

Predictors of Coping with Health-related Expectation Violations among University Students

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Objectives: Individuals often experience expectation violations related to the consumption of healthy food and physical activity and they may cope with expectation-disconfirming information by (1) ignoring the discrepancy (immunization), (2) increasing efforts to fulfill them (assimilation), or (3) changing their expectations (accommodation). We investigated whether valence, discrepancy magnitude, and controllability of the expectation disconfirming event predicted coping with expectation violations. **Methods:** A 2 (valence: positive vs negative) x 2 (discrepancy: larger vs smaller) x 2 (controllability: control vs no control) experimental design was implemented. Overall, we presented 297 university students with vignettes describing expectation violations and present different combinations of predictor levels. **Results:** Regarding physical activity, participants showed significantly higher accommodation when experiencing a better-than-expected event and showed significantly higher immunization when experiencing a worse-than-expected event. Regarding food consumption and physical activity, individuals experiencing lower discrepancy showed significantly higher immunization; individuals with control over the source of expectation disconfirmation showed significantly higher assimilation; and individuals without control over the source of expectation disconfirmation showed significantly higher accommodation. **Conclusions:** To promote the maintenance of healthy expectations, despite expectation violations, interventions could foster the perception of control as well as assimilative behavior.

Key words: food consumption; physical activity; expectation violations; coping

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University students often develop unhealthy food consumption¹ and physical activity patterns throughout the university period.² These behaviors may impact future health outcomes, thereby putting university students at risk for health conditions such as obesity, cardiovascular diseases, malignant tumors, and diabetes.³ Studies report that university students often gain a significant amount of weight, which has been correlated with increased unhealthy food consumption and sedentary behavioral patterns.⁴ Therefore, it is imperative to improve understanding of factors that can either inhibit or promote unhealthy behaviors among students to optimize interventions aimed at promoting healthy living. For this, universities are critical settings for decreasing the prevalence of chronic diseases among future adult populations.

PERSONAL EXPECTATIONS

Previous literature consistently describes expectations or subjective appraisals of the probability of forthcoming occurrences⁵ as predictors of future behavior.⁶ Expectations are particularly noteworthy cognitions as they can guide individuals to engage in healthy or unhealthy behaviors that may ultimately affect their present and future well-being.⁷ In a study among college freshmen, Werner et al.⁸ found that holding positive alcohol expectations significantly predicted future alcohol use. Additionally, Anderson et al.⁹ reported that individuals who expected positive results from performing physical activity showed a higher probability of being physically active.

When an individual's expectations are confirmed or violated based on novel evidence, individuals can react by altering or conserving their original

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expectations. The Violated Expectations (ViolEx) Model proposes 3 ways of coping with the disconfirmation of situation-specific expectations—*immunization*, *assimilation*, and *accommodation*.^{6,10} Immunization refers to minimizing the impact of expectation-disconfirming evidence by ignoring or downplaying its importance. Assimilation refers to increased efforts to fulfill one's expectations (ie, search for or produce future expectation-confirming evidence). Whereas the 2 former processes contribute to the persistence of expectations, accommodation refers to change in expectations to match the experienced outcome.

The ViolEx Model provides a framework in various disciplines for understanding how expectations develop and how they change or persist despite disconfirming evidence.¹¹ For instance, the model has been applied in clinical psychology to explain the maintenance of symptoms because of expectation-confirming assimilative behavior, and by immunizing against the experienced unexpected absence of feared negative consequences of avoided behaviors.⁷ Furthermore, the model has been found to predict persistence versus change of students' achievement expectations after worse-than expected achievements.¹¹

Characteristics of the Disconfirming Event as Predictors of Coping

Recognizing conditions that promote or inhibit the use of the coping strategies proposed by the ViolEx Model can help predict expectation maintenance or change in response to expectation violation. Coping with expectation violations can be influenced by certain characteristics of an expectation disconfirming event such valence, discrepancy size, and controllability of the disconfirming information or event.¹¹ The role of these factors has not been analyzed extensively in the context of violated health-related expectations.

