

Online Appendices

Improving or Enhancing the Self? Beliefs About Body Shape Malleability

Influence Consumer Product Evaluation and Preference

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Appendix

Table of contents

Appendix..... 1

8. Study 1..... 2

 8.1. Measure wording of Study 1 2

 8.2. Pilot study of Study 1..... 6

 8.3. Data transparency of Study 1 9

9. Study 2..... 9

 9.1. Measure wording of Study 2 9

 9.2. Manipulation texts in Study 2 10

 9.3. Products of Study 2 12

 9.4. Pilot studies of Study 2 15

 9.5. Data transparency of Study 2 18

10. Male-specific parallel experiment..... 18

 10.1. Measure wording of the male-specific parallel experiment 18

 10.2. Manipulation texts in the male-specific parallel experiment 20

 10.3. Products of the male-specific parallel experiment 22

 10.4. Pilot studies of the male-specific parallel experiment..... 24

 10.5. Data transparency of the male-specific parallel experiment..... 27

 10.6. Design of the male-specific parallel experiment..... 28

 10.7. Materials of the male-specific parallel experiment 28

 10.8. Procedure of the male-specific parallel experiment..... 29

 10.9. Participants and compensation of the male-specific parallel experiment..... 29

 10.10. Results of the male-specific parallel experiment 29

11. Study 3..... 30

 11.1. Measure wording of Study 3 30

11.2. Manipulation texts in Study 3	31
11.3. Dropped control group in Study 3.....	34
11.4. Products of Study 3	35
11.5. Data transparency of Study 3.....	36
References.....	37

8. Study 1

8.1. Measure wording of Study 1

Lay theories about body shape malleability (Burnette 2010) (original version)

Inwiefern stimmen Sie den folgenden Aussagen über den menschlichen Körper zu?

Der Körper eines Menschen hat eine bestimmte Figur und man kann nicht wirklich viel dagegen tun.

Die eigene Figur kann man nicht erheblich beeinflussen.

Um ehrlich zu sein, kann man die Form des Körpers nicht wirklich verändern.

Lay theories about body shape malleability (Burnette 2010) (English translation)

To what extent do you agree or disagree with each of these statements about the human body?

You have a certain figure, and you can't really do much to change it.

You can't change your basic body shape considerably.

To be honest, you can't really change your body shape.

Perceived relevance of thinness (Schaefer et al. 2015) (original version)

Inwiefern stimmen Sie folgenden Aussagen über Ihren Körper zu?

Ich möchte, dass mein Körper sehr dünn aussieht.

Ich denke viel darüber nach, ob ich schlank aussehe.

Ich möchte, dass mein Körper sehr schlank aussieht.

Ich denke viel darüber nach, ob mein Körper einen geringen Fettanteil hat.

Perceived relevance of thinness (Schaefer et al. 2015) (English translation)

To what extent do you agree or disagree with each of these statements about your body?

I want my body to look very thin.

I think a lot about looking thin.

I want my body to look very lean.

I think a lot about having very little body fat.

Perceived relevance of muscle tone (Schaefer et al. 2015) (original version)

Inwiefern stimmen Sie folgenden Aussagen über Ihren Körper zu?

Ich denke viel darüber nach, ob ich muskulös aussehe.

Es ist mir wichtig, athletisch auszusehen.

Ich verbringe viel Zeit mit Tätigkeiten, damit ich muskulöser aussehe.

Ich verbringe viel Zeit mit Tätigkeiten, damit ich athletischer aussehe.

Ich denke viel darüber nach, ob ich athletisch aussehe.

Perceived relevance of muscle tone (Schaefer et al. 2015) (English translation)

To what extent do you agree or disagree with each of these statements about your body?

I think a lot about looking muscular.

It is important for me to look athletic.

I spend a lot of time doing things to look more muscular.

I spend a lot of time doing things to look more athletic.

I think a lot about looking athletic.

Body image (Cash et al. 2002) (original version)

Bitte vervollständigen Sie jeweils den angefangenen Satz, damit er am besten beschreibt, wie Sie sich genau in diesem Moment fühlen. Bewegen Sie den Kreis durch Verschieben, Klicken oder, indem Sie eine ganze Zahl zwischen 0 und 100 in das Kästchen rechts vom Balken schreiben. Der Kreis und die Zahl zeigen pro Satz, inwiefern eine der beiden Beschreibungen Ihr aktuelles Körpergefühl besser ausdrückt.

Genau in diesem Moment fühle ich mich...

... mit meiner körperlichen Erscheinung äusserst unzufrieden/zufrieden.

... mit meiner Figur äusserst zufrieden/unzufrieden.

... mit meinem Körpergewicht äusserst unzufrieden/zufrieden.

... körperlich äusserst attraktiv/unattraktiv.

... hinsichtlich meines Aussehens sehr viel schlechter/besser als gewöhnlich.

Genau in diesem Moment empfinde ich mein Aussehen im Vergleich zu demjenigen des Durchschnittsmenschen als sehr viel besser/schlechter.

Body image (Cash et al. 2002) (English translation)

Please complete each sentence so that it best describes how you feel at that exact moment.

Move the circle of the bar each time by dragging, clicking, or typing a whole number between 0 and 100 in the box to the right. The circle and the number show per sentence to what extent one of the two descriptions better expresses your current body feeling.

At this very moment, I feel...

... strongly dissatisfied/satisfied with my physical appearance.

... strongly satisfied/dissatisfied with my figure.

... strongly dissatisfied/satisfied with my body weight.

... physically highly attractive/unattractive.

... much worse/better than usual about my appearance.

At this very moment, I feel my appearance is much better/worse compared to that of an average person.

Body appreciation (Swami et al. 2008) (original version)

Bitte geben Sie an, wie häufig die jeweilige Aussage auf Sie zutrifft.

Ich respektiere meinen Körper.

Ich fühle mich wohl in meinem Körper.

Im Grossen und Ganzen bin ich mit meinem Körper zufrieden.

Trotz seiner „Makel“ akzeptiere ich meinen Körper, so wie er ist.

Ich finde, dass mein Körper zumindest einige Vorzüge hat.

Ich habe eine positive Einstellung zu meinem Körper.

Ich achte auf die Bedürfnisse meines Körpers.

Mein Selbstwertgefühl ist unabhängig von meiner Figur oder meinem Gewicht.

Ich verwende nicht viel Zeit dafür, mir Gedanken über meine Figur oder mein Gewicht zu machen.

Meine Einstellung zu meinem Körper ist grösstenteils positiv.

Zum Wohle meines Körpers lebe ich gesund.

