

## Individually perceived impact of a life design intervention on students: A qualitative approach

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### ABSTRACT

This study examines the impact of the "Design Your Happy Life" course at Technische Universität Berlin on students' life strategies. Utilizing the Theory of Planned Behaviour (TPB), eight course participants were engaged in in-depth semi-structured interviews. The Gioia methodology guided the qualitative data analysis, informing the development of standardized entry and exit questionnaires based on TPB constructs. Findings reveal significant improvements in perceived behavioural control and attitudes towards life planning among participants, with most reporting a clearer vision of their life and career trajectory. This research contributes to understanding how design thinking principles in life design courses can shape students' behavioural intentions. It offers a novel assessment tool for measuring course impact, providing valuable insights for educational practitioners and curriculum developers. The study paves the way for future research on the effectiveness of life design interventions in higher education.

*Keywords: Life Design; Design Thinking; Entrepreneurial Life Design; Educational strategies; Positive psychology.*

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### INTRODUCTION

The integration of Life Design principles into higher education has gained significant traction in recent years. This approach, extending beyond traditional applications of Design Thinking in venture development (Allworth et al., 2021), is important and relevant in higher education for several reasons:

- Life Design helps students with lifelong learning, adaptability, and the creation of a cogent personal life/career story (Kernbach & Eppler, 2020);
- It contributes to the development of an entrepreneurial mindset which is based on individuals striving to become more efficient in daily life and pay more attention to opportunities, which is essential for having a growth mindset (Wang et al., 2021);
- Students assigned to growth mindset intervention have seen an increase in entrepreneurial self-efficacy, academic interest, and task persistence, which have important implications for career development outcomes (Burnette et al., 2020).

Despite the growing popularity of Life Design interventions in educational settings, there is a significant gap in empirical research focusing on students' experiences with these courses. Specifically, little is known about students' motivations for enrolling in life design courses and the effects they perceive after completion. While anecdotal evidence from students suggests positive outcomes, we lack solid, theory-based

research that looks at students' motivations before the course and the impacts they feel afterwards.

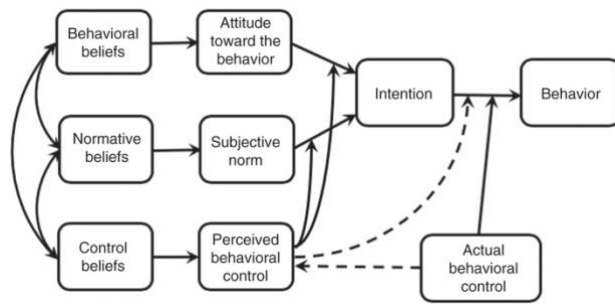
This study aims to address this research gap by investigating the impact of the "Design Your Happy Life" (DYHL) course at a large European university on students' life planning attitudes and intentions. Utilizing the Theory of Planned Behaviour (TPB) as a theoretical framework, we seek to answer the following research question: **How do participants' motivations for enrolling in the Design Your Happy Life (DYHL) course align with their perceived impacts on personal traits and life planning strategies after course completion?**

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### THEORETICAL BACKGROUND

Ajzen's Theory of Planned Behaviour (1991) states that behaviour is preceded by intention, which is influenced by three key factors: attitudes towards the behaviour, subjective norms, and perceived behavioural control.





**Figure 1.** The Theory of Planned Behaviour. From "Changing Behavior Using the Theory of Planned Behavior," by I. Ajzen and P. Schmidt, 2020, in M. S. Hagger, L. D. Cameron, K. Hamilton, N. Hankonen, & T. Lintunen (Eds.), *The Handbook of Behavior Change* (p. 19). Cambridge University Press. Copyright 2020 by Cambridge University Press.

In the context of our study on Life Design interventions, these elements can be understood as follows:

- **Attitudes:** students' attitudes towards life changes. These attitudes are shaped by beliefs about the outcomes of behaviour and the evaluation of these outcomes (Ajzen & Schmidt, 2020). In the context of Life Design, this could relate to beliefs about the effectiveness and value of intentional life planning.
- **Subjective norms:** the influence of the social environment on the decision to participate in the Life Design intervention. This factor is influenced by normative beliefs and motivation to comply with these norms (Ajzen, 1991). For DYHL participants, this might involve perceptions of peer or societal expectations regarding career planning and personal development.
- **Perceived behavioural control:** belief in one's ability to effectively plan and shape one's life trajectory. This concept is closely related to Bandura's (1997) notion of self-efficacy, which refers to an individual's belief in their capacity to execute behaviours necessary to produce specific performance attainments. In the context of Life Design, this relates to students' confidence in their ability to implement life changes.
- **Intention:** the readiness to attempt life changes.
- **Behaviour:** going through life changes supported by Life Design techniques.