Valence of the disconfirming event. Vast evidence indicates a higher probability of expectation change in response to better-than-expected outcomes as opposed to worse-than-expected outcomes.¹² This effect has been referred to as optimistic reinforcement learning.¹³ A higher probability of immunizing against worse-than-expected rather than better-than expected outcomes has been demonstrated as individuals tend to question the credibility of negative disconfirming information

and to label it as an exception.¹⁴

Discrepancy size of the disconfirming event. Several researchers argue that the magnitude of the discrepancy of the expectation violation predicts expectation maintenance versus change. Corresponding to the delta rule, Recorla et al.¹⁵ posit that larger discrepancies produce larger expectation change as they provide more room for learning. Nonetheless, other researchers suggest that moderate discrepancies may produce the strongest expectation change as highly discrepant events might be regarded as atypical and exception from the rule (subtyping), while smaller discrepancies are likely to be ignored.^{16,17}

Controllability of the disconfirming event. Evidently, some level of control over an event is needed for influencing its occurrence. Previous studies suggest that, in the case of controllable disconfirming situations, individuals are more likely to increase efforts to fulfill their expectations.¹⁸ In the face of uncontrollable disconfirming sources, individuals are more likely to update their expectations in response to expectation violation.¹⁸

The Present Study

As university students are at high risk of developing unhealthy expectations about food consumption and physical activity during their time at university,^{1,2} understanding predictors of maintenance or change of these expectations is important to promote healthy behavior among university students and prevent adverse health outcomes. Our study searches for evidence regarding characteristics of expectation disconfirming events that predict coping with expectation violations in a health behavior context. Previous studies demonstrate that characteristics of expectation disconfirming events predict the maintenance or change of expectations, although these characteristics have been rarely empirically related to the processes of coping with expectation violation as proposed by the ViolEx Model.¹¹ In addition, the related research has not yet addressed coping with expectation violations associated with health behaviors, such as food consumption and physical activity. Findings on predictors of expectation maintenance or change can advise health promotion interventions on adjusting dysfunctional expectations that contribute to persistent unhealthy behaviors, thus, fostering

healthy food consumption and physical activity patterns and related expectations among university students. Moreover, applying these findings could potentiate the effects of interventions.¹⁹

We investigated how 3 characteristics of the expectation disconfirming event (ie, valence, discrepancy magnitude, and controllability of the expectation disconfirming event) predict coping with expectation violations (ie, accommodation, assimilation, immunization). The first hypothesis states that individuals experiencing a positive valence of expectation violation will react with higher accommodation to expectation-disconfirming information compared to individuals experiencing negative valence of expectation violation. The second hypothesis assumes that individuals experiencing a negative valence of expectation violation will react to expectation-disconfirming information with higher immunization compared to individuals experiencing positive valence of expectation violation in order to avoid negative feelings related to disappointment.¹² The third hypothesis suggests that individuals experiencing larger discrepancy will react with higher accommodation to expectation-disconfirming information compared to individuals experiencing smaller discrepancy, and the fourth hypothesis states that individuals experiencing smaller discrepancy will react with higher immunization to expectation-disconfirming information compared to individuals experiencing larger discrepancy. The third and fourth hypotheses are based on numerous findings supporting the delta rule that suggest that larger expectation violations are likely to lead to stronger expectation change.¹⁵ To keep them realistic, we worked with moderate discrepancies rather than with extreme discrepancies that may provoke subtyping; we anticipated a linear association of the size of discrepancy with accommodation and immunization, and therefore, adhered to the delta rule. Furthermore, based on evidence suggesting a higher likelihood of individuals becoming active to fulfill their expectations in the case of control as opposed to no control over the expectation disconfirming event,¹⁸ the fifth hypothesis assumes that if individuals have control over the source of expectation disconfirmation they will react with higher assimilation to expectation-disconfirming information than individuals who do not have control over the source of expectation

disconfirmation. Finally, the sixth hypothesis proposes that if individuals do not have control over the source of expectation disconfirmation they will react with higher accommodation to expectation-disconfirming information than individuals who have control over the source of expectation disconfirmation.

METHODS

We implemented a 2 (valence of expectation-violating event: positive vs negative) x 2 (discrepancy magnitude of expectation-violating event: larger vs smaller) x 2 (controllability of expectation-violating event: control vs no control) within-subjects design. University students who were at least 18 years old were recruited via e-mail lists and were sent an invitation containing a direct link to an online questionnaire. All responses were anonymous, and participants consented to participate. As compensation, students could participate in a gift card raffle or obtain course credit.

Measures

Sociodemographic characteristics.

