004). ACSW students’ motivation tends to be introjected, rather than intrinsic, with goals that are self-validating rather than about acquiring competence. This makes their motivation fragile, showing decreased persistence with their work when failure occurs (Crocker et al., 2006). They also are more likely to self-handicap in the anticipation of failure which increases the chance of failure occurring (e.g., Niiya et al., 2010). Their ego-involvement with their studies also makes their work more stressful and less enjoyable, creating potential conflict between teacher and students (Crocker & Luhtanen, 2003), and may increase their susceptibility to cheat (Niiya et al., 2008). Finally, ACSW may also increase anxiety in test scenarios, which adversely affects performance (e.g., Lawrence & Williams, 2013).

Regarding well-being, ACSW may pose concerns for sound mental health in students. Contingent self-worth may increase levels of stress and perfectionism (e.g., Sturman et al., 2009). Over time, these stresses may also lead to burnout (e.g., Herrman et al., 2019), but also increase levels of depression (Schöne et al., 2015). This might be because contingent self-worth erodes one’s level of self-esteem over time or because it is associated with increased self-esteem instability (Chen-Bouck & Patterson, 2016; Crocker et al., 2003b), both of which have been identified as vulnerability factors for depression.

**Addressing self-esteem in higher education**

The present review has painted a rather bleak picture regarding ACSW in as much that it can produce deficits to learning, success and well-being. It is of interest then to understand how we might tackle issues of self-esteem, namely when it is contingent on academic success, in an educational setting. The present review will briefly consider the ideas of reducing contingent self-worth, changing the culture of higher education, the role of learning orientations, and self-compassion.

Firstly, some scholars have argued that it would be worthwhile reducing levels of ACSW amongst students (Niiya et al., 2010). Unfortunately, current evidence suggests that contingent self-worth increases throughout higher education, and that students in higher education have higher levels of contingent self-worth than a nationally representative sample of employed workers (Hallsten, et al., 2005; Hallsten et al., 2012). This might be because students are subject to continual evaluation through assessments and become acutely aware of the standards expected of them, which subsequently become internalised (Hallsten et al., 2012).

 One possibility to reducing contingent self-worth might be to adapt learning environments and how feedback is provided to students. For example, evidence suggests that person-focused feedback (e.g., praise/criticism on one’s ability) can increase levels of contingent self-worth, whilst process-focused feedback (e.g., how one went about the task) does not (Kamins & Dweck, 1999). Similarly, longitudinal research suggests that students embedded into a mastery-structured learning environment that emphasised effort and growth, and de-emphasised performance outcomes, produced a medium-large effect size on reduced levels of contingent self-worth (O’Keefe, Ben-Eliyahu, & Linnenbrink-Garcia, 2012). Taken together, this would suggest that learning environments and feedback that focus on effort and the process that one takes with their learning might reduce levels of contingent self-worth. It is also worthwhile noting that an educational environment that emphasises effort would more closely align with student expectations for an increased focus on effort rather than performance (Altman, Prittie, & Forbach, 2019). However, as reviewed, we should be careful to conclude that mastery, effort-focused, environments would alleviate the problems of contingent self-worth. They may simply shift the boundaries of what is ego-threatening (Niiya & Crocker, 2008). Moreover, it seems difficult to imagine how these would work in practice given that achievement is strongly emphasised within higher education (for similar views see Humphrey, 2004).

 It is not just learning environments that could be adapted, but also teaching styles. Controlling teaching styles (i.e., authoritarian) have been linked with stifling student autonomy which is a critical ingredient to student achievement (Boud, 2012). One reason for this link may be because that controlling teaching styles have been associated with increasing levels of contingent self-worth (Bartholomew et al., 2018). When teaching is perceived to be controlling, it undermines autonomy, and increases contingent self-worth as students internalise the standards of performance expected by their teacher. Therefore, teachers could be mindful of their verbal and non-verbal language that may suggest disappointment when students fail to meet expectations, and instead foster autonomy-supportive relationships (Bartholomew et al., 2018).

 While reducing contingent self-worth may be one way to counter-act the problems reviewed, some scholars have warned that whilst extrinsically based, contingent self-worth might able to be reduced, they cannot be abandoned. This is because self-esteem is based on meeting consensually validated standards that is needed to manage, among other things, existential concerns (Greenberg, 2008). Consequently, it is important to find more stable ways of pursuing self-esteem that come with fewer costs to learning, autonomy and well-being (Crocker & Park, 2004; Greenberg, 2008). One possibility is to foster intrinsic contingencies, such as personal growth, as these rely less on external validation and have been positively associated with well-being (Vonk & Smit, 2012; see also Crocker & Park, 2004). Another possibility is to ensure that bases of self-worth (in the academic domain) are realistic, widely attainable and flexible (Greenberg, 2008). If students do not feel they can meet the standards of conduct they perceive to be expected of them, then this may cause deficits to their self-esteem, which as we have reviewed, is a recipe for psychological despair.

