Summary
The research as presented in this dissertation has investigated the impact of contextualization to idealized body imagery on body-related perceptions, such as body (dis)satisfaction. Such a pairing of model images with, for instance, verbal references is common in media fare. However, the effects of such combinations are not often studied. This research aims to contribute to the development of uniformly applicable mass media tools to counteract the negative effects of exposure to idealized body imagery, especially in adolescent girls. The General Introduction (Chapter 1) describes the scientific and societal background of the research in this dissertation.

Scientifically, the role of contextualization seems underplayed in studies on media effects of idealized body imagery. To date, the large body of research on media affecting body image shows paradoxical and inconsistent findings. Many studies have pointed toward the detrimental effects of media-induced ideal-body imagery. However, a few meta-studies concluded that ideal-body depictions in media resulted in only small to hardly any effects on body perceptions in women. Additionally, some studies even found more positive body perceptions after idealized body exposure. To explain such divergent reactions of the effects in idealized body image research, the current dissertation proposed that the setting of the image is an important element for consideration. Put differently, the differences found for the impact of idealized body imagery may be dependent on how the imagery is contextualized by, for instance, verbal references and feedback from peers. In further underscoring the relevance of the present research, only very few studies have investigated how mass media can be used to redirect detrimental effects from ideal-body exposure. Hence, we argue that the use of contextualization of media imagery by verbal messages such as labels and (peer) feedback may act as a strategy to negotiate the effects from idealized body exposure, which motivated us to formulate our Negotiated Media Effects Model.

The Negotiated Media Effects Model predicts two main effects on recipients’ body perceptions resulting from exposure to ideal-body imagery in a specific context. First, we assume that undesired effects from ideal-body exposure can be countered by bringing the actual weight status of the idealized media models to the fore: A counteracting effect will occur when thin-ideal images are contextualized as being ‘underweight’ or ‘extremely thin’. Second, we propose that presenting ideally shaped bodies as ‘normal’ may lead to increased negative responses, such as, more body dissatisfaction: A normalization effect then follows. Finally, to elucidate the variance in media effects from idealized body exposure, we consider the role of individual difference variables, such as self-esteem and appearance schematicity besides the contextualization of ideal-body images. The fact that the use of mandatory labels and disclaimer information accompanying media models’ body shapes in common media fare is subject to debate internationally, further underscores the societal relevance of this
research. Moreover, the present research aims to complement currently existing media literacy interventions and wishes to inform the development of cost-effective and uniformly applicable mass media tools to counteract undesired effects of ideal-body exposure.

This dissertation covers five empirical studies that have tested the effects of contextualizing ideal-body imagery, which will be described shortly. Chapter 2 describes the first study that used verbal labels to establish the counteracting and normalization effects. Drawing on so-called counter-advertising principles as used in other health settings, specific weight information labels were combined with variously-sized media models to examine their effects on (pre-)adolescent girls’ body perceptions and on how they compare themselves with media models ($N = 184$). Additionally, this study investigated body perceptions among three age groups (9-10, 12-13, and 15-16 years old). The findings generally supported the counteracting assumption. More specifically, girls showed less body dissatisfaction and less comparison with media figures in case of accurately labeling ultrathin media models to be ‘underweight’ compared to classifying such ultrathin models to be of ‘normal weight’. Additionally, the results also supported the normalization assumption. That is, pairing an ultrathin media model with a ‘normal weight’-label evoked more negative body perceptions and higher levels of comparison with media models than concurrently showing thin or normal weight media models with ‘normal weight’ labels. As expected, age differences also existed, such that adolescent girls (12-13 and 14-15 years old) disclosed more negative body perceptions and social comparison with media figures than the pre-adolescents (9-10 years old).