Ich lasse es nicht zu, dass Medienbilder von unrealistisch dünnen oder muskulösen Personen meine Einstellung zu meinem Körper beeinflussen.

Trotz seiner Unvollkommenheit mag ich meinen Körper.

Body appreciation (Swami et al. 2008) (English translation)

Please indicate how often each statement applies to you.

I respect my body.

I feel comfortable in my body.

On the whole, I am satisfied with my body.

Despite its "flaws", I accept my body as it is.

I think my body has at least some merits.

I have a positive attitude towards my body.

I pay attention to my body's needs.

My self-esteem is independent of my figure or weight.

I do not spend much time worrying about my figure or weight.

My attitude toward my body is mostly positive.

For the sake of my body, I live a healthy life.

I do not allow media images of unrealistically thin or muscular people to influence my attitude towards my body.

Despite its imperfections, I like my body.

Body-brand signaling (Park and John 2010) (original version)

Inwiefern stimmen Sie folgenden Aussagen über Markenprodukte zu? Bewegen Sie den Kreis jeweils durch Verschieben, Klicken oder, indem Sie eine ganze Zahl zwischen 0 und 100 in das Kästchen rechts vom Balken schreiben.

Ich nutze Markenprodukte, um mir zu zeigen, wie schlank oder muskulös ich aussehe.

Ich verwende Markenprodukte, um anderen zu kommunizieren, wie mein Körper aussieht.

Ich konsumiere Markenprodukte, damit meine Figur besser aussieht.

Ich benutze Markenprodukte, um bei anderen in Bezug auf meinen Körper einen besseren Eindruck zu hinterlassen.

Body-brand signaling (Park and John 2010) (English translation)

To what extent do you agree or disagree with each of these statements about brands? Move the circle of the bar each time by dragging, clicking, or typing a whole number between 0 and 100 in the box to the right.

I use brands to tell myself how thin or muscular I look.

I use brands to communicate how my body looks to other people.

I consume brands to make my figure look better.

I use brands to make a better impression on other people with respect to my body.

8.2. Pilot study of Study 1

Pilot study 1: Selecting a survey instrument for measuring body shape malleability beliefs

To identify a reliable and valid measure of lay theories about body shape malleability, we conducted a pre-test comparing five survey instruments. Framed as a survey about personality

and the human body, survey software SurveyMonkey randomly assigned the participants to one of five conditions, each featuring a different version of a malleability beliefs scale varying in wording, item framing, and response format.

Whereas three survey instruments included both incremental and entity theory statements, two survey instruments only contained entity theory statements (e.g. Yorkston et al. 2010). One condition had a non-forced-choice format to examine whether it exhibits better psychometric properties.

Survey instrument 1 contained three entity theory statements on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) arranged as single multiple-choice questions. Survey instrument 2 included three interval scales ranging from 0 (*completely endorsing an entity theory*) to 100 (*completely endorsing an incremental theory*). Survey instrument 3 had seven entity and incremental theory statements on a 5-point Likert-type scale ranging from 1 (*not correct at all*) to 5 (*completely correct*) arranged as single multiple-choice questions. Survey instrument 4 encompassed three entity theory statements on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*) arranged in a matrix format. Survey instrument 5 consisted of six entity and incremental statements on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*) arranged in two matrix formats. We asked each participant to indicate how strongly they believe that body shape is stable or malleable, respectively.

To assess discriminant validity, participants completed the implicit person theory measure (Levy et al. 1998; Preißinger and Schoen 2018), matched in format to the assigned survey instrument. For convergent validity, all participants estimated the likelihood that four persons in different scenarios can improve their body shape through diet and exercise on interval scales ranging from 0 (*completely unlikely*) to 100 (*completely likely*) (adapted from Chiu et al. 1997). To evaluate concurrent validity, all participants completed a measure of avoidant

coping in the context of body shape change attempts (Burnette 2010; Hong et al. 1999; Ommundsen 2003).

Tab. A1 describes participant demographics and compensation details. The psychometric properties of the survey instruments appear in *Tab. A2*. Based on reliability and validity, we selected the survey instrument with three entity theory statements on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*).

Sample	Students enrolled in an introductory marketing class at a West German university: $N = 163$
Gender (percentage of sample)	Men: $n = 68$ (41.72%)
	Women: $n = 94$ women (57.67%)
	Not specified: $n = 1$ (0.61%)
Body Mass Index (kg/m²)	$M = 23.78$
	$SD = 4.21$
Age (years)	$M = 22.85$
	$SD = 3.28$
Compensation	Partial course credits

Tab. A1: Participant demographics and compensation details of pre-test “Pilot study 1:

Selecting a survey instrument for measuring body shape malleability beliefs”

	Descriptive statistics of lay theories about body shape malleability		Internal reliability Cronbach's α	Pearson correlation coefficients					
	M	SD		Implicit person theory measure	Scenarios				Avoidant coping measure
					1	2	3	4	
Survey instrument 1	4.39	0.59	.90	.18	.07	.01	.06	.25	.32
Survey instrument 2	85.72	12.04	.80	-.05	.27*	.56****	.46***	.09	.26*
Survey instrument 3	4.10	0.57	.75	.28	.09	.55***	.19	.35*	.32*
Survey instrument 4	4.82	1.11	.91	.13	.21	.61****	.40**	.53***	.38**
Survey instrument 5	4.43	0.86	.83	.05	-.05	.21	.17	-.12	.19

Note. – * $p \leq .10$, ** $p < .05$, *** $p < .01$, **** $p < .001$.

Tab. A2: Descriptive statistics and psychometric properties of pre-test “Pilot study 1:

Selecting a survey instrument for measuring body shape malleability beliefs”

8.3. Data transparency of Study 1

All data and analysis code of Study 1 are available at

https://osf.io/yn23f/?view_only=34ce44769d3e48d0ae7bc747a6aee002.

9. Study 2

9.1. Measure wording of Study 2

Self-enhancement product evaluation

Product attitudes (Han et al. 2020; Keller 1993; Labroo and Mukhopadhyay 2009; Lei et al. 2012) (original version). Inwiefern trifft jeweils eines der beiden Worte besser auf das Sommerkleid/figurformende Top zu?

abstoßend – ansprechend

wichtig – belanglos

nützlich – unnütz

Product attitudes (Han et al. 2020; Keller 1993; Labroo and Mukhopadhyay 2009; Lei et al. 2012) (English translation). To what extent does either word better apply to the single-color maxi dress/figure-shaping top?

repulsive – pleasant

important – irrelevant

useful – useless

Purchase intention (Paolacci et al. 2014) (original version). Stellen Sie sich jetzt bitte vor, dass Sie den Geldbetrag zur Verfügung hätten, welchen das Sommerkleid/figurformende Top kostet. Wie wahrscheinlich ist es, dass Sie das Geld sparen bzw. das Produkt kaufen würden?