Our aim is to assess Attitudes, Subjective Norms, and Perceived behavioural control both before students join DYHL course and after they complete it. This approach will allow us to evaluate how the course influences students' intentions and readiness to make changes in their lives according to life design principles.

The theoretical underpinnings of this assessment are bolstered by two key concepts from positive psychology and mental health research. First, Seligman's (1998) concept of learned optimism suggests that individuals can

cultivate a more positive outlook, potentially influencing their attitudes and perceived control over life changes. This aligns closely with the DYHL course's goal of empowering students to take an active role in shaping their futures.

Building on this, recent research by Kim et al. (2021) has highlighted the wide-ranging impact of a sense of purpose on various health and behavioural outcomes. This finding is particularly relevant to the DYHL course, as it suggests that by helping students develop a clearer sense of purpose and direction, the course may have far-reaching effects beyond immediate career or life planning outcomes, which is also of great importance for the course developers to consider.

While TPB has been widely applied in various behavioural domains, such as entrepreneurial education (Heydari et al., 2020), academic career choices (Henningsen et al., 2021), and technological innovation (Czakov et al., 2020), its application to Life Design interventions remains underexplored. This study aims to bridge this gap by examining how the principles of TPB can be applied to understand and evaluate the impact of Life Design education.

## METHOD AND DATA

### Study context

The "Design Your Happy Life" (DYHL) course at a large European university is a 6 ECTS module inspired by Stanford University's "Design Your Life" class. Offered as part of a larger teaching curriculum, DYHL combines theoretical concepts from positive psychology with practical exercises. The course is typically conducted in-person, but during the 2021/2022 academic years, when this study's respondents participated, it was delivered primarily online due to the COVID-19 pandemic. DYHL is structured into four sessions: an introduction to positive psychology, student presentations on happiness concepts, self-reflection on current life situations, and future planning with prototype development. Students engage in both in-person discussions and independent reflection, culminating in a personal and career portfolio. The course aims to equip students with an understanding of happiness concepts, critical evaluation skills for scientific research in positive psychology, advanced reflection abilities, and the capacity to develop value-based future plans. This innovative approach bridges theoretical knowledge with practical life design, providing students with tools to navigate their personal and professional development.

### Mixed-methods approach

This study employed a mixed-methods approach, primarily qualitative with a foundation for future quantitative assessment.

Data collection involved in-depth, semi-structured interviews with eight participants (6 female, 2 male) who completed the DYHL course in 2021 and 2022. The interview guide explored participants' motivations, expectations, and perceived impacts of the course, probing changes in life planning attitudes, subjective norms, and perceived behavioural control, aligning with the TPB framework.

Data analysis followed the Gioia methodology (Gioia et al., 2013), allowing for the rigorous development of first-order concepts, second-order themes, and aggregate dimensions.

### Respondents' recruitment

This study utilized a purposive sampling strategy (Palinkas et al., 2013) to recruit participants from a large European university. Eight participants (6 female, 2 male) who completed the DYHL course in 2021 and 2022 were included in the study. While the DYHL course is available to students from various Masters programmes, the majority of participants were enrolled in a graduate program in management and entrepreneurship. This programme was the primary source of our sample, reflecting the typical composition of DYHL course attendees.

The sample size was determined based on the exploratory nature of this study, being the first qualitative investigation of DYHL course experiences. Saturation of insights was achieved within this sample, providing sufficient data to generate hypotheses and inform the selection of scales for subsequent quantitative research. This approach aligns with recommendations for exploratory qualitative research in novel areas of inquiry (Guest et al., 2006; Malterud et al., 2016).

Recruitment was facilitated through academic networks, utilizing a combination of direct outreach and snowball sampling techniques. This method ensured participants had direct, recent experience with the DYHL course, enhancing the relevance and depth of the data collected.

### Quantitative assessment development

While this study primarily employed qualitative methods, it also laid the groundwork for future quantitative research. The development of quantitative measures was informed by a comprehensive review of relevant literature in positive psychology, Life Design, and educational impact assessment. This review, coupled with the theoretical framework of the TPB (Ajzen, 1991), guided the selection of established psychometric scales potentially applicable to assessing the impact of the DYHL course.