The study presented in Chapter 3 further advanced testing the counteracting effect of verbal messages accompanying media models of various weights on body-related perceptions and psychosocial responses among adolescent girls ($N = 178$). Based on counter-advertising and reactance theorizing, this study contrasted information labels with warning labels (and with images-only without labels). For this study, we developed magazine covers to present the media models of various weights and the experimental texts as integrated entities. Furthermore, self-esteem was included as a moderator that further differentiates the effects based on individual predispositions. The results again confirmed a counteracting effect of information labels placed to thin-ideal imagery, particularly for girls with lower self-esteem. For them, the simple information labels confirming the underweight status of (ultra)thin models evoked lower levels of body dissatisfaction and objectified body consciousness compared to warning labels or images only. However, findings showed a different pattern for body comparison: the girls with lower self-esteem showed less body comparison in response to both information and warning labels accompanying normal weight media models (compared to images-only). Apparently, labeling media models’
weight status has a different impact on body dissatisfaction and objectified body consciousness than on body comparison. In all, combining idealized body images with information labels is most effective in counteracting negative body perceptions, while warning labels appeared ineffective in doing so. Additionally, the findings underscore the importance of accounting for self-esteem as a factor to explain individual differences.

The study in *Chapter 4* extends the previous ones by including peer influence in the contextualization of idealized body imagery. Hence, the verbal weight labels are employed by means of peer feedback commenting on media models’ body weight to test normalization and counteracting effects on body perceptions and psychosocial outcomes. In this study, adolescent girls (*N* = 216) saw YouTube screenshots that entailed systematic variations in peer comments and media model imagery. The study further differentiated among girls higher versus lower in appearance schematicity. Unlike counteracting and normalization effects, the findings suggested an idealization effect from labeling ultrathin models as being ‘just a few kilos underweight’. In more detail, peer comments that specify extremely thin media models as ‘3 kg underweight’ induced highest levels of body dissatisfaction and objectified body consciousness. Apparently, peers referring to thin-ideal images as being slightly underweight seems to further idealize models’ thin bodies, which results in more negative body affect when no effective solutions are provided on how to attain such an ideal body. Moreover, the idealization effect on objectified body consciousness especially holds true for girls who are higher in appearance schematicity. This underlines the role of appearance schematicity as individual predisposing factor.

To investigate the counteracting and idealization effects in more detail, the study reported in *Chapter 5* included variations in labeling media models by instigating various motives for self versus model body comparisons among emerging adults (aged 18-25 years old, *N* = 150), including males and females. More specifically, in an experimental design, magazine cover headlines induced body comparison with models for reasons of either self-evaluation or self-improvement to test the impact of these social comparison motives paired with ideally shaped magazine models on young adults’ body satisfaction. As expected, results showed that headlines instigating self-improvement increased body satisfaction (compared to body-irrelevant control headlines and baseline measures of body satisfaction). This finding is in line with the counteracting prediction of contextualizing idealized body images resulting in reduced negative body perceptions. Here, we even found an increase in body satisfaction. In contrast to what could be expected from the idealization assumption, the self-evaluation did not reduce body satisfaction.

*Chapter 6* describes a study that applies the counteracting principle of verbally contextualizing and labeling media models’ body weight in a real-life intervention. That is, a
A prototype ‘body image’-app for mobile devices is evaluated in terms of the causal impact on adolescent girls’ \((N = 206)\) body-related perceptions (summative evaluation), and appreciation of the app design (formative evaluation). In this case, the idealized body images were accompanied by body-relevant quiz-like statements about the media models’ weight. This body-relevant app version is contrasted with another app version that used body-irrelevant quiz-items. Independent of the app version, the findings revealed that providing positive incentives in the form of verbal feedback following correct answers increases adolescent girls’ self-esteem. Such a finding indicates that offering positive incentives complementary to idealized body imagery may yield protection for negative effects in terms of self-esteem. In contrast, correctly informing about the portrayed media models’ weight status did not affect body satisfaction. Furthermore, adolescent girls rated both app versions as equally attractive, and similar in creating involvement and use intentions. They also perceived the body-relevant information app as being more informative and having a higher learning potential compared to the body-irrelevant app, although also less clear and pleasant. Such a finding might follow from the high cognitive capacity that is required for processing new and unfamiliar information. Altogether, the results from this study guide future directions for development and implementation of a ‘body image’-app to counteract negative effects from ideal-body exposure. For instance, the girls indicated avatars, interactivity, personalized aspects, and customization to ‘especially girls’ as important app features for future use, adherence and effectiveness.