Purchase intention (Paolacci et al. 2014) (English translation). Please assume that you've the amount of money the single-color maxi dress/figure-shaping top costs. How likely would you be to save the money or spend it to get the product?

Lay theories about body weight malleability (Burnette 2010) (original version)

Inwiefern stimmen Sie den folgenden Aussagen über das Körpergewicht des Menschen gemäß dem Text zu?

Der Körper von ausgewachsenen Personen hat ein bestimmtes Gewicht und sie können üblicherweise nicht wirklich viel dagegen tun.

Das eigene Körpergewicht können ausgewachsene Personen prinzipiell nicht erheblich beeinflussen.

Im Großen und Ganzen können ausgewachsene Personen das Körpergewicht nicht nachhaltig verändern.

Lay theories about body weight malleability (Burnette 2010) (English translation)

To what extent do you agree or disagree according to the text with each of these statements about body weight?

You have a certain body weight, and you can't really do much to change it.

You can't influence your basic body weight considerably.

Overall, you can't permanently change the body weight you have.

9.2. Manipulation texts in Study 2

Incremental theory text about body weight (original version)

Das Körpergewicht ist veränderlich.

Neben zahlreichen weiteren Faktoren aus der Humanbiologie unterstreicht die Wirkung des Insulinspiegels, dass ausgewachsene Personen ihr Körpergewicht üblicherweise in deutlichem Ausmaß verändern können. Ein niedriger Insulinspiegel sorgt dafür, dass sich das Gewicht in der Regel erheblich reduzieren lässt. Wenn der Körper das Insulin zur Senkung des Blutzuckerspiegels abbaut, beziehen die Zellen Energie aus den Fettreserven.

Verlängert sich daher die Dauer zwischen zwei Mahlzeiten, welche Kohlenhydrate zum Beispiel in Form von Brot, Reis oder Nudeln enthalten, verbraucht der Körper mehr eigenes

Fett. Generell lässt sich das Körpergewicht von ausgewachsenen Personen mithilfe von Essenspausen somit langfristig beträchtlich senken.

Incremental theory text about body weight (English translation)

Body weight is malleable.

Among numerous other factors from human biology, the effect of the insulin level underscores that body weight of adults is usually changeable to a significant extent. A low insulin level contributes to losing body weight. After insulin degradation, the cells start to metabolize body fat. Therefore, the organism degrades its fat if people increase the duration between their meals that contain carbohydrates, e.g. in the form of bread, rice, or pasta.

Thanks to longer meal breaks, adult persons can thus considerably reduce body weight in the long term.

Entity theory text about body weight (original version)

Das Körpergewicht ist dauerhaft.

Neben zahlreichen weiteren Faktoren aus der Humanbiologie unterstreicht die Wirkung des Insulinspiegels, dass das Körpergewicht von ausgewachsenen Personen üblicherweise beständig ist. Ein hoher Insulinspiegel sorgt dafür, dass das Gewicht in etwa fix ist. Erst wenn der Körper das Insulin zur Senkung des Blutzuckerspiegels abbaut hat, beziehen die Zellen Energie aus den Fettreserven. Bei vielen Menschen wird Insulin jedoch nicht vollständig verbraucht, weil diese häufig verarbeitete Kohlenhydrate konsumieren. Folglich greift der Körper nicht mehr auf sein Fett zurück, selbst wenn die Dauer zwischen Mahlzeiten verlängert wird. Generell bleibt das Körpergewicht von ausgewachsenen Personen trotz Essenspausen somit langfristig ungefähr konstant.

Entity theory text about body weight (English translation)

Body weight is stable.

Among numerous other factors from human biology, the effect of the insulin level underscores that body weight of adults is usually permanent. A high insulin level contributes to a roughly fixed body weight. Only after insulin degradation, the cells start to metabolize body fat. The organism of many people, however, does not completely degrade the insulin because they frequently consume refined carbohydrates. Consequently, the body does not metabolize its fat even if these people increase the duration between their meals. Despite longer meal breaks, body weight of adult persons thus remains approximately constant in the long term.

9.3. Products of Study 2

Picture of single-color maxi dress



Product description of single-color maxi dress (original version)

Der Saum des Kleides fällt locker über den Körper, sodass eine breitere Taille, kräftigere Hüften oder Oberschenkel kaschiert werden. Insgesamt schmeichelt das unifarbene Kleid der Figur, weil diese gestreckter und zierlicher wirkt.

Product description of single-color maxi dress (English translation)

The dress conceals a wider waist, stronger hips or thighs as the hem of the clothing falls loosely over the body. Overall, the apparel good flatters the figure because it looks more elongated and petite.

Picture of figure-shaping top



Product description of figure-shaping top (original version)

Das Top zaubert eine sichtbar schlankere Silhouette, indem es die Taille und die Hüftpartie sanft formt. Ideal eignet es sich zum Tragen unter einer Bluse oder einem Kleid, weil das Top unauffällig ist. Das Top bringt Sie in Sekunden in Form.

Product description of figure-shaping top (English translation)

Because the top forms the waist and hips area, the clothing contributes to a visibly slimmer silhouette. The apparel good is ideal to wear under a blouse or dress, because the top is unobtrusive. Within seconds, it will get you in shape.

9.4. Pilot studies of Study 2

Pilot study 1: Selecting manipulation text topics for Study 2

The goal of this pilot study was to identify suitable text topics for manipulating lay theories about body weight malleability. The incremental theory text should describe body weight as more malleable than the entity theory text. We also evaluated each text pair for clarity, credibility, familiarity, and relevance.

Five text topics were tested: physical activity, socialization, hunger, dietary fiber, and insulin. Survey software SurveyMonkey randomly assigned female participants to the entity or incremental theory text about three topics. *Tab. A3* explains the demographics of pre-test participants and compensation details. After reading a text, participants rated on two items the degree to which the text described body weight as malleable on a 5-point Likert-type scale ranging from 1 (*against it/hardly*) to 5 (*for it/considerable*) (Jain et al. 2009). Participants then evaluated on eight control variable items the text’s clarity, credibility, familiarity, and relevance on a 5-point Likert-type scale ranging from 1 (*completely disagree*) to 5 (*completely agree*) (Carnevale et al. 2018; Huang et al. 2014; Labroo and Mukhopadhyay 2009; Mathur et al. 2012; Park and John 2010). We averaged these control variables if the internal consistency allowed.