Demographic questions assessed sex (male, female, non-binary), age, and whether the hometown was in Germany or abroad (specific ethnic background was not assessed to prevent reidentification of participants).

Coping with expectation violations. We assessed our outcome variable through a self-developed questionnaire containing stories in which expectations about healthy food consumption and physical activity were violated. In each story, characteristics of the expectation disconfirming event were manipulated according to a 2 (positive vs negative valence) x 2 (smaller vs larger discrepancy) x 2 (high vs low controllability) plan. A total of 16 stories were included, out of which 8 referred to food consumption and 8 referred to physical activity. For each story, participants had to choose one out of 3 response options, representing immunization (ignoring/downplaying the expectation violation), accommodation (expectation change) or assimilation (trying to fulfill the expectation despite initial violation). Separate dependent variables were built for food consumption and physical activity to test the robustness of the results across both kinds of health behaviors. We used a counting variable

to sum the numbers of chosen immunization, accommodation, and assimilation responses for each level of the 3 independent variables, ranging from 0 (ie, not choosing a specific coping style in any of the 4 possible stories assessing a specific coping strategy) to 4 (ie, choosing a specific coping style in all of the 4 possible stories assessing a specific coping strategy). Appendix 1 presents 2 exemplary stories per domain.

To control for a possible effect of the sequences of the presented stories, half of the participants received them in one random sequence and the other half in the reverse sequence. Participants were randomly assigned to one of these sequences (all participants received all the vignettes).

Familiarity of situations. To validate the vignettes, we administered self-developed questions to assess whether the situations presented in the stories were like previous situations experienced by participants with a Likert scale response format from 1 “very similar” to 5 “not similar at all.”

Importance of consumption of healthy food and physical activity. To validate the vignettes, we administered self-developed questions for assessing the perceived significance of consuming healthy food and of being physically active with a response format ranging from 1 “very important” to 5 “not important at all.”

Data Analysis

We used SPSS version 27 (IBM Corp, Armonk, NY) for data analysis. Based on an *a priori* power analysis, a minimum of 111 participants was required to obtain .95 power to detect a medium effect size of .25 at the standard .05 alpha error probability. We tested our hypotheses using repeated measures ANCOVAs, comparing the corresponding outcome variable in response to the corresponding predictor variable while including the sequence of presentation of the stories as the between-subjects factor. Analyses for food consumption and for physical activity were computed separately. Appendix 2 provides a list of all used variables.

RESULTS

Demographic and Individual Characteristics

The sample consisted of 297 university students (75.8% female, 22.9% male, 1.3% non-binary; $M_{\text{age}}=23.76$, $SD=4.42$), of which 63 (21.2%)

reported that their hometown was outside of Germany.

The presented stories were, on average, perceived as familiar ($M=2.77$ ($SD=1.30$) for food consumption; $M=3.02$ ($SD=1.31$) for physical activity) and relevant ($M=1.76$ ($SD=.76$) for food consumption; $M=2.03$ ($SD=1.03$) for physical activity), which supports the validity of the stories. Paired-samples *t*-tests demonstrated that consumption of healthy food ($M=1.76$, $SD=.76$) was perceived as more important than physical activity ($M=2.03$, $SD=1.01$; $t(296)=-4.83$, $p<.001$), and that participants had more familiarity with expectation violations related to consumption of healthy food ($M=8.97$, $SD=2.97$) than related to physical activity ($M=9.83$, $SD=3.58$; $t(296)=-3.79$, $p<.001$).

Predictors of Coping with Expectation Violations

Table 1 presents the results for all hypotheses. The first hypothesis was only supported regarding physical activity as participants responded with significantly higher accommodation when experiencing a better-than-expected event compared to experiencing a worse-than-expected activity-related event. In line with the second hypothesis, we found that participants responded with higher immunization when experiencing a worse-than-expected event related to physical activity compared to experiencing positive valence of expectation violation. Nevertheless, the second hypothesis was not supported regarding food consumption.

The third hypothesis was not supported because experiencing larger discrepancy was not associated with significantly higher accommodation scores than experiencing smaller discrepancy. For physical activity, higher discrepancy was even associated with less accommodation. Consistent with the fourth hypothesis, we found for both kinds of health behavior that experiencing smaller discrepancy was related to significantly higher immunization to expectation-disconfirming information.

The fifth hypothesis was supported regarding food consumption and physical activity because having control over the source of expectation disconfirmation was associated with significantly higher assimilation scores than having no control over the source of expectation disconfirmation.

