KRAFT-COPILOT - A JOINT PROJECT THAT TRANSCENDS DISCIPLINARY AND PROFESSIONAL BOUNDARIES

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ABSTRACT: *Young adult carers (YACs) face considerable challenges that affect their personal development, health and quality of life. In Germany, there are currently only a few customised support services for this target group. The Kraft co-pilot project aims to develop and test an adaptive, gamified learning and networking platform that addresses the specific needs of YACs, strengthens their self-care and sustainably improves their quality of life. Participatory research methods such as workshops, photo voices, online surveys and the use of modern media were used to analyse the living conditions and needs of YACs. These results formed the basis for the development of the platform content. The platform integrates personalised support, networking opportunities and target group-specific offers based on an AI-supported recommendation system. Kraft-Copilot offers an innovative solution for supporting YACs, closing existing gaps in care and helping to improve their quality of life. Nevertheless, fur-ther efforts are required to establish flexible and sustainable care services, particularly in structurally weak regions.*

KEY WORDS: *Young Adult Carers, Participation Development, Networking Platform.*

JEL CLASSIFICATIONS: *I15, P46.*

1. AIM OF THE PROJECT: KRAFT-COPILOT

With the help of an adaptive, gamified learning and networking platform, young adult carers are provided with an app that focuses on self-care and thus aims to improve their quality of life in the long term.

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1.1. Stakeholders of the project

In a joint project of the Federal Ministry of Education and Research with a term from August 2022 to January 2026, representatives of the CODIP Institute of the Excelenzuniversität Dresden (as overall responsible for Kraft-Copilot), three Saxon universities of applied sciences, practice partners such as a citizens' council, Sächsische Landesvereinigung für Gesundheitsförderung e.V. and members of the target group are researching, working and developing together.

1.2. Background to the project

The topic of human rights is represented in numerous professional ethical and political discourses and has a profound significance for many areas of life. Human rights are also an important frame of reference for social work. Human rights include participation rights, economic, social and cultural human rights, such as the rights to work, housing, health and education. Social work in particular is committed to the implementation of human rights. The definition adopted in Melbourne in 2014 states: "Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. Principles of social justice, human rights, collective responsibility and respect for diversities are central to social work. Underpinned by theories of social work, social sciences, humanities and indigenous knowledge, social work engages people and structures to ad-dress life challenges and enhance wellbeing. The above definition may be amplified at national and/or regional levels" (International Federation of Social Workers (IFSW); International Association of Schools of So-cial Work (IASSW), 2014). In this sense, the focus is always on people who are on the margins of society, marginalized and have few opportunities for development. The right to work, health and personal development is also restricted when young adults are involved in care work in addition to their duties. Although this group of young adult carers have all the development opportunities available to them, they can hardly take advantage of them because they have so many tasks to fulfill. In addition, as young adults, they are hardly perceived as a burdened group. They are a forgotten group.

1.3. Target group of the project

Juliane is 26 years old. She is married and has two young sons (aged three and five). She has completed training as a nurse. Because shift work was not compatible with her family, she decided to study social work. At the same time, her grandmother was diagnosed with dementia, which progressed very quickly. The grandparents decided to stay together in their home for as long as possible. Julia-ne and her mother take on a large part of the care, nursing and organization of everyday life. The care service also visits the grandparents. Juliane goes to her grandparents immediately after classes. Sometimes she brings requests for her grandmother to the university and asks specialist colleagues for help. After being provided with food and a short activity together, she drives to her family. Then she has about two hours with her family (talking, playing). In the evening, she goes back to her grandparents. Grandma is prepared for bed and essential things for the coming day are discussed with Grandpa. Sometimes her husband comes along and supports her. When she returns, her children are already in bed. She herself discusses the day's things with her husband and they manage the household together. Only then can she take care of her self-study. She never goes to bed before midnight. She gets up at 5 o'clock in the morning because then she has at least 30 minutes a day to herself. At weekends, she spends time with her family at her grandparents' house, on Saturdays from breakfast until midday and on Sundays from 2 p.m. until the evening. She is rarely able to make appointments with friends. She hasn't been on vacation with her family for three years. There are no longer any pleasures such as going to the movies, reading a book, going to the hairdresser or simply sleeping in. Family life also revolves around the grandparents' daily routine. There is hardly any time for togetherness with her husband. At the same time, Juliane is developing numerous skills. She is now very familiar with the service requirements of people in need of care. She is well connected and is part of a group of volunteers at the faculty who organize and run an annual ball for senior citizens and people with increased care needs. Juliane is a Young Adult Carer (YAC for short)!