Sample	German-speaking participants: $N = 62$
Gender (percentage of sample)	Women: $n = 61$ (98.39%)
	Not specified: $n = 1$ (1.61%)
Students (percentage of sample)	Students: $n = 50$ (80.65%)
	Non-students: $n = 12$ (19.35%)
Body Mass Index (kg/m²)	$M = 23.07$
	$SD = 7.60$
Age (years)	$M = 26.56$
	$SD = 5.62$
Compensation	Platform credits and opportunity to win a raffle

Tab. A3: Participant demographics and compensation details of pre-test “Pilot study 1:

Selecting manipulation text topics for Study 2”

Independent samples *t*-tests revealed that the insulin texts met the malleability difference and control variables criteria. The incremental theory text about insulin ($M = 3.79$, $SD = 0.49$) described body weight as more malleable than the entity theory text ($M = 1.90$, $SD = 0.77$) ($t(15) = 5.67$, $p < .001$, Cohen's $d = 2.93$). The incremental ($M = 4.04$, $SD = 0.76$) and entity theory texts ($M = 3.80$, $SD = 0.72$) were similarly rated on the control variables ($t(17) = 0.72$, $p = .484$, Cohen's $d = 0.35$). The hunger texts also met these criteria, but we selected the insulin texts for utilizing in Study 2 due to their brevity.

Furthermore, we excluded the physical activity and dietary fiber texts because the text pairs differed in the control variables (both p 's $\leq .019$). We dropped the socialization texts, as they failed to differ in perceived malleability ($p = .674$).

Pilot study 2: Pretesting the manipulation texts for Study 2

The second pilot study tested whether the manipulation texts effectively induced different beliefs about body weight malleability. It employed a single factor (manipulation text: entity vs. incremental theory) between-subjects design. For information about the sample and the compensation details, please see *Tab. A4*.

Sample	German-speaking participants recruited via email and survey platforms based on reciprocity: $N = 56$
Gender (percentage of sample)	Women: $n = 56$ (100.00%)
	Not specified: $n = 0$ (0.00%)
Students (percentage of sample)	Students: $n = 50$ (89.29%)
	Non-students: $n = 6$ (10.71%)
Body Mass Index (kg/m²)	$M = 22.31$
	$SD = 3.72$
Age (years)	$M = 25.73$
	$SD = 6.59$
Compensation	Platform credits and opportunity to win a raffle

Tab. A4: Participant demographics and compensation details of "Pilot study 2: Pretesting the manipulation texts for Study 2"

SurveyMonkey, survey software, randomly assigned female participants to read either the entity or incremental theory text. As a first manipulation check, participants responded to three statements representing an entity theory of body weight on a 6-point Likert-type scale

ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). After reverse-coding and averaging the items, an independent samples *t*-test found that incremental theory participants ($M = 5.69$, $SD = 0.50$) perceived body weight as more malleable than did entity theory participants ($M = 3.49$, $SD = 1.65$) ($t(29.03) = 6.56$, $p < .001$, Cohen’s $d = 2.44$). As a second manipulation check, participants answered whether two persons portrayed in separate scenarios will reduce their body weight on a 6-point Likert-type scale ranging from 1 (*completely unlikely*) to 6 (*completely likely*) (adapted from Chiu et al. 1997). Each of these scenarios described the person’s current body appearance. The scenarios also stated the activities that the persons plan to execute. An independent samples *t*-test demonstrated that incremental theory participants ($M = 4.71$, $SD = 0.74$) rated the persons’ likelihood of success higher than did entity theory participants ($M = 3.88$, $SD = 0.90$) ($t(52) = 3.72$, $p < .001$, Cohen’s $d = 1.03$). These findings confirm the manipulation texts’ effectiveness to induce distinct lay theories about body weight malleability.

Pilot study 3: Pretesting product selection for Study 2

This pilot study aimed to assess whether pre-test participants perceive certain apparel goods as self-enhancement products—items that signal a desirable body shape without actually improving it—and not as self-improvement products, which help consumers change their body shape (e.g., through diet or exercise). *Tab. A5* illustrates participant demographics and compensation details.

Sample	German-speaking, female students registered at a university in the Western part of Switzerland: $N = 76$
Body Mass Index (kg/m²)	$M = 21.48$
	$SD = 2.87$
Age (years)	$M = 24.69$
	$SD = 3.93$
Response rate	7.60%
Compensation	None

Tab. A5: Participant demographics and compensation details of pre-test “Pilot study 3:

Pretesting product selection for Study 2”

We preselected several apparel goods for women. Survey software SurveyMonkey randomly assigned participants to evaluate four products. For each of them, participants responded to three items whether it was a self-improvement product on a 6-point Likert-type scale ranging from 1 (*completely disagree*) to 6 (*completely agree*). To illustrate, a recipe book may support reducing body weight by healthy eating. Participants also responded to three items whether it was a self-enhancement product on a on 6-point Likert-type scale ranging from 1 (*completely disagree*) to 6 (*completely agree*). A vertically striped dress, for example, makes the figure appear slimmer. We averaged the items to create an index where lower scores indicate stronger perceptions of the good as a self-enhancement product. After completing the two tasks for every product, participants completed a short demographic questionnaire.

A one sample *t*-test showed that female participants rated a figure-shaping top ($M = 1.72$, $SD = 0.51$) below the index' midpoint (3.00) and thus as a self-enhancement product ($t(2) = -4.35$, $p = .049$, Cohen's $d = -2.51$). Moreover, participants rated a single-color maxi dress ($M = 2.44$, $SD = 0.75$) as marginally below the midpoint (3.00) and thus as a self-enhancement product ($t(8) = -2.23$, $p = .056$, Cohen's $d = -0.74$). Based on these findings, we selected the single-color maxi dress and figure-shaping top for employing as self-enhancement products in Study 2.

9.5. Data transparency of Study 2

All data and analysis code of Study 2 are available at

https://osf.io/yn23f/?view_only=34ce44769d3e48d0ae7bc747a6aee002.

10. Male-specific parallel experiment

10.1. Measure wording of the male-specific parallel experiment

Self-enhancement product evaluation

Product attitudes (Han et al. 2020; Keller 1993; Labroo and Mukhopadhyay 2009; Lei et al. 2012) (original version). Inwiefern trifft jeweils eines der beiden Worte besser auf das T-Shirt mit V-Ausschnitt/Unterhemd mit Muskelmodulen zu?

abstoßend – ansprechend

wichtig – belanglos

nützlich – unnütz

Product attitudes (Han et al. 2020; Keller 1993; Labroo and Mukhopadhyay 2009; Lei et al. 2012) (English translation). To what extent does either word better apply to the V-neck T-shirt/undershirt with muscle modules?

repulsive – pleasant

important – irrelevant

useful – useless

Purchase intention (Paolacci et al. 2014) (original version). Stellen Sie sich jetzt bitte vor, dass Sie den Geldbetrag zur Verfügung hätten, welchen das T-Shirt mit V-Ausschnitt/Unterhemd mit Muskelmodulen kostet. Wie wahrscheinlich ist es, dass Sie das Geld sparen bzw. das T-Shirt mit V-Ausschnitt/Unterhemd mit Muskelmodulen kaufen würden?

