Summary

When people are faced with information that links their specific behavior to increased risk for health problems, they often respond defensively and are less likely to accept the threatening health information. Although defensive responding to threatening health information is likely to keep worries at a safe distance, it may also prevent people from protecting their personal health. From the perspective taken in this dissertation, people at-risk respond defensively because they are highly motivated to protect their positive self-image as a good and sensible person. This proposition follows from self-affirmation theory (Steele, 1988). An important prediction from this theory is that if people can restore their global sense of self-integrity by drawing upon alternative self-resources unrelated to the specific threat (i.e., “self-affirm”), they should be less likely to respond defensively to the threatening health information and more likely to accept the information.

While previous research confirmed that self-affirmation can increase acceptance of threatening health information (e.g., Harris & Napper, 2005; Reed & Aspinwall, 1998; Sherman et al., 2000), insight into how self-affirmation affects the processing of threatening health information remained lacking. Therefore, the first aim of the research reported in this dissertation was to fill this gap by systematically examining the impact of self-affirmation on health information processing. Additionally, the conditions under which self-affirmation positively affects health information processing and results in adaptive responses had not been specifically addressed in previous research. There may be boundary conditions to the positive effects of self-affirmation, under which self-affirmation is ineffective or even backfires. We proposed that the impact of self-affirmation on information processing would vary as a function of the level of self-threat people experience when faced with threatening health
information. Thus, the second aim of the research reported in this dissertation was to examine the moderating role of self-threat level regarding the impact of self-affirmation on the processing of threatening health information. In sum, the purpose of this dissertation has been to advance our understanding of how and when self-affirmation makes people more responsive to threatening health information.

**Summary of the Empirical Findings**

The research reported in the empirical chapters was designed to examine how self-affirmation affects the processing of threatening health information. We hypothesized that the effect of self-affirmation on information processing is likely to vary as a function of the level of self-threat. Specifically, in Chapter 1 we argued that self-affirmation would *increase* extensive, careful information processing under moderate self-threat conditions, but would *decrease* extensive, careful processing of threatening health information under low and high self-threat conditions. Conceptualizing self-threat level as participants’ vulnerability to a health risk, and varying the health risk across studies, we obtained repeated evidence for this prediction.

**Chapter 2 – How Self-Affirmation Affects Health Message Derogation**

In Chapter 2, we examined the impact of self-affirmation on the processing of threatening health information under low and moderate self-threat conditions. Information processing was assessed by measuring participants’ level of message derogation, that is, an explicit measure of defensive information processing (Witte, 1992). On the basis of the assumption that self-affirmation decreases defensive processing of threatening health information, we predicted that self-affirmation would decrease message derogation under moderate self-threat conditions (i.e., for participants at-risk). In line with the observation that self-affirmation can reduce the motivation to process information when participants do not
feel particularly threatened (Briñol et al., 2007), we predicted that self-affirmation would not affect message derogation under low self-threat conditions (i.e., for participants not at-risk). Consistent with these predictions, at-risk participants who were given the opportunity to self-affirm, derogated the threatening health information less, while self-affirmation had no effect among participants not at-risk.

Additionally, Study 2.1 investigated the impact of self-affirmation on screening behavior (online risk testing behavior). Unlike behaviors directed at maintaining one’s health (e.g., exercising) that are typically seen as involving little or no risk because they encompass little uncertainty, screening or detection behaviors potentially inform people of a severe health problem and are typically considered high risk as they encompass high uncertainty (Devos-Comby & Salovey, 2002; Rothman & Salovey, 1997). While there is some evidence that self-affirmation can positively affect health-promoting behavior (Epton & Harris, 2008), no study to date tested whether self-affirmation can promote screening or detection behavior. As predicted, we found that self-affirmation increased intentions to do an online risk test and promoted online risk test taking among at-risk participants (i.e., moderate self-threat condition), and decreased intentions and online risk test taking among participants not at-risk (i.e., low self-threat condition). The findings of Study 2.1 further suggest that for at-risk participants, the effect of self-affirmation on intentions to take precautions was mediated by the decrease in message derogation. In addition, intentions to engage in precautionary behavior mediated the impact of self-affirmation on screening behavior.

Chapter 3 – How Self-Affirmation Affects Explicit Health Information Processing

Chapter 3 examined in more detail how self-affirmation affects the processing of threatening health information under low, moderate, and high-self-threat conditions. Study 3.1 tested the assertion that a manipulation of vulnerability to a health risk induces a higher threat to the self than when vulnerability is measured. Consistent with our hypothesis, the results
showed that participants who received false feedback regarding their high vulnerability level (i.e., manipulation of vulnerability) reported higher levels of perceived vulnerability to a health risk than participants who were classified as highly vulnerable based on measurements. Moreover, this study demonstrated that using different methods to assess participants’ vulnerability level (i.e., measurement vs. manipulation) enabled us to create three levels of self-threat: low, moderate, and high. In addition, Study 3.1 provided initial evidence that self-threat level moderates the effect of self-affirmation on information processing. Self-affirmation increased the number of critical thoughts participants reported under moderate levels of self-threat, and decreased the number of critical thoughts under conditions of high self-threat. These findings thus suggest that self-affirmation increases the extent of information processing for moderate self-threats, but decreases extensive, careful information processing for high levels of self-threat. However, no self-affirmation effect was found under low levels of self-threat. The absence of an argument quality manipulation and attitude measure may have limited our ability to detect this effect.