The typical life-stage tasks of this group include breaking away from their own family, establishing close social relationships (friends/partnerships/family etc.), developing leisure interests and living them out as well as building a career. In addition to the developmental tasks, this group takes on the unpaid care and support of family members or performs many additional household or family tasks due to the illness or disability of a relative (Kliem, et al., n.y.). The reasons for assuming responsibility vary and depend on the family and emotional relationship of the YACs to the person in need of care. The degree of burden also depends on the type and severity of the illness, the temporary state of health of the person in need of care and the contextual circumstances of the living environment. This results in various tasks and demands on the young caring adults, ranging from basic care to the organization and administration of support and household management. This is accompanied by emotional, psychological and social support not only for the care recipient, but also for other relatives (Becker, F. & Becker, S., 2008; Leu, et al., 2018; Metzing & Schnepp, 2007). Depending on the range of tasks, the amount of time spent on care and caring activities varies from several times a month to several hours a day (Klie & Storm, 2021). This target group is characterized by the special requirements of their phase of life and the associated care responsibilities (Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ), 2013). This leads to various areas of tension, for example between the compatibility of education and the care situation or the pursuit of self-determination and the obligation towards the person in need of care. In summary, there is a correlation between the amount of care required and the lack of health care, which manifests itself in a higher susceptibility to mental illness and physical problems (Wepf & Leu, 2022). The features outlined above characterize the all-encompassing support needs of this vulnerable target group.

There is currently no precise and valid data on the prevalence of young adult carers in Germany. The Caregiver Report 2021 and the Social Survey 2021 suggest that the prevalence between the ages of 18-29 is between 11.9% and 13% (Storm, 2021; Federal Ministry of Education and Research (BMBF), German Centre for Higher Education and Science Research (DZHW), German Student Union (DSW), 2021). A survey conducted by the Allensbach Institute for Public Opinion Research in 2021 shows that a third of the women and men surveyed between the ages of 16 and 39 are currently caring for relatives or have done so in the last ten years (Klie & Storm, 2021). Of these, 28% in the 16-19 age group and 32% in the 20-29 age group care for their parents or parents-in-law. Grandparents provide care for 56% of the 16-19 age group and 59% of the 20-29 age group. The difficulty is pointed out that many YACs do not identify themselves as carers or do not publicly admit to being carers due to stigmatization and fear of (Knopf, et al., 2022), which means that a high number of unreported cases must be assumed. Young carers often encounter a lack of understanding among their peers, which carries the risk of social withdrawal and leads to inhibitions about accepting outside help (Oyoyo & Moeller-Bruker, 2021). They want to interact with peers who have a reflective understanding of the particularities of the life situation characterized by caregiving tasks (Klie & Storm, 2021).

2. SURVEY METHODS

Various participatory methods were used to analyze the situation-related living conditions of the YACs, such as workshops, photo voices, online surveys and the use of modern media such as Twitter. The content of all these methods revolved around aspects of the living environment, the care situation such as professional service providers on site and self-care. In the online survey "Questionnaire for young family caregivers" conducted by the project group in February/March 2023, a total of eleven out of 47 usable data sets were generated from YACs aged 18-27, with around 45% of respondents aged between 24-27 and over 2/3 female. It should be noted that it was mainly students, some with part-time jobs, and trainees who responded.