Purchase intention (Paolacci et al. 2014) (English translation). Please assume that you've the amount of money the V-neck T-shirt/undershirt with muscle modules costs. How likely would you be to save the money or spend it to get the V-neck T-shirt/undershirt with muscle modules?

Lay theories about muscle tone malleability (Burnette 2010) (original version)

Inwiefern stimmen Sie den folgenden Aussagen über die menschliche Muskulatur gemäß dem Text zu?

Der menschliche Körper hat eine bestimmte Muskulatur und ausgewachsene Personen können üblicherweise nicht wirklich viel dagegen tun.

Die eigene Muskulatur können ausgewachsene Personen prinzipiell nicht erheblich beeinflussen.

Im Großen und Ganzen können ausgewachsene Personen den Umfang der Muskulatur nicht nachhaltig verändern.

Lay theories about muscle tone malleability (Burnette 2010) (English translation)

To what extent do you agree or disagree according to the text with each of these statements about muscle tone?

You have a certain muscle tone, and you can't really do much to change it.

You can't influence your basic muscle tone considerably.

Overall, you can't permanently change the amount of muscle you have.

10.2. Manipulation texts in the male-specific parallel experiment

Incremental theory text about muscle tone (original version)

Die Muskulatur ist veränderlich.

Die Humanbiologie zeigt, dass ausgewachsene Personen ihre Muskulatur üblicherweise in deutlichem Ausmaß verändern können. Im menschlichen Körper existieren zwei Arten von Muskelfasern. Im Vergleich zu den Typ I Fasern können die Typ II Fasern deutlich stärker an Volumen gewinnen. Eine eiweißreiche Ernährung und gezieltes Krafttraining steigern den Anteil der Typ II Fasern im Körper, wodurch das Muskelwachstum erheblich gefördert wird. Deswegen können sogar Menschen, die bislang schwächlich waren, ihre Muskelmasse mit der Zeit erhöhen. Generell lässt sich die Muskulatur von ausgewachsenen Personen mithilfe von Krafttraining und der Ernährung somit langfristig beträchtlich aufbauen.

Incremental theory text about muscle tone (English translation)

Muscle tone is malleable.

Human biology demonstrates that muscle tone of adults is usually changeable to a significant extent. The type of fibers causes whether a muscle can expand. Type I and type II muscle fibers exist in the human body. Compared to the type I fibers, the type II fibers can significantly increase in volume. Engaging in strength training and sticking to a protein-rich diet contributes to a higher proportion of type II fibers. Thanks to sports and nutrition, even lanky persons can thus considerably build muscle mass in the long term.

Entity theory text about muscle tone (original version)

Die Muskulatur ist dauerhaft.

Die Humanbiologie zeigt, dass die Muskulatur von ausgewachsenen Personen üblicherweise beständig ist. So ist die Art der Fasern in einem Muskel dafür verantwortlich, ob sich dieser ausdehnen kann. Im Vergleich zu den Typ II Fasern können die Typ I Fasern kaum an Volumen gewinnen. Welcher Typ in der Muskulatur überwiegend vorkommt, bestimmen die Erbanlagen eines Menschen. Aus diesem Grund bleibt die Muskelmasse bei den meisten Menschen trotz Krafttraining und einer eiweißreichen Ernährung circa konstant, da sie einen hohen Anteil an Typ I Fasern aufweisen. Generell bewahrt die Muskulatur von ausgewachsenen Personen trotz Krafttraining und einer Ernährungsumstellung somit langfristig ungefähr ihren Umfang.

Entity theory text about muscle tone (English translation)

Muscle tone is stable.

Human biology demonstrates that muscle tone of adults is usually permanent. The type of fibers causes whether a muscle can expand. Type I and type II muscle fibers exist in the human body. Compared to the type II fibers, the type I fibers can hardly increase in volume. Which type is predominant in the muscles is determined by a person's genetic makeup.

Because most people possess a high proportion of type I fibers, the muscle mass of these people remains approximately constant in the long term even if they engage in strength training and stick to a protein-rich diet.

10.3. Products of the male-specific parallel experiment

Picture of V-neck T-shirt



Product description of V-neck T-shirt (original version)

Optisch verbreitert der Ausschnitt des T-Shirts die Schultern, sodass der Oberkörper kräftiger wirkt. Zudem erscheinen die Oberarme maskuliner, weil sich die kurzgeschnittenen Ärmel der Haut anschmiegen. Das Kleidungsstück unterstreicht somit die Vorzüge Ihres Körpers.

Product description of V-neck T-shirt (English translation)

The neckline of the T-shirt visually widens the shoulders, so that the upper body looks stronger. In addition, the upper arms appear more masculine, because the short-cut sleeves cling to the skin. The apparel good thus accentuates the advantages of your body.

Picture of undershirt with muscle modules



Product description of undershirt with muscle modules (original version)

Das T-Shirt verbreitert die Schultern, die Brust sowie die Oberarme unauffällig und realistisch, weil die Muskelmodule aus Nylon nach dem Vorbild des männlichen Körpers konzipiert wurden. Unter einem Hemd, einem Pullover oder sogar einer Winterjacke erscheint der Torso definierter, kräftiger und maskuliner.

Product description of undershirt with muscle modules (English translation)

The T-shirt unobtrusively and realistically broadens the shoulders, chest, and upper arms, because the muscle modules made of nylon are modelled after the male body. Under a shirt, sweater, or even a winter jacket, the torso appears stronger, more defined, and more masculine.

10.4. Pilot studies of the male-specific parallel experiment

Pilot study 1: Selecting manipulation text topics for the male-specific parallel experiment

The aim of this pilot study was to identify suitable text topics for manipulating lay theories about muscle tone malleability. The incremental theory text should describe muscle tone as more malleable than the entity theory text. We also evaluated each text pair for clarity, credibility, familiarity, and relevance.

Six text topics were assessed: strength training, training weights, nutrients, protein, abdominal muscles, and muscle fibers.