The following validated scales were identified as potentially relevant:

1. General Self-Efficacy Short Scale-3 (Doll et al., 2021)

2. Optimism & Pessimism Scale (SOP2) (Nießen et al., 2022)
3. Identity Scale (Luyckx et al., 2008)
4. Readiness to Assume Risk scale (Nießen et al., 2020b)
5. Internal-External Locus of Control Short Scale-4 (Nießen et al., 2022)
6. Life Satisfaction Scale (Nießen et al., 2020a)

The qualitative interviews were designed to explore how these theoretically-grounded scales might correlate with participants' lived experiences of the DYHL course. This approach aimed to bridge the gap between established quantitative measures and the unique aspects of the DYHL intervention, as revealed through participant narratives.

In summation, **the goals of this research were twofold:** 1) to validate which domains of the DYHL experience could be meaningfully assessed using these established scales, and 2) to inform the development of a preliminary questionnaire that would be both comprehensive and feasible for future large-scale administration. This methodological approach aligns with best practices in mixed-methods research design, where qualitative insights inform the development and refinement of quantitative instruments (Creswell & Plano Clark, 2017; Neergaard & Ulhøi, 2007).

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## RESULTS

The empirical findings have revealed that the motivation to join the course is based on two main factors: *prior interest in psychology* and *the particularities of a student's life context* (belonging to a particular age group) (Figure 2).

As per interest in psychology, the participants mentioned a vast range of interests related to psychology they had before joining the course, such as studying about self-improvement, mental disorders, self-realization and personal growth, psychological concepts of happiness and well-being, flow state, and active behaviour modification. What is more, people in their early to mid-twenties have different expectations regarding the DYHL course than their colleagues who are 30 years old and older, while the first group is seeking to establish emotional comfort in a transitional period of their lives when switching from Bachelor to Master's studies, the second group is striving for securing their life trajectory.

### Goals for course participation

Participants' goals for enrolling in the DYHL course fell into several distinct categories, as shown in Figure 3:

1. *Personal development and self-discovery.* It is the motivation shown by most of the respondents. This includes moving away from external expectations and focusing on one's desires and values, bridging self-improvement

with a clearer life direction, and establishing new life patterns.

2. *Exploring and understanding certain phenomena.* The respondents from this category were particularly interested in investigating the topics of happiness or the application of Design Thinking principles in a new area.
3. *Therapeutic self-exploration.* These participants aimed for a deeper understanding of their mental and emotional landscapes in a current life context and establish a plan to navigate further changes after establishing their Life Plan.

### Course impact on TPB components: qualitative evidence

- **Attitudes.** Respondents reported a more positive attitude towards going through life changes post-course as the DYHL course helped them realign with core life goals and values and develop a clearer vision of their life trajectory.
- **Subjective norms.** Participants reassessed the importance of various relationships in their lives, e.g., a close social circle (family and friends), and linked their needs here with the vision of their future endeavours.
- **Perceived behavioural control.** This was the most substantial impact observed, with participants developing a stronger belief in their ability to exercise control over their lives after learning life design techniques and principles.

Participants' motivations for enrolling in the DYHL course (or Intention in TPB), primarily centred on enhancing self-understanding and improving life planning strategies, largely aligned with their reported outcomes. The course fostered increased self-awareness and clarity about personal values, enhancing participants' readiness to attempt life changes. This alignment between initial goals and perceived outcomes was evident in reports of more strategic decision-making and consistent evaluation of choices against personal desires rather than external expectations.

However, the translation of these enhanced intentions into concrete behavioural changes (Behaviour in TPB) varied among participants. While some implemented specific life design techniques, such as regular family communication and deliberate free time planning, others struggled to identify tangible changes in their life planning strategies. External factors, including the COVID-19 pandemic and geopolitical events, emerged as unexpected barriers to implementing planned changes. This disparity between enhanced intentions and varied behavioural outcomes highlights a key challenge in translating life design principles into sustained action, an aspect not fully anticipated in participants' initial motivations for taking the course.