The sixth hypothesis was supported regarding food consumption and physical activity as situations without control over the source of expectation disconfirmation were associated with significantly higher accommodation scores than situations with control over the source of expectation disconfirmation.

Furthermore, we checked whether the sequence of the presented items affected the report of coping with expectation violations. We found sequence

effects indicating that respondents were more likely to react with immunization if a story on expectation violation was presented first rather than last (F scores ranging from 3.88 to 20.87 and p ranging from .05 to <.001). However, this sequence effect is unlikely to affect hypothesis testing as half of the participants received the stories in one sequence and the others received them in reverse sequence (thereby leading to the same mean rank of each story in the total sample).

Table 1
Effects of Predictor Variables on Coping with Expectation Violation per Health Behavior

HB ^a	Group 1	Mean ₁	SD ₁	Group 2	Mean ₂	SD ₂	df	F	p
<i>Effect of valence on accommodation</i>									
FC ^b	PV ^d	.83	1.03	NV ^e	.86	1.22	1	.10	.75
PA ^c	PV	1.50	1.30	NV	.87	.88	1	73.98	<.001
<i>Effect of valence on immunization</i>									
FC	PV	1.85	1.27	NV	1.84	1.37	1	.08	.77
PA	PV	1.20	1.07	NV	2.35	1.16	1	182.86	<.001
<i>Effect of discrepancy on accommodation</i>									
FC	HD ^f	.80	.99	LD ^g	.89	1.14	1	2.43	.12
PA	HD	1.10	1.02	LD	1.27	1.10	1	8.47	.004
<i>Effect of discrepancy on immunization</i>									
FC	HD	1.45	1.09	LD	2.24	1.24	1	131.39	<.001
PA	HD	1.48	.95	LD	2.07	1.07	1	84.65	<.001
<i>Effect of control on assimilation</i>									
FC	C ^h	1.14	.96	NC ⁱ	.72	.85	1	342.83	<.001
PA	C	1.14	.96	NC	.93	.88	1	10.67	.001
<i>Effect of control on accommodation</i>									
FC	C	.60	.94	NC	.88	1.11	1	44.09	<.001
PA	C	.96	.97	NC	1.41	1.25	1	39.52	<.001

Note.

^a HB denotes health behavior.

^b FC denotes food consumption.

^c PA denotes physical activity.

^d PV denotes positive valence.

^e NV denotes negative valence.

^f HD denotes high discrepancy.

^g LD denotes low discrepancy.

^h C denotes control.

ⁱ NC denotes no control.

DISCUSSION

In this study, we investigated predictors of coping with expectation violations related to 3 characteristics of an expectation disconfirming event (ie, valence, discrepancy magnitude, and controllability) in the health behavior context (ie, food consumption and physical activity). Three of the 6 hypotheses were completely confirmed, 2 were confirmed in part, and one hypothesis was not confirmed. We start with a short discussion of the confirmed hypotheses, followed by a more detailed discussion of inconsistent findings.

Results for the fourth hypothesis align with

findings by Seta et al.¹⁷ and suggest that in the case of food consumption and physical activity, smaller discrepancies predict immunization to cope with expectation violations. Moreover, results for the fifth and sixth hypotheses corroborate previous findings suggesting a higher likelihood of individuals becoming active to fulfill their expectations if they have control as opposed to no control over the expectation disconfirming event, and higher likelihood of expectations change following expectation violation in the face of uncontrollable disconfirming events.¹⁸ Our results indicate that the size of discrepancy and having

control over the disconfirming event are relevant for health behaviors such as food consumption and physical activity.

The first and second hypotheses were supported regarding physical activity but not regarding food consumption. Possibly, the manipulation of the independent variable (ie, valence) may have been more successful in the stories referring to physical activity than to food consumption as the levels of valence presented in the food consumption vignettes (eg, price difference of buying a salad of 30 cents vs 80 cents) may not have been large enough to produce different responses compared to the levels of valence presented in the physical activity vignettes (eg, running for 2 hours instead of 1 hour or running for 40 minutes instead of 2 hours). As more statistically significant results were found regarding physical activity than food consumption, the higher perceived importance of healthy eating and the higher familiarity with expectation violations related to food consumption rather than physical activity might have inhibited the effects of the manipulation of the presented situations. Thus, participants already may have developed a general way of coping with food-consumption-related expectation violations (eg, whether it is worth to check another store) that may have affected their reactions to the presented stories and therefore, may have reduced the effects of the experimental manipulation within the stories.