SurveyMonkey, survey software, randomly assigned male participants to the entity or incremental theory text about three topics. *Tab. A6* explains the demographics of pre-test participants and compensation details. After reading a text, participants estimated on two items the degree to which the text described muscle tone as malleable on a 5-point Likert-type scale ranging from 1 (*against it/hardly*) to 5 (*for it/considerable*) (Jain et al. 2009).

Participants then evaluated on eight control variable items the text's clarity, credibility, familiarity, and relevance on a 5-point Likert-type scale ranging from 1 (*completely disagree*) to 5 (*completely agree*) (Carnevale et al. 2018; Huang et al. 2014; Labroo and Mukhopadhyay 2009; Mathur et al. 2012; Park and John 2010). We averaged these control variable items if the internal consistency allowed.

Sample	German-speaking participants: $N = 58$
Gender (percentage of sample)	Men: $n = 58$ (100%)
	Not specified: $n = 0$ (0.00%)

Students (percentage of sample)	Students: $n = 50$ (86.21%)
	Non-students: $n = 8$ (13.79%)
Body Mass Index (kg/m²)	$M = 24.05$
	$SD = 2.99$
Age (years)	$M = 25.57$
	$SD = 3.94$
Compensation	Platform credits and opportunity to win a raffle

Tab. A6: Participant demographics and compensation details of pre-test “Pilot study 1:

Selecting manipulation text topics for the male-specific parallel experiment”

Independent samples t -tests indicated that the muscle fibers texts met the malleability difference and control variables criteria. The incremental theory text about muscle fibers ($M = 4.25$, $SD = 0.27$) described body muscle tone as more malleable than the entity theory text ($M = 3.22$, $SD = 1.03$) ($t(9.19) = 2.88$, $p = .018$, Cohen’s $d = 1.37$). The incremental ($M = 3.65$, $SD = 0.39$) and entity theory texts ($M = 3.96$, $SD = 0.62$) were rated similarly on the control variables ($t(17) = -1.32$, $p = .205$, Cohen’s $d = -0.60$). The nutrients and strength training texts also met both criteria, but we chose the muscle fibers texts for employing in the male-specific parallel experiment due to their brevity and focus.

We dropped the training weights and protein texts, as the text pairs failed to differ in perceived malleability (both p ’s $\geq .195$). We also excluded the abdominal muscles texts because the text pair marginally differed in the control variables ($p = .053$).

Pilot study 2: Pretesting the manipulation texts for the male-specific parallel experiment

The second pilot study examined whether the manipulation texts effectively induced different beliefs about muscle tone malleability. It had a single factor (manipulation text: entity vs. incremental theory) between-subjects design. For information about participant demographics and compensation details, please see *Tab. A7*.

Sample	German-speaking participants recruited via email and survey platforms based on reciprocity: $N = 40$
Gender (percentage of sample)	Men: $n = 40$ (100.00%)
	Not specified: $n = 0$ (0.00%)
Students (percentage of sample)	Students: $n = 31$ (77.50%)
	Non-students: $n = 9$ (22.50%)

Body Mass Index (kg/m²)	<i>M</i> = 23.95
	<i>SD</i> = 2.39
Age (years)	<i>M</i> = 27.70
	<i>SD</i> = 8.22
Compensation	Platform credits and opportunity to win a raffle

Tab. A7: Participant demographics and compensation details of “Pilot study 2: Pretesting the manipulation texts for the male-specific parallel experiment”

Survey software SurveyMonkey randomly assigned male participants to read either the entity or incremental theory text. As a first manipulation check, participants indicated their agreement with three statements representing an entity theory of muscle tone on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). After reverse-coding and averaging the items, an independent samples *t*-test revealed that incremental theory participants ($M = 5.57, SD = 0.51$) perceived muscle tone as more malleable than did entity theory participants ($M = 2.48, SD = 1.28$) ($t(28.58) = 10.37, p < .001$, Cohen’s $d = 3.88$). As a second manipulation check, the participants answered whether three persons portrayed in separate scenarios will build muscles on a 6-point Likert-type scale ranging from 1 (*completely unlikely*) to 6 (*completely likely*) (adapted from Chiu et al. 1997). Each of these scenarios described the person’s current body appearance. The scenarios also stated the activities that the persons plan to execute. An independent samples *t*-test found that incremental theory participants ($M = 5.25, SD = 0.49$) rated the persons’ likelihood of success higher than did entity theory participants ($M = 4.32, SD = 0.87$) ($t(32.68) = 4.11, p < .001$, Cohen’s $d = 1.44$). These findings support the manipulation texts’ effectiveness to induce distinct lay theories about muscle tone malleability.

Pilot study 3: Pretesting product selection for male-specific parallel experiment

This pilot study aimed to investigate whether the pre-test participants perceive certain apparel goods as self-enhancement and not as self-improvement products. Self-enhancement products were defined as items that create the appearance of a desirable body shape without actually

altering the body, whereas self-improvement products help consumers to transform their body shape physically. *Tab. A8* illustrates participant demographics and compensation details.

Sample	German-speaking men via survey platforms based on reciprocity: $N = 104$
Body Mass Index (kg/m²)	$M = 23.66$
	$SD = 2.94$
Age (years)	$M = 27.62$
	$SD = 7.55$
Compensation	Platform credits and opportunity to win a raffle

Tab. A8: Participant demographics and compensation details of pre-test “selecting products”

We preselected several apparel goods for men. SurveyMonkey, survey software, randomly assigned participants to evaluate four products. For each of them, participants responded to three items whether it was a self-improvement product on a 6-point Likert-type scale ranging from 1 (*completely disagree*) to 6 (*completely agree*). Participants also answered three items about whether it was a self-enhancement product on a 6-point Likert-type scale ranging from 1 (*completely disagree*) to 6 (*completely agree*). We averaged the items to create an index where lower scores indicate stronger perceptions of the good as a self-enhancement product. After completing the two tasks for every product, participants completed a short demographic questionnaire.

A one-sample t -test demonstrated that male participants rated a V-neck T-shirt ($M = 2.41$, $SD = 0.67$) below the index’ midpoint (3.00) and thus as a self-enhancement product ($t(38) = -5.48$, $p < .001$, Cohen’s $d = -0.88$). Furthermore, participants rated an undershirt with muscle modules ($M = 1.58$, $SD = 0.52$) below the index’ midpoint (3.00) and thus as a self-enhancement product ($t(32) = -15.59$, $p < .001$, Cohen’s $d = -2.71$). Based on these results, we chose the undershirt with muscle modules and V-neck T-shirt as self-enhancement products in the male-specific parallel experiment.