To conclude, our qualitative findings reveal a significant alignment between participants' motivations

for enrolling in the DYHL course and their perceived impacts, particularly in enhancing self-awareness and decision-making strategies. The course positively influenced all TPB components: attitudes towards life changes, subjective norms, and especially perceived behavioural control. However, while intentions were strongly affected, the translation into concrete behavioural changes varied, often impeded by external factors. This discrepancy highlights both the potential and limitations of Life Design interventions in higher education, suggesting that such courses can effectively shift mindsets and intentions, but additional support may be necessary for implementing sustained life changes.

### The quantitative questionnaire development

The translation of qualitative insights into quantitative measures was guided by the TPB framework and the themes that emerged from our qualitative analysis. The process involved several steps:

- (i) **Thematic analysis:** key themes from the qualitative interviews were mapped onto the TPB components that could be assessed before and after the course completion (attitudes, subjective norms, and perceived behavioral control). Other components, such as Intention and Behaviour, are not an object of our quantitative assessment as they are personal for each course participant. What is more, their changes are to be tracked during a significant amount of time.
- (ii) **Scale selection:** based on these themes, we identified validated scales that closely aligned with the qualitative findings:
  - Attitudes:
    - (i) Optimism & Pessimism Scale (SOP2) (Nießen et al., 2022)  
*Rationale:* this scale measures general outlook on life, which closely relates to attitudes towards making life changes.
    - (ii) Life Satisfaction Scale (Nießen et al., 2020a)  
*Rationale:* life satisfaction can influence one's attitude towards engaging in life design practices.
  - Subjective norms:  
Identity Scale (Luyckx et al., 2008)  
*Rationale:* this scale includes aspects of identity commitment and exploration, which can be influenced by social norms and expectations.
  - Perceived behavioral control:
    - (i) General Self-Efficacy Short Scale-3 (Doll et al., 2021)  
*Rationale:* self-efficacy is a key component of perceived behavioral control, measuring one's belief in their ability to perform tasks and overcome challenges.

- (ii) Internal-External Locus of Control Short Scale-4 (Nießen et al., 2022)  
*Rationale:* locus of control directly relates to perceived behavioral control, measuring the extent to which individuals believe they can control events affecting them.
- (iii) Readiness to Assume Risk scale (Nießen et al., 2020b)  
*Rationale:* risk readiness can be considered an aspect of perceived behavioral control in the context of life design, as it measures one's willingness to engage in potentially challenging life changes.

Following the selection of scales based on the qualitative findings and TPB framework, two crucial steps are planned to ensure the relevance and validity of the quantitative measures. First, a content validation process will be conducted, where the selected scales will be carefully reviewed to ensure their items resonate with the language and experiences shared by participants in the qualitative phase. This process will help maintain consistency between the qualitative insights and the quantitative tool. Subsequently, a small-scale pilot test will be carried out to assess the relevance and clarity of the selected scales in the specific context of the DYHL course. This pilot testing will provide valuable feedback on the comprehensibility and applicability of the scales, allowing for necessary adjustments to enhance the tool's effectiveness in capturing the impact of the DYHL course on participants' attitudes, subjective norms, and perceived behavioral control.

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## DISCUSSION AND CONCLUSIONS

Our study investigated how participants' motivations for enrolling in the Design Your Happy Life (DYHL) course aligned with their perceived impacts on personal traits and life planning strategies after course completion. Most notably, participants experienced enhanced perceived behavioral control and clearer life trajectories, aligning with their initial goals of gaining greater control over their lives and future planning.

The development of a comprehensive measurement tool for life design impact emerged as a crucial goal of this study. By aligning established psychological scales with the TPB elements, we have taken initial steps towards quantifying the effects of life design interventions. This approach brings us closer to understanding what aspects of life design interventions truly need to be measured to assess their effectiveness.

Nevertheless, our study faced several significant **challenges** that merit deeper exploration.

First of all, connecting qualitative insights to established psychological scales proved to be a complex task. While our qualitative data provided rich, nuanced information about participants' experiences, translating these insights into quantifiable measures presented difficulties. For instance, participants often described their increased sense of agency in personal terms that did not directly map onto existing scale items.

Apart from that, the small sample size of our study (n=8) significantly limited the generalizability of our findings. This limitation is particularly salient in the context of life design interventions, where individual differences can play a crucial role in outcomes. The small sample made it difficult to discern whether observed effects were truly representative of broader trends or simply reflective of the specific group studied. Hence, more iterations of interviewing are required.

Moreover, the lack of standardized measures specifically built for assessing life design interventions presented a significant challenge. Existing scales, while validated for general psychological constructs, often failed to capture the unique aspects of life design processes.