2.1. Care situation of the interviewees

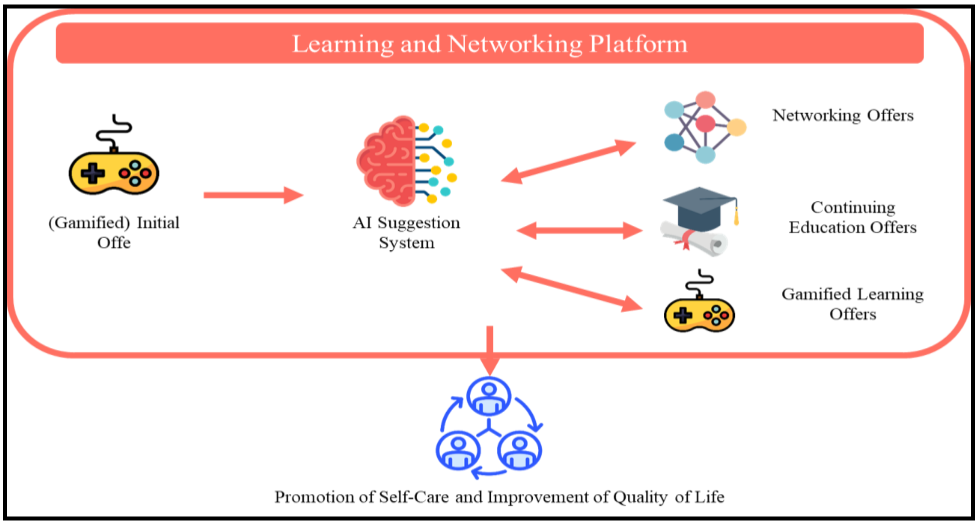
The care situation of the interviewees is mainly such that one or sometimes two people are being cared for. The relatives of the care recipients are mostly grandparents, but also parents and siblings, who in four out of eleven cases are the main carers due to old age or illness. All respondents state that they are supported by various family members in their care responsibilities and that only one person has previous care experience. The main focus of the tasks is on providing social and emotional support to the person in need of care as well as planning and organizing everyday care, driving and communicating with third parties. Up to 63% provide medical and nursing support at least several times a week, such as administering medication, wound care, assistance with personal hygiene and care. The young informal carers state that they are informed about topics such as care degree, care allowance, care services, advice on aids and measures to relieve the burden of care. It is striking that there is less knowledge in certain areas such as training courses on care and support, advice services, legal services and family groups.

2.2. Stresses and resources of the respondents

Overall, the majority of the YACs surveyed (81.8%) are very accepting of their caregiving role and can rely above all on good resilience as a protective factor. In addition, the social relationships (e.g. partners, family) that are perceived as positive and the balance in leisure activities as well as pursuing hobbies serve as personal resources. On the other hand, there are major stress factors that weigh on the YACs. Around 90% of them feel moderately to very heavily burdened by their care duties, which significantly increases the risk of (physical) complaints. Seven out of eleven respondents stated that they experience moderate to high personal restrictions, which can result in a risk of depression. For more than half of YACs, the financial situation is also not rated as positive.

3. THE KRAFT- COPILOT PLATFORM

The platform is intended to offer target-group-specific support by addressing individual self-care on the basis of an intelligent suggestion system, as well as aiming to network care communities and the informal carers themselves (see Figure 1).