10.5. Data transparency of the male-specific parallel experiment

All data and analysis code of the Male-specific parallel experiment are available at

https://osf.io/yn23f/?view_only=34ce44769d3e48d0ae7bc747a6aee002.

10.6. Design of the male-specific parallel experiment

As Study 2, this experiment had a 2 (lay theories about muscle tone malleability: incremental vs. entity theory; between-subjects) x 2 (self-enhancement product evaluation: V-neck T-shirt vs. undershirt with muscle modules; within-subjects) mixed design.

10.7. Materials of the male-specific parallel experiment

Independent variable: Incremental vs. entity theory of muscle tone

To manipulate participants' beliefs about muscle tone malleability, we employed two texts about muscle fibers that were selected and pretested, respectively, in two pilot studies (see section 10.4). The entity theory text described muscle tone as stable, whereas the incremental theory text described it as malleable (Section 10.2). An independent samples *t*-test demonstrated a marginally significant age difference between participants in the two conditions ($p = .057$).

Dependent variables: Self-enhancement product evaluation

We measured participants' evaluation of two apparel goods using the average of three product attitude items on semantic differential scales and one purchase intention item. The two products were a V-neck T-shirt (Cronbach's $\alpha = .84$) and an undershirt with muscle modules (Cronbach's $\alpha = .92$). Both products were selected after pretesting in the third pilot study (Section 10.4) and are pictured in section 10.3. For the attitude and purchase intention scores, a higher value means a more favorable product evaluation.

Product attitudes. Participants rated each apparel good on three semantic differential scales with endpoints 1 (*repulsive/important/useful*) and 5 (*pleasant/irrelevant/useless*) (adapted from Han et al. 2015; Keller 1993; Labroo and Mukhopadhyay 2009; Lei et al. 2012). We reverse-scored the second and third items so that higher values reflect more positive attitudes.

Purchase intention. Participants indicated their likelihood of purchasing each apparel good on a 5-point Likert-type scale ranging from 1 (*certainly save the money*) to 5 (*certainly spend the money*) (adapted from Paolacci et al. 2014).

Manipulation check: Lay theories about muscle tone malleability

To assess the manipulation's effectiveness, we employed three statements representing an entity theory of muscle tone, to which participants responded on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). After reverse-coding the items, we calculated the mean value of muscle tone malleability beliefs, with higher scores indicating a stronger incremental theory (Cronbach's $\alpha = .97$).

10.8. Procedure of the male-specific parallel experiment

The experiment comprised two parts. First, after being randomly assigned to one of the two conditions, half the participants read the entity theory text about strength training, whereas the other half read the incremental theory text. All participants then completed the manipulation check. In the second part, participants evaluated two apparel goods from a purportedly new fashion retailer: a V-neck T-shirt and an undershirt with muscle modules. Ultimately, participants were asked to indicate the study's purpose. No participant correctly identified that the two parts were related.

10.9. Participants and compensation of the male-specific parallel experiment

We recruited 113 male participants ($M_{AGE} = 36.57$ years, $SD_{AGE} = 12.45$ years) via the crowdsourcing platform Clickworker and paid them a monetary reward of €0.55.

10.10. Results of the male-specific parallel experiment

Manipulation check

In an independent samples *t*-test with lay theories about muscle tone malleability as the dependent variable, incremental theory participants ($M = 5.79$, $SD = 0.41$) perceived muscle

tone as more malleable than did entity theory participants ($M = 2.67$, $SD = 1.51$) ($t(61.41) = 14.75$, $p < .001$, Cohen's $d = 2.84$), confirming the manipulation's effectiveness.

Effect of the incremental vs. entity theory of muscle tone on self-enhancement product evaluation

To test *H1*, we conducted a mixed ANOVA with incremental vs. entity theory of muscle tone as the between-subjects factor and self-enhancement product evaluation as the within-subjects factor. There was a significant main effect of self-enhancement product evaluation ($F(1, 111) = 110.33$, $p < .001$, partial $\eta^2 = .50$). Participants evaluated the V-neck T-shirt ($M = 3.09$, $SD = 0.83$) more favorably than the undershirt with muscle modules ($M = 1.98$, $SD = 1.03$) ($t(111) = 10.51$, $p < .001$, Cohen's $d_z = 0.99$). By contrast, we found no significant interaction effect between self-enhancement product evaluation and incremental vs. entity theory of muscle tone ($F(1, 111) < 0.01$, $p = 0.962$, partial $\eta^2 < .01$).

Furthermore, there was no significant main effect of incremental vs. entity theory of muscle tone on the aggregated self-enhancement product evaluation ($F(1, 111) = 0.39$, $p = .534$, partial $\eta^2 < .01$). Contrary to *H1*, entity ($M = 2.58$, $SD = 0.76$) and incremental theory participants ($M = 2.50$, $SD = 0.75$) did not differ in how they evaluated the V-neck T-shirt and undershirt with muscle modules.

11. Study 3

11.1. Measure wording of Study 3

Self-improvement product preference

Zurzeit würden Ihnen zwei Fruchtjoghurts zur Verfügung stehen. Für welchen Fruchtjoghurt würden Sie sich gerade jetzt entscheiden?

At this moment, you would have two fruit yogurts to choose from. Which one would you choose right now?

Nehmen Sie an, dass Ihnen in diesem Augenblick zwei Naturjoghurts zur Verfügung stehen.

Für welchen Naturjoghurt würden Sie sich gerade jetzt entscheiden?

Suppose that you have two plain yogurts to choose from at this moment. Which one would you choose right now?

Lay theories about body shape malleability (Burnette 2010) (original version)

Inwiefern stimmen Sie den folgenden Aussagen über die menschliche Figur zu?

Der menschliche Körper hat eine bestimmte Form und ausgewachsene Personen können üblicherweise nicht wirklich viel dagegen tun.

Die eigene Figur können ausgewachsene Personen prinzipiell nicht erheblich beeinflussen.

Im Großen und Ganzen können ausgewachsene Personen ihre Figur nicht nachhaltig verändern.

Lay theories about body shape malleability (Burnette 2010) (English translation)

To what extent do you agree or disagree with each of these statements about the human body shape?

You have a certain figure, and you can't really do much to change it.

You can't influence your basic body shape considerably.

Overall, you can't permanently change the body shape you have.

