

## **Summary of the Dissertation by Lena Marie Uhlmann**

### **Loneliness and Well-Being During Life-Changing Events: Is There a Social Cure in Times of a Pandemic and of Job Change?**

This dissertation investigates the role of social identity in reducing loneliness and protecting well-being during periods of profound life change. Drawing on the Social Identity Approach to Health (SIAH; C. Haslam et al., 2018) and the Social Identity Model of Identity Change (SIMIC; C. Haslam et al., 2021), the overarching goal was to examine how belonging to multiple social groups (conceptualized as multiple group membership, MGM) functions as a social resource that supports resilience, primarily by reducing loneliness and sustaining psychological well-being during life change. By integrating evidence across large-scale meta-analytic, cross-sectional, and longitudinal studies, the dissertation addresses key empirical and conceptual gaps in the literature on social identity, loneliness, and adaptation to life-changing events.

A central premise of this work is that life-changing events differ systematically in their objective and subjective characteristics, and that these differences shape their psychological consequences. Following Filipp and Aymanns (2010), the dissertation considers multiple dimensions along which such events can be categorized, including their degree of disruption, controllability, predictability, normativity, affective content, relevance to personal goals, and the extent to which they challenge core beliefs about the self and the world. This framework allows for a nuanced comparison of events that differ markedly in structure and meaning. The empirical focus of the dissertation lies on two such events: the COVID-19 pandemic and job change. While both represent periods of social reorganization, they differ substantially in terms of disruption, controllability, predictability, and normativity.

The first two studies focus on the COVID-19 pandemic, a collective, externally imposed, and non-normative crisis that disrupted social life on a global scale. The pandemic constitutes a particularly informative context for testing the social identity approach to health, as public health measures designed to reduce viral transmission often curtailed precisely those forms of social interaction and group engagement that typically protect against loneliness. Loneliness is conceptualized as the distressing experience arising from a perceived discrepancy between desired and actual social relationships, encompassing both quantitative and qualitative aspects of social connection.

Study 1 addressed this paradox by conducting the most comprehensive meta-analysis to date on longitudinal changes in loneliness during the COVID-19 pandemic. The systematic review and meta-analysis were preregistered with PROSPERO (CRD42024539766). Searches were conducted in PubMed, Scopus, PsycINFO, and the World Health Organization's COVID-19 database (including preprint servers), supplemented by Google Scholar and citation tracking (May 2024). From 6,520

retrieved records, 93 longitudinal studies comprising more than 150,000 participants at baseline were included. Loneliness was operationalized using both mean-level indicators and prevalence rates, and multiple effect size metrics were employed (Percent of Maximum Possible, Hedges'  $g$ , log odds, and log odds ratios).

To account for contextual variation in pandemic conditions, the meta-analysis integrated data from the Oxford COVID-19 Government Response Tracker (Hale et al., 2021) and categorized effect sizes according to changes in government stringency between measurement points (increasing, decreasing, remaining high, remaining low). The results showed that loneliness reliably increased during periods of stricter containment measures and decreased when restrictions were relaxed. However, the recovery effect was smaller than the initial increase, suggesting lingering disruptions to social connectedness. Age emerged as a significant moderator: a meta-analysis of the correlation of age and loneliness at study baseline found a medium negative association,  $r = -0.12$ ,  $k = 25$ ,  $N = 36,087$ , 95% CI  $[-0.17, -0.06]$ . This means younger adults reported higher baseline-loneliness. Comparing the oldest and youngest samples revealed that older adults were more sensitive to changes in government restriction levels. Mean sample age was also a significant predictor of stronger changes in loneliness in the meta-regression. Results were robust across risk-of-bias assessments and clinical versus non-clinical samples. Nevertheless, substantial heterogeneity remained unexplained, underscoring the complexity of loneliness as an outcome during a crisis of this magnitude.