As per **future plans**, our primary focus is developing and validating a comprehensive Life Design Impact Scale (LDIS). This scale will integrate Theory of Planned Behaviour elements with Life Design constructs, measuring changes in attitudes, subjective norms, perceived behavioral control, and behavioral intentions. Validation will involve pilot testing, factor analysis, and reliability testing across diverse student groups.

Implementing longitudinal studies could be another way to evolve the study. We intend to track cohorts of students over several years post-graduation, interviewing them and using the LDIS to assess how life design skills translate into real-world outcomes. This approach will examine the evolution of participants' career choices, job satisfaction, and overall life satisfaction in relation to their Life Design course experiences.

We invite the academic and practitioner community to collaborate on developing and validating the LDIS. This multi-institutional effort will involve experts in psychology, education, and design thinking participating in item generation, content validity assessments, and pilot testing. Such collaboration will ensure the LDIS is robust, culturally sensitive, and widely applicable.

Researchers and educators from various institutions are encouraged to participate in cross-institutional studies using the LDIS. This collaboration will increase sample sizes and diversity, enhancing result generalizability and providing insights into tailoring life design interventions for different contexts.



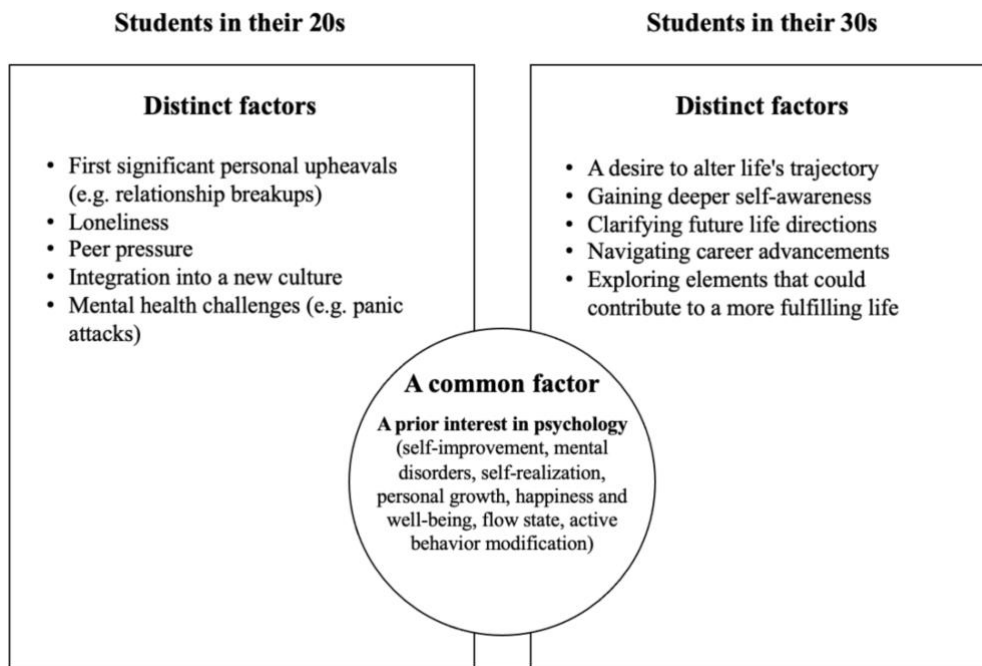


Fig. 2. Motivations to join the Design Your Happy Life course.

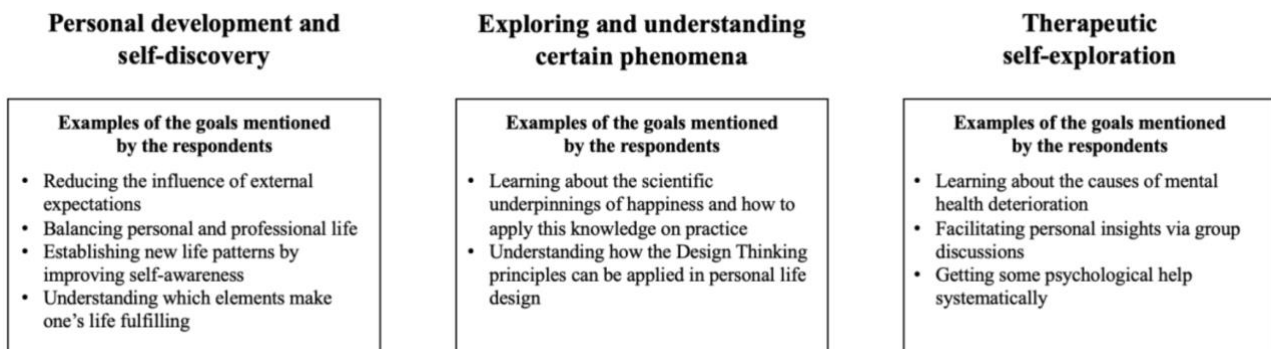


Fig. 3. Groups of goals of the Design Your Happy Life course participants.