 Unfortunately, the current cultural climate of higher education may not fulfil these requirements. For example, it has been argued that lower levels of education insufficiently prepare students for the pressures and difficulty of higher education (Thomas, 2013). Moreover, evidence suggests that students are acutely aware of the importance of obtaining a ‘good’ degree, and the need to excel in degree programmes (Tomlinson, 2008). It would seem likely that many students enter higher education feeling that they cannot attain the standards that are expected of them, causing deficits to learning and well-being. It should be noted that many of the studies reported in this review show the negative effects of ACSW when participants were faced with difficult tests where the chance of failure is likely to be higher (e.g., Niiya et al., 2010; Niiya & Crocker, 2007). When tests were easier (i.e., students felt more confident in doing well), ACSW did not adversely affect one’s approach to learning, in fact, in some cases there were some potential benefits such as increased effort (e.g., Niiya & Crocker, 2007). While higher education should obviously be challenging, it is important that students are sufficiently prepared for these challenges. This may help get the best out of academically contingent students.

There are several practical solutions one might envisage to improve the cultural environment of education. One strategy would be to ensure that lower education aims to foster increased levels of independence and develop more critical thinking that are critical to success in higher education (Boud, 2012). Additionally, higher education could be adapted to become more suitable for those entering the system. For example, degrees could be designed so that the early stages test knowledge acquisition, whilst higher-order learning skills such as critical thinking are examined later in the degree once students have had the opportunity to develop these skills. Moreover, trying to de-emphasise performance-based outcomes (such as grades and ‘good’ degree classifications) and emphasise qualities such as experience and skill acquisition, might help students feel that they are meeting the standards expected of them.

Other strategies may involve combatting the harmful effects that may be associated with contingent self-worth. For example, managing academically contingent students test anxiety, may help get the best out of them (Lawrence & Smith, 2017). Another possibility might be to teach students to embrace failure as an opportunity to learn and improve, rather than as a threat to self-esteem (Niiya & Crocker, 2015). Some evidence suggests that amongst students high in learning from failure goals, there were no decreases in state self-esteem amongst students high in ACSW after experiencing failure (Niiya & Crocker, 2015). While further research is required, these findings may suggest that emphasising to students that failure is an opportunity to learn may help take the sting out of failure.

Similar to learning from failure, increasing self-compassion in students might also be a useful strategy. Self-compassion refers to being understanding and kind towards one’s own flaws, inadequacies and personal disappointments (Neff, 2011). As such, self-compassion and learning from failure goals share in common a need to be less self-critical, and view failure (and how it impinges on oneself) in a less harsh manner. Self-compassion has generally been associated with good psychological adjustment. Self-compassion is positively related to life satisfaction, happiness, and positive affect, and negatively related to depression and anxiety (Neff, 2011).

There is some promising evidence from appearance-based research, that self-compassion may weaken the link between contingent self-worth and body dissatisfaction (Homan & Tylka, 2015). Future research should see whether self-compassion might also reduce the link between ACSW and some of the outcomes reviewed above. Self-compassion interventions might be particularly fruitful because evidence suggests that interventions are effective in increasing levels of self-compassion that persist even after one-year follow-ups (Braun et al., 2016). One possibility might be to consider introducing principles of self-compassion interventions into the core skills aspect of a degree curriculum. Core skills could also aim to nurture intrinsic contingencies (Vonk & Smit, 2012) and learning from failure goals (Niiya & Crocker, 2015). In line with the reviewed evidence, if there is one core skill that students need to help them succeed, then it is learning to cope more positively with setbacks and disappointments when they inevitably occur.

**Limitations**

All that withstanding, some limitations of the reviewed work should be discussed. Notably, this research has measured ACSW and its relationship to these outcomes, thus limiting the ability to infer causality into these findings. One inherent limitation may be the difficulty to manipulate contingent self-worth because one’s contingencies may be deeply embedded within the cultural milieu that one subscribes to. Longitudinal research does help to unpick the causal pathway (e.g., Burwell & Shirk, 2006; Schöne et al., 2015), though without more research that can establish the causal role of ACSW, interventions targeting ACSW may be futile. Second, whilst this work has shown that domain-specific contingent self-esteem is a stronger predictor than global self-esteem by testing their relative contribution concurrently, it would be useful to situate the influence of contingent self-worth within the context of other relevant constructs that have been shown to predict the outcomes reviewed here. This could further support the need for educators to focus on ACSW.

Finally, whilst evidence suggests that that contingent self-worth can change over time and in different environments (e.g., Hallsten et al., 2012; O’Keefe et al., 2012), more research is required to pinpoint the conditions within a higher education setting that may lead to increasing contingent self-worth, or how it can be reduced. For example, some of the proposals outlined in this paper regarding how to combat contingent self-worth in higher education could be subjected to empirical scrutiny.

**Summary**

Psychological understanding of the concept self-esteem has come a long way since it was first considered in relation to academic achievement and well-being. Though we should not entirely disregard global self-esteem (Park et al., 2007), it appears more fruitful to consider what domain people stake their self-worth in. This review has highlighted an accumulating body of evidence that seeing one’s self-worth as contingent on their academic competence may prove to do more harm than good in the long run in regard to learning, success and well-being. The present review has also highlighted the possibility of reducing levels of contingent self-worth, changing the culture of higher education, the role of learning orientations and self-compassion as strategies to tacking self-esteem.

Despite this, there is still a long way to go to understand how we might more effectively combat issues in self-esteem in higher education. We may also benefit from taking a history lesson regarding prior efforts to combat self-esteem (Baumeister et al., 2003). While interventions targeting self-esteem might be well intentioned, they may often be ineffective due to a lack of sufficient understanding regarding the concept. At the most severe, they can also backfire (*see* Forsyth et al., 2007). Regardless, the point of this review remains. We need to talk about self-esteem and how we may more effectively manage ACSW within higher education.

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