Interestingly, the third hypothesis was not confirmed, and regarding physical activity, we found even statistically significant results in the opposite direction of our hypothesis (ie, higher discrepancy was associated with less accommodation). Several researchers suggest that high discrepancies may lead to subtyping and to the perception of the expectation disconfirming event as exception from the rule, and therefore, to the maintenance of general expectations as future situations are expected to be as they have previously been.^{16,17} Thus, large discrepancies might inhibit learning and expectation change. This alternative theoretical view may have been more appropriate for our data than Rescorla and Wagner's¹⁵ delta rule. Moreover, despite stories presenting higher discrepancy, half of them included the option to show assimilative behavior (ie, becoming active to fulfill one's expectation at least in part). Higher accommodation (ie, expectation change)

in response to larger discrepancies may be found mainly if individuals have no chance to alter the situation (eg, getting an unexpected injury that permanently prevents from doing an expected kind of sports). Thus, the third hypothesis might have been confirmed if the stories only referred to situations that did not leave any option to show assimilative behavior.

We end the discussion with a few comments on the observed effect of the sequence of the presented stories. When participants were first exposed to a story presenting an expectation violation, they were more likely to immunize against discrepant information. However, participants were more likely to change their expectation (ie, accommodate) after further exposure to stories presenting expectation violations as it may have become more difficult to ignore discrepant information. Thus, in line with research on serial learning,²⁰ some participants may have needed more than one trial of exposure to expectation violations to realize it may be difficult to continue ignoring discrepant information and decide to change their expectation.

Limitations and Conclusions

Our findings should be interpreted in light of potential limitations. First, some sequence effects were found regarding items presented in either the first or last story (depending on the sequence completed). In addition, due to the similarity of the presented stories, participants may have become more aware of the variables that were manipulated and may have more strongly responded accordingly thereafter. Varying the story contents (eg, buying different kinds of food, success vs failure with preparing a meal, etc) not only would reduce the attention for the manipulation of the independent variables, but also would bring in additional sources of variation that could confound effects of the independent variables (if a particular story content is presented together with a particular combination of the independent variables). Using a between-subject design and presenting only one story to each individual would solve these problems, although it would be challenging to recruit a much larger sample that would be needed for such a design. In addition, repeated confrontation with expectation violations is common in daily life. Second, our study focused on investigating disconfirmation of expectations about only 2 healthy behaviors. For

testing the generalizability of our results, future studies could assess coping with expectation violations related to other healthy (eg, getting enough sleep) and unhealthy (eg, substance use) behaviors. Despite these limitations, our findings provide novel evidence regarding characteristics of expectation disconfirming events that predict coping with expectation violations in a health behavior context.

Future studies should consider assessing predictors of coping with expectation violations in a health behavior context in a more naturalistic setting by confronting individuals with broken expectations in real life situations—for instance—with virtual-reality-based studies. Moreover, future research could assess the role of these predictors in relationship to other health behaviors among young adults (eg, alcohol use, sexual risk-taking) and other age groups and/or examine further predictors of coping with expectation violations related to characteristics of the expectation disconfirming event (eg, credibility of the disconfirming information), and to broader situational and personality characteristics (eg, prior coping with the disconfirming information; positive and negative affectivity).¹¹ Furthermore, empirical research is needed to assess under which conditions effects of the size of discrepancies follow the delta rule¹⁵ and under which conditions large discrepancies do not lead to expectation change. A more complex model that includes the role of control over an expectation-violating event for predicting how the size of discrepancy relates to accommodation might be theoretically relevant, as the delta rule¹⁵ mainly or exclusively may be applied in uncontrollable situations.