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**REFERENCES**

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)

Ajzen, I., & Schmidt, P. (2020). Changing behavior using the Theory of Planned Behavior. In M. S. Hagger, L. D. Cameron, K. Hamilton, N. Hankonen, & T. Lintunen (Eds.), *The Handbook of Behavior Change* (pp. 17-31).

Cambridge University Press. <https://doi.org/10.1017/9781108677318.002>

Allworth, J., D’Souza, L., & Henning, G. W. (2021). *Design thinking in student affairs: A Primer*. Routledge.

Auernhammer, J., & Roth, B. (2021). The origin and evolution of Stanford University’s design thinking: From product design to design thinking in innovation management. *Journal of Product Innovation Management*, 38(6), 623–644. <https://doi.org/10.1111/jpim.12594>

Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. Macmillan.

Beierlein, C., Kovaleva, A., Kemper, C. J., & Rammstedt, B. (2015). Kurzsкала zur Erfassung der Risikobereitschaft (R-1). *ZIS*.

Beierlein, C., Kovaleva, A., László, Z., Kemper, C. J., & Rammstedt, B. (2015). Kurzsкала zur Erfassung der Allgemeinen Lebenszufriedenheit (L-1). *ZIS*.

Burnette, J. L., Knouse, L. E., Vavra, D., O’Boyle, E. H., & Brooks, M. A. (2020). Growth mindsets and psychological distress: A meta-analysis. *Clinical*