Finally, this dissertation concludes with a General Discussion (Chapter 7) that puts together the scientific and practical implications of our findings, as well as the strengths and limitations of the present studies in light of recommendations for future research. From our research, we can generally conclude that contextualization and idealized body imagery interact in directing body perceptions in adolescent girls and emerging adults. Such effects were anticipated from the Negotiated Media Effects Model. More specifically, the findings confirmed the counteracting and normalization assumptions. That is, simple information labels on media models’ weight status counteracted the undesired effects of the thin-body ideal as promoted by the media: Informing (rather than warning) about the actual weight status of thin-ideal media models reduced negative body perceptions in adolescent girls. Furthermore, short verbal messages that suggested body-improvement strategies even increased body satisfaction in young adults. In addition to the counteracting effect, our findings provided supporting empirical evidence for a normalization effect: Labeling ideally thin models’ bodies as ‘normal’ induced more negative body perceptions in adolescent girls, while standardizing average-weight models as ‘normal’ seems to have relieved such responses.
Our findings also bring some other implications for the Negotiated Media Effects Model to the fore. First, the results also revealed an idealization effect. That is, certain contextualizing messages may further reinforce idealization of ideally shaped bodies as portrayed in media fare. More specifically, when peers commented on ultrathin media models as being ‘slightly underweight’, this might have put the ideal-body within reach while no effective means are handed on how to attain such an ideal body shape. Consequently, negative body affect increased in adolescent girls. Second, from these findings we can also conclude that the effectiveness of the contextualization depends on the specific content and proposed source of the messages. Third, the findings showed the importance to account for individual predispositions in explaining who are most affected by contextualizing idealized body imagery. That is, the contextualization effects accounted particularly for those who are vulnerable in terms of lower self-esteem and higher appearance schematicity. In sum, based on these findings, we have revised our Negotiated Media Effects Model as follows: (1) an idealization effect is proposed in addition to the counteracting and normalization predictions, (2) the content and source are differentiated within the contextualization messages, and (3) individual differences are included as a moderator of the contextualization effects.

The implications of the findings in this dissertation and the subsequent adaptations made to the Negotiated Media Effects Model raise several directions for future research. We recommend replication studies to further secure the counteracting, normalization and idealization effects from contextualizing idealized body imagery, as anticipated in our Negotiated Media Effects Model. Moreover, the construction of message content can be refined by integrating marketing principles and persuasion strategies, such as by applying two-sided messaging or adding interpretational aids. Alternatively, future research can vary the source of the messages, for example, by contrasting an expert judgment, peer feedback, and a more anonymous sender of the messages like ‘the media’. Moreover, the contextualization effects should be segmented along the lines of individual differences and user characteristics, such as self-esteem, age and Body Mass Index. Related, such segmentation and customization will allow exploring the surplus value of a strategy like tailoring of message content. Furthermore, future research can test the effects of prolonged exposure to our proposed intervention mechanisms and compare various media settings to find the best fit for optimal intervention effectiveness. As a last point, we recommend that the implementation of contextualization of idealized body imagery as an intervention strategy is guided by proper process and impact evaluations.

Lastly, the General Discussion confers several implications and recommendations for practice and policy. First, our findings may inform those who are involved in developing and
implementing real-life prevention interventions, such as *health promoters and intervention developers* working at health organizations. Our findings show that information labels and attainability information may be effective strategies for body image interventions using a mass media approach to counteract negative media-induced body perceptions and to carefully guide a healthy body size by proper lifestyle behaviors. Moreover, the contextualization principles can be easily and successfully implemented in a mobile device application (i.e., a 'body image'-app). Second, our results may support those *media actors* that have shown their willingness to take responsibility to provide healthier body standards through their media outlets. Moreover, the findings may even persuade them to support our proposed counteracting suggestions. Third, our research may inform *political debates* about redirecting the detrimental effects that arise from exposure to idealized body imagery by means of mandatory labels and disclaimer information about digital alterations made to models. Such policy rules are subject to consideration in several countries like the United Kingdom, Israel, and France. In the Netherlands, the provision of warning texts before entering a pro-anorexia site has obtained some political interest, but no legal means seem to be currently available to force the use of such texts. However, our findings may set the topic of body image and negative media-induced effects on the political agenda, which may lead to further consideration of political guidelines as a driving force behind our proposed intervention strategies. Finally, changes in the media landscape and the implementation of proper interventions will most likely have a positive impact on the *media users themselves*. Especially those who are vulnerable to body-related issues may further profit from social reinforcement by peers, parents and relevant others, and from societal discussions about what is considered healthy and ‘normal’ body sizes.