The second study focused specifically on older adults—a group identified in the meta-analysis as particularly vulnerable to shifts in restrictions. A representative survey of 2,062 citizens aged 60 and older in Dresden, Germany, was conducted from February to May 2021 during a national lockdown. Study 2a tested whether MGM was associated with well-being. MGM was operationalized in two ways: a subjective measure assessing perceived membership in multiple groups, and a formal count of participation in specific types of groups (e.g., sports clubs, work-related groups, hobby groups). Consistent with the SIAH, individuals with more than one group membership reported higher well-being, whereas those without any group memberships reported the lowest levels. The subjective operationalization yielded slightly stronger and more consistent associations, suggesting that perceived belonging is more psychologically consequential than formal group involvement alone. Contrary to theoretical expectations, however, MGM did not buffer the negative association between pandemic-related fear and well-being, indicating potential limits to the social cure under conditions of widespread social disruption.

Study 2b extended this analysis by focusing explicitly on loneliness as an outcome and as a potential mechanism. Both operationalizations of MGM were negatively associated with loneliness, again

more strongly for the subjective measure. Furthermore, loneliness statistically mediated the relationship between MGM and well-being, providing initial evidence that reduced loneliness may be a key pathway through which multiple group memberships support psychological health. Although causal inferences were limited by the cross-sectional design, these findings strengthened the proposed mechanism linking social identity to well-being.

The third study shifted focus to a fundamentally different type of life-changing event: job change. Unlike the pandemic, job change is an individualized, often voluntary, and more temporally bounded transition that can occur repeatedly across the life course. Using a longitudinal panel design, 548 participants were surveyed across three waves over four months. The sample included individuals who had recently changed jobs ( $N = 435$ ) and a comparison group who had remained in the same role for at least two years ( $N = 176$ ), with an overall attrition rate of 39.6%. The study was preregistered on PsychArchives (<https://doi.org/10.23668/psycharchives.16207>) and employed advanced statistical techniques, including multigroup latent growth models and structural equation models.

The results revealed an unexpected pattern: job changers reported higher well-being at the first measurement point, with trajectories converging with the control group over time. This pattern is consistent with a honeymoon–hangover effect, whereby initial gains associated with job change diminish as individuals adjust to new demands. In line with study 2, MGM was positively associated with well-being, and this association was again mediated by loneliness, this time in methodological sound longitudinal design. However, contrary to SIMIC assumptions, neither identity continuity nor identity gain were significant mediators. Instead, occupational and organizational identity emerged as key predictors of well-being and job satisfaction. Exploratory analyses highlighted the importance of context-factors for the development of occupational and organizational identity, such as relocation for the new job and the number of previous job changes. Timing of the job change within the three months prior to study entry did not significantly affect outcomes, supporting the decision to treat job changers as a single group in the main analyses.

Taken together, the three studies advance empirical and theoretical understanding of social identity processes in well-being. Across two highly contrasting life-changing events the findings consistently highlight the benefits of belonging to multiple social groups. MGM supports well-being primarily by reducing loneliness, underscoring social connectedness as a central mechanism of resilience. At the same time, the dissertation identifies important boundary conditions for the SIAH and SIMIC. During the pandemic, when many identities were disrupted simultaneously and opportunities for identity enactment were constrained, the protective effects of group memberships were present but limited in their buffering capacity. In the context of job change, identity continuity and gain were less

relevant than expected, while occupational and organizational identities played a more prominent role.

Beyond these substantive findings, the dissertation contributes to theory by refining the conceptualization and measurement of MGM. By directly comparing formal and subjective indicators, it demonstrates that subjective identification with multiple groups is more strongly and consistently related to loneliness and well-being, supporting a shift toward measurement approaches that capture the internalized experience of belonging.

As a practical implication, the dissertation highlights the importance of supporting diverse group memberships in society and organizations, as a means of reducing loneliness and safeguarding health during times of disruption. Interventions should address loneliness at different levels (society, community, workplace, and individual) and address the specific needs of their target groups (e.g., including older people in the development of interventions for the elderly).

The dissertation is characterized by substantial strengths, including high societal relevance, methodological breadth, and the use of naturalistic field data across multiple contexts. At the same time, it is important to interpret the evidence in light of typical limitations in this research area, including self-report measures, predominantly non-experimental designs, and geographically and population-specific constraints. Overall, the findings underscore the importance of maintaining or acquiring meaningful group memberships as a key determinant of well-being during life change. In doing so, the dissertation contributes to social cure research by demonstrating that social identities remain vital resources across diverse forms of disruption, while also highlighting the critical role of context, event characteristics, and measurement choices in shaping their effects.