- Psychology Review*, 77, 101816.  
<https://doi.org/10.1016/j.cpr.2020.101816>
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. SAGE Publications, Incorporated.
- Czakon, W., Niemand, T., Gast, J., Kraus, S., & Lisa, F. (2020). Designing cooperation for radical innovation: An experimental study of managers' preferences for developing self-driving electric cars. *Technological Forecasting and Social Change*, 155, 119992.  
<https://doi.org/10.1016/j.techfore.2020.119992>
- Doll, E. S., Nießen, D., Schmidt, I., Rammstedt, B., & Lechner, C. M. (2021). General Self-Efficacy Short Scale-3 (GSE-3). *ZIS*. [https://zis.gesis.org/skala/Doll-Nie%C3%9Fen-Schmidt-Rammstedt-Lechner-General-Self-Efficacy-Short-Scale-3-\(GSE-3\)](https://zis.gesis.org/skala/Doll-Nie%C3%9Fen-Schmidt-Rammstedt-Lechner-General-Self-Efficacy-Short-Scale-3-(GSE-3))
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2012). Seeking qualitative rigor in inductive research. *Organizational Research Methods*, 16(1), 15–31.  
<https://doi.org/10.1177/1094428112452151>
- Guest, G., Bunce, A., & Johnson, L. (2005). How many interviews are enough? *Field Methods*, 18(1), 59–82.  
<https://doi.org/10.1177/1525822x05279903>
- Henningsen, L., Eagly, A. H., & Jonas, K. (2021). Where are the women deans? The importance of gender bias and self-selection processes for the deanship ambition of female and male professors. *Journal of Applied Social Psychology*, 52(8), 602–622.  
<https://doi.org/10.1111/jasp.12780>
- Heydari, M., Xiaohu, Z., Lai, K. K., & Shang, Y. (2020). Entrepreneurial Intentions and Behaviour as the Creation of Business: Based on the Theory of Planned Behaviour Extension Evidence from Polish Universities and Entrepreneurs. *Propósitos Y Representaciones*, 8(SPE2).  
<https://doi.org/10.20511/pyr2020.v8nspe.674>
- Kemper, C. J., Beierlein, C., Kovaleva, A., & Rammstedt, B. (2014). Skala Optimismus-Pessimismus-2 (SOP2). *ZIS*.
- Kernbach, S., & Eppler, M. J. (2020). *Life Design: Mit Design Thinking, Positiver Psychologie und Life Loops mehr von sich in das eigene Leben bringen*.
- Kim, E. S., Chen, Y., Nakamura, J. S., Ryff, C. D., & VanderWeele, T. J. (2021). Sense of Purpose in life and subsequent physical, behavioral, and psychosocial health: an Outcome-Wide Approach. *American Journal of Health Promotion*, 36(1), 137–147.  
<https://doi.org/10.1177/08901171211038545>
- Lewrick, M., Link, P., & Leifer, L. (2018). *The Design Thinking Playbook: Mindful Digital Transformation of Teams, Products, Services, Businesses and Ecosystems*. John Wiley & Sons.
- Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., & Goossens, L. (2008). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality*, 42(1), 58–82.  
<https://doi.org/10.1016/j.jrp.2007.04.004>
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2015). Sample size in qualitative interview studies. *Qualitative Health Research*, 26(13), 1753–1760.  
<https://doi.org/10.1177/1049732315617444>
- Neergaard, H., & Ulhøi, J. P. (2007). *Handbook of Qualitative Research Methods in Entrepreneurship*. Edward Elgar Publishing.
- Nießen, D., Groskurth, K., Kemper, C., Rammstedt, B., & Lechner, C. M. (2022). The Optimism–Pessimism Short Scale–2 (SOP2): a comprehensive validation of the English-language adaptation. *Measurement Instruments for the Social Sciences*, 4(1).  
<https://doi.org/10.1186/s42409-021-00027-6>
- Nießen, D., Groskurth, K., Rammstedt, B., & Lechner, C. M. (2020a). General Life Satisfaction Short Scale (L-1). *ZIS*.  
[https://zis.gesis.org/skala/Nie%C3%9Fen-Groskurth-Rammstedt-Lechner-General-Life-Satisfaction-Short-Scale-\(L-1\)](https://zis.gesis.org/skala/Nie%C3%9Fen-Groskurth-Rammstedt-Lechner-General-Life-Satisfaction-Short-Scale-(L-1))
- Nießen, D., Groskurth, K., Rammstedt, B., & Lechner, C. M. (2020b). Risk Proneness Short Scale (R-1). *ZIS*.  
[https://zis.gesis.org/skala/Nie%C3%9Fen-Groskurth-Rammstedt-Lechner-Risk-Proneness-Short-Scale-\(R-1\)#](https://zis.gesis.org/skala/Nie%C3%9Fen-Groskurth-Rammstedt-Lechner-Risk-Proneness-Short-Scale-(R-1)#)
- Nießen, D., Schmidt, I., Groskurth, K., Rammstedt, B., & Lechner, C. M. (2022). The Internal–External Locus of Control Short Scale–4 (IE-4): A comprehensive validation of the English-language adaptation. *PLOS ONE*, 17(7), e0271289.  
<https://doi.org/10.1371/journal.pone.0271289>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2013). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544.  
<https://doi.org/10.1007/s10488-013-0528-y>
- Schmuck, P., & Sheldon, K. M. (2001). Life goals and well-being : towards a positive psychology of human striving. In *Hogrefe & Huber Publishers eBooks*.  
<http://ci.nii.ac.jp/ncid/BA56907803>
- Seligman, M. E. P. (1998). *Learned optimism*. Free Press.
- Seligman, M. E. P., & Csíkszentmihályi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5–14.  
<https://doi.org/10.1037/0003-066x.55.1.5>
- Shir, N., & Ryff, C. D. (2021). Entrepreneurship, Self-Organization, and Eudaimonic Well-Being: A Dynamic Approach. *Entrepreneurship Theory and Practice*, 46(6), 1658–1684.  
<https://doi.org/10.1177/10422587211013798>
- Strauss, A. L., & Corbin, J. (1994). Grounded theory methodology: An overview. *Strategies of Qualitative Inquiry*.
- Strauss, A. L., & Corbin, J. M. (1997). *Grounded theory in practice*. SAGE.
- Wang, J., Murad, M., Bajun, F., Tufail, M., Mirza, F., & Rafiq, M. (2021). Impact of entrepreneurial education, mindset, and creativity on entrepreneurial intention: Mediating Role of Entrepreneurial Self-Efficacy. *Frontiers in Psychology*, 12.  
<https://doi.org/10.3389/fpsyg.2021.724440>