11.2. Manipulation texts in Study 3

Entity theory text (original version)

Die Form des Körpers ist nahezu unveränderlich

Zu Unrecht gehen manche davon aus, dass die menschliche Figur vor allem das Produkt der Ernährung und der Bewegung einer Person ist. Obwohl diese Faktoren kleine Schwankungen im Gewicht und im Erscheinungsbild erklären, bestimmen die Erbanlagen und das Umfeld, in welchem eine Person aufwächst, bei den allermeisten Menschen, wie ihr Körper aussieht. Im Allgemeinen ist die Genetik dafür verantwortlich, wie viele Kalorien ein Mensch täglich

verbraucht. Ferner hängt es vom Erbgut ab, ob der Körper grundsätzlich gesund, beweglich sowie athletisch ist und wie viel er wiegt. Ebenso tragen die Essgewohnheiten des Elternhauses wesentlich zur Körperform bei. Diese werden im Verlauf des Lebens für gewöhnlich aufrechterhalten. Üblicherweise bleibt die menschliche Figur daher beständig, sobald eine Person ausgewachsen ist.

Subsequent question (original version)

Alle Menschen irren sich dabei, welche Faktoren für die menschliche Figur hauptsächlich verantwortlich sind. Ist diese Aussage richtig oder falsch?

Entity theory text (English translation)

Body shape is almost stable

Some people wrongly assume that body shape is primarily the result of a person's dietary behavior and physical exercise. Although these two factors account for small variations in weight and appearance, for the vast majority of people, the genetic makeup and the environment in which a person grows up determine what body shape looks like. In general, genetics is responsible for how many calories a person metabolizes on a daily basis. The genetic makeup also defines whether the body is basically healthy, agile, athletic, and how much it weighs. Furthermore, the eating habits of the parental home contribute significantly to body shape. These conducts are usually maintained during the life. Therefore, the human figure of adult persons remains approximately constant.

Subsequent question (English translation)

All people are mistaken about what factors are mainly responsible for body shape. Is it right or wrong?

Incremental theory text (original version)

Die Form des Körpers ist äußerst veränderlich

Zu Unrecht gehen manche davon aus, dass die menschliche Figur vor allem das Produkt der Erbanlagen und des Umfelds ist, in welchem eine Person aufwächst. Obwohl genetische Prädispositionen das Risiko von Stoffwechselkrankheiten erhöhen, die Übergewicht oder eine schlaksige Statur begünstigen, bestimmen die Ernährung und die Bewegung bei den allermeisten Menschen, wie ihr Körper aussieht. Im Allgemeinen gilt deshalb der Grundsatz, dass sich das Gewicht reduziert, wenn man täglich weniger Kalorien verzehrt, als der Körper in dieser Zeit verbraucht. Sportliche Betätigung steigert nicht nur den Kalorienbedarf, sondern trägt auch dazu bei, dass der Körper gesünder, beweglicher und athletischer ist. Üblicherweise lässt sich die menschliche Figur daher bis ins hohe Alter durch eine umgestellte Ernährung und mehr Bewegung deutlich verändern.

Subsequent question (original version)

Alle Menschen irren sich dabei, welche Faktoren für die menschliche Figur hauptsächlich verantwortlich sind. Ist diese Aussage richtig oder falsch?

Incremental theory text (English translation)

Body shape is strongly malleable

Some people wrongly assume that body shape is primarily the result of the genetic makeup and the environment in which a person grows up. Although genetic predispositions increase the risk of metabolic diseases that promote obesity or a lanky figure, for the vast majority of people, the dietary behavior and physical exercise determine what body shape looks like. If a person eats fewer calories than his or her organism metabolizes on a daily basis, body weight will decrease. Furthermore, exercising raises caloric needs and contributes to a healthier, more agile, and athletic body. Through physical activity and a changed diet, adult persons can therefore significantly change their figure until they are old.

Subsequent question (English translation)

All people are mistaken about what factors are mainly responsible for body shape. Is it right or wrong?

11.3. Dropped control group in Study 3

We dropped the control group from our analyses based on reviewer concerns regarding the control text's adequacy. Specifically, the control text may have elicited an abstract, high-level mindset. As the mindset hinders processing of concrete information, this could explain the lack of difference in the depend variable between participants of the control group and those primed with an entity theory. Additionally, the control text was the longest of all texts, potentially resulting in unequal cognitive load across conditions.

Control text (original version)

Die zufällige Entdeckung eines Eisriesen.

Am 13. März 1781 entdeckte der deutsch-britische Astronom Wilhelm Herschel den Planeten Uranus zufällig am Nachthimmel, als er mit einem selbst gebauten Teleskop die Sterne beobachtete. Zunächst mutmaßte Herschel, dass es sich um einen Kometen handelt. Innerhalb von drei Monaten berechneten Wissenschaftler, wie sich das Gestirn um die Sonne bewegt, sodass dieses als Planet eingeordnet wurde. Der Uranus umkreist den Stern in einer kreisförmigen Bahn und in einer durchschnittlichen Entfernung von 2,9 Milliarden Kilometern. Hierbei benötigt er mehr als 84 Jahre, bis er die Sonne einmal umrundet hat. Vergleicht man die Planeten im Sonnensystem anhand des Durchmessers, ist der Uranus nach dem Jupiter und dem Saturn der drittgrößte. Er zählt zu den sogenannten Eisriesen, weil sein Mantel vor allem aus flüchtigen chemischen Verbindungen besteht und sich seine Atmosphäre aus leichten Elementen zusammensetzt.

Subsequent question (original version)

Der Entdecker des Uranus heißt Johannes Kepler. Ist diese Aussage richtig oder falsch?

Control text (English translation)

The random discovery of an ice giant.

While the German-British astronomer Wilhelm Herschel was observing the stars with a telescope he had built himself, he accidentally discovered the planet Uranus on March 13 in 1781. At first, Herschel speculated that it was a comet, but within three months, scientists calculated how the celestial body moves around the sun, so that Uranus was classified as a planet. The planet orbits the sun at an average distance of 2.9 billion kilometers and in a circular path. It takes more than 84 years for Uranus to travel once around the star. Uranus is the third-largest planet in the solar system, after Jupiter and Saturn if comparing them by their diameters. Because Uranus' mantle mainly consists of volatile chemical compounds and the planet's atmosphere is composed of light elements, the celestial body is one of the so-called ice giants.

Subsequent question (English translation)

The discoverer of Uranus is Johannes Kepler. Is it right or wrong?

11.4. Products of Study 3

Picture preference for a protein-rich vs. regular fruit yogurt



Regular fruit yogurt



Protein-rich fruit yogurt

Picture preference for a skim-milk vs. full-fat-milk yogurt



Full-fat-milk yogurt (3.8
% fat)



Skim-milk yogurt (0.8 %
fat)

11.5. Data transparency of Study 3

All data and analysis code of Study 3 are available at

https://osf.io/yn23f/?view_only=34ce44769d3e48d0ae7bc747a6aee002.

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