Studies 3.2 and 3.3 therefore assessed information processing following self-affirmation under different self-threat levels in a more robust way by varying the quality of the arguments in a health message and by examining the impact of these arguments on participants’ cognitive responses (Study 3.3) and attitudes (Studies 3.2 & 3.3). Past research has shown that extensive, careful information processing is indicated by a significant differentiation between strong and weak arguments in a message, whereas less careful processing is implied when this differentiation is absent on the dependent measures (Petty & Wegener, 1999). It was hypothesized that self-affirmation would increase sensitivity to the quality of the arguments in the health information under moderate self-threat conditions. In contrast, we hypothesized that self-affirmation would decrease sensitivity to argument quality under low and high self-threat conditions. Study 3.2 demonstrated that, in the moderate self-threat condition, self-affirmation
increased sensitivity to the quality of the arguments in the health information, consistent with the predicted increase in the extent and carefulness of information processing. Self-affirmed participants had more favorable attitudes when the message was supported by strong rather than weak arguments. In contrast, in the low and high self-threat conditions, self-affirmation decreased participants’ sensitivity to argument quality in the health information, consistent with the predicted decrease in the extent and carefulness of information processing.

Study 3.3 replicated these findings for moderate and high self-threat levels using an experimental manipulation of self-threat level across conditions. In addition, it was found that the effects of argument quality on attitudes observed among self-affirmed participants in the moderate self-threat condition and non-affirmed participants in the high self-threat condition were mediated by cognitive responses. Moreover, Study 3.3 ruled mood out as an alternative explanation as self-affirmation did not affect mood in this study. Together, the research reported in Chapter 3 provided strong evidence for our hypothesis that self-threat level moderates the effect of self-affirmation on the processing of threatening health information.

Chapter 4 – How Self-Affirmation Affects Implicit Health Information Processing

The information processing measures used in the preceding chapters (i.e., message derogation, cognitive responses, and attitudes) required participants to engage in a conscious retrieval process. To test whether we could replicate our previous findings using an information processing measure without any explicit reference to the self-threat, the studies reported in Chapter 4 tested the impact of self-affirmation on the accessibility of threat-related cognitions by means of a lexical decision task. Increased (vs. decreased) extensive, careful processing of threatening health information following self-affirmation should make it easier (vs. more difficult) to encode threatening aspects of health information because these aspects no longer pose a threat to people’s self-integrity. Because information that is better encoded should be easier retrieved from memory (i.e., more accessible; Ashcraft, 2006; Carlston &
Smith, 1996; Higgins, 1996), we hypothesized that self-affirmation would increase the accessibility of threat-related cognitions under moderate self-threat conditions, and would decrease the accessibility of threat-related cognitions under low and high self-threat conditions.

Indeed, Study 4.1 showed that, in the moderate self-threat condition, self-affirmation increased the accessibility of threat-related cognitions. Contrary to expectations, in the low self-threat condition, self-affirmation had no effect. Study 4.2 replicated the impact of self-affirmation on the accessibility of threat-related cognitions for moderate threats to the self. In contrast, and in accordance with our prediction, self-affirmation decreased the accessibility of threat-related cognitions under conditions of high self-threat. Because information that is less accessible will be less likely encoded and recalled (Carlston & Smith, 1996; Higgins, 1996), these findings suggest that self-affirmed people are less likely to integrate threatening information into the self-system in situations in which they experience a high threat to the self. Moreover, Study 4.2 included a measure of implicit affect to test for the possibility that implicit affect accounts for the observed impact of self-affirmation. However, as in Study 3.3, affect did not account for the present findings; no effects were found on the measure of implicit affect.

The studies reported in Chapter 4 are the first to demonstrate the impact of self-affirmation in the area of less controlled, automatic cognitive responses to threatening health information. Consistent with our theoretical analysis and extending our previous findings, the studies in Chapter 4 demonstrate that self-threat level also moderates the impact of self-affirmation on an implicit level. The findings underscore that self-affirmation may backfire on information processing for sever threats to the self.

*Chapter 5 – How Self-Affirmation Affects Health Persuasion*
Whereas the studies in Chapters 3 and 4 showed that self-affirmation decreases extensive, careful information processing under high self-threat conditions, Study 5.1 examined whether self-affirmation would similarly backfire on persuasive outcomes (attitudes, intentions to take precautions, and behavior) following a severe threat to the self. Although previous self-affirmation studies in the health domain have shown positive effects of self-affirmation on such persuasive outcomes (e.g., Harris & Napper, 2005; Jessop et al., in press; Sherman et al., 2000), we predicted that this would be limited to circumstances in which people experience a moderate threat to the self. Therefore, it was hypothesized that self-affirmation would increase persuasion under moderate self-threat conditions, and would decrease persuasion under high self-threat conditions. The results of Study 5.1 were consistent with this hypothesis. Under moderate self-threat conditions, self-affirmed participants reported more positive attitudes toward the health message, expressed higher intentions to take precautions, and requested more health information leaflets than non-affirmed participants, consistent with the predicted increase in persuasion. In contrast, under high self-threat conditions, self-affirmed participants reported less positive attitudes, expressed lower intentions, and requested less leaflets than non-affirmed participants, consistent with the predicted decrease in persuasion. The findings of Study 5.1 thus corroborate our reasoning that self-affirmation backfires for severe threats to the self.

Taken together, the results from the empirical studies presented in this dissertation consistently show that self-affirmation may promote or impede extensive, careful processing of threatening health information depending on the level of self-threat. When people feel moderately threatened, self-affirmation may have positive effects on message processing and persuasion. When people feel highly threatened, however, self-affirmation seems to be a risky strategy. The coherent pattern of findings has important theoretical and practical implications.