Applying our findings can potentiate the effects of health promotion interventions related to food consumption and physical activity among university students. First, interventions may benefit from assessing participants' initial ways of coping with expectation violations as these may influence their reaction to future expectation violations and the effects of interventions. Second, our findings indicate that, even in the case of larger expectation violations, individuals can maintain expectations about the consumption of healthy food and physical activity if, to some degree, they have the perception of control (ie, see the chance to still achieve their expectations). Correspondingly, interventions that

encourage assimilative behavior for coping with unforeseen events that prevent an expected healthy behavior would be favorable to fostering healthy eating and physical activity. As such, interventions could foster the perception and availability of control to increase the probability that individuals will try to overcome barriers to fulfill their healthy expectations (ie, assimilation) rather than giving them up (ie, accommodation). Fostering control could include activities that allow participants to overcome unexpected barriers (eg, writing daily health goals, committing to realizing them, and marking them as completed). Lastly, as confronting individuals with expectation violations about alcohol use through Alcohol Expectancy Challenges is effective at changing unhealthy expectations and behavior,²¹ expectation violations also could play a role in interventions aimed at promoting healthy behaviors. Applying our findings regarding the optimal kind of expectation violations that foster healthy expectations could increase intervention effects for promoting healthy food consumption and physical activity.

Human Subjects Approval Statement

Ethical approval was granted by the ethical board of the Psychology Department at Philipps-University of Marburg, approval number 2021-78k.

Conflict of Interest Disclosure Statement

All authors have no conflict of interest to disclose.

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APPENDIX 1

Exemplary Stories

Story related to food consumption (combination of independent variables: valence=positive, discrepancy=higher, controllability=higher): I went to the supermarket to buy one salad for 1 euro because I expect to eat it with a friend in the evening. When I arrived at the supermarket, I found out that the price of the salads was reduced by 80%, and I can buy five salads for the price of one. I can decide how many salads to buy. I would react by:

- Buying the one salad I expected to buy (assimilation)
- Thinking that it doesn't matter how much the salads cost as long as I get the one salad that I expected to buy (accommodation)
- Changing my expectation to buy only one piece of salad as I can get more for the price of one (immunization)

Story related to physical activity (combination of independent variables: valence=negative, discrepancy=higher, controllability=lower): I started to wake up early because I expect to run in the morning for two hours. When I woke up, I read my emails and realized that I can only run for forty minutes instead of two hours because I confused the time of my lecture. Since this lecture is important for me and I cannot miss it, I cannot decide to run for more than forty minutes. I would react by:

- Planning to run after the lecture to run for two hours as I expected to (assimilation)
- Thinking that it does not matter how long I run as long as I get to run (accommodation)
- Changing my expectation of running for two hours to running for a shorter time (immunization)

APPENDIX 2

Variables

- **Sex:** (1) Male (2) Female (3) Non-binary
- **Age**
- **Hometown:** (1) In Germany (2) Abroad
- **Order of vignettes:** (1) Order 1 (2) Reversed order
- **Food consumption vignette familiarity:** Average of all four items assessing whether the situations presented in the food consumption stories were like previous situations experienced by participants.
- **Physical activity vignette familiarity:** Average of all four items assessing whether the situations presented in the physical activity stories were like previous situations experienced by participants.
- **Importance of consumption of healthy food:** Sum of items assessing perceived significance of consuming healthy food.
- **Importance of physical activity:** Sum of items assessing perceived significance of being physically active.
- **Numbers of choosing accommodation, assimilation, and immunization depending on kind of health behavior (food consumption, physical activity) and characteristics of the expectation violation:**

		Food consumption		Physical activity	
Control over expectation confirmation	High	Accommodation	Accommodation	Accommodation	Accommodation
		Assimilation	Assimilation	Assimilation	Assimilation
		Immunization	Immunization	Immunization	Immunization
	Low	Accommodation	Accommodation	Accommodation	Accommodation
		Assimilation	Assimilation	Assimilation	Assimilation
		Immunization	Immunization	Immunization	Immunization
Size of discrepancy between expectation and event	High	Accommodation	Accommodation	Accommodation	Accommodation
		Assimilation	Assimilation	Assimilation	Assimilation
		Immunization	Immunization	Immunization	Immunization
	Low	Accommodation	Accommodation	Accommodation	Accommodation
		Assimilation	Assimilation	Assimilation	Assimilation
		Immunization	Immunization	Immunization	Immunization
Valence of expectation violation	Positive (better than expected)	Accommodation	Accommodation	Accommodation	Accommodation
		Assimilation	Assimilation	Assimilation	Assimilation
		Immunization	Immunization	Immunization	Immunization
	Negative (worse than expected)	Accommodation	Accommodation	Accommodation	Accommodation
		Assimilation	Assimilation	Assimilation	Assimilation
		Immunization	Immunization	Immunization	Immunization