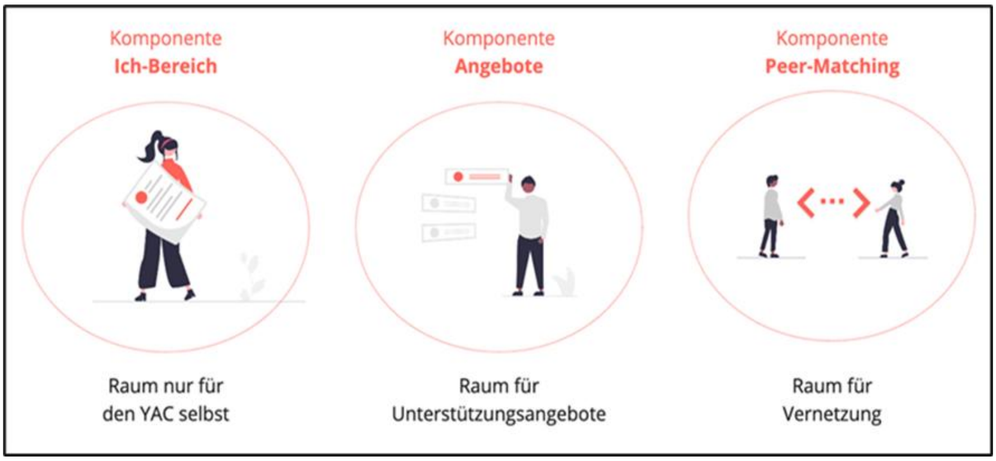


Source: Technical University of Dresden, Center for Open Digital Innovation and Participation, Mittweida University of Applied Sciences, Evangelical University of Applied Sciences Dresden, Saxon State Association for Health Promotion e.V., Trägerwerk Soziale Dienste wohnen plus… gGmbH (unveröffentlich): Gesamtvorhabensbeschreibung

Figure 1. Technical development, concept of the platform

3.1. Structure and functionality of the platform

The Kraft Copilot platform consists of three independent components that are connected to each other (see Figure 2): the ego area component, the offers component and the peer matching component. The ego component offers the opportunity to get in touch with oneself. The focus is on conveying content on all areas of self-care and as a space for self-reflection. Gamified learning opportunities such as micro-learning units, story pieces, narrative elements, mini-games and small story-led games are used to support the transfer of content.



Source: Technical University of Dresden, Center for Open Digital Innovation and Participation, Mittweida University of Applied Sciences, Evangelical University of Applied Sciences Dresden, Saxon State Association for Health Promotion e.V., Trägerwerk Soziale Dienste wohnen plus… gGmbH (unveröffentlich): Gesamtvorhabensbeschreibung

Figure 2. Platform components

The Offers component is the area of the platform in which YACs are suggested suitable offers. Learning, training, support and networking opportunities are suggested on the basis of user data (Aggarwahl, 2016). By using the suggested offers, data is continuously collected, which is used for further adaptive, automated recommendations. This creates an instance-based predictive system that can use classified and new data to make appropriate predictions (Aha, et al., 1999). The following offers, for example, can be suggested by the intelligent system: Networking offers, learning offers, active offers and exchange offers. In terms of content, the proposed offers address the field of self-care (e.g. stress management course for caregiving relatives), the field of care-related topics (e.g. reference to care portals) and the fields of life-phase typology and living environment (e.g. career guidance counseling in the model region). In order to be able to offer suitable support and networking solutions, the platform explicitly takes into account the YACs' situation-related life circumstances. For this purpose, individual data on the living environment, care situation and care community are collected for classification (Kotsiantis, et al., 2006). This data is entered by the users (e.g. by maintaining their personal profile in the ego area). As a proto-typical development, the platform primarily includes offers from the respective model regions.

Peer matching is based on the peer support approach, i.e. the networking of YACs for mutual support. Digital networking based on intelligent/AI technologies (technical innovation) enables an expansion of the social space and access to care communities. This strengthens the health-related resources of informal carers (social innovation).

4. RESULTS AFTER TWO YEARS OF PROJECT WORK

After two years of project work, the previous picture of the life situation and health needs of young adults providing informal care can be expanded. The daily challenges and how they deal with their own health have been worked out in a more differentiated way. Thanks to the participation of representatives of this group, key content areas for the AI were filtered out. The pilot app is already in the learning process and offers initial application options for strengthening self-care.

5. CONCLUDING REMARKS

The Kraft Copilot project aims to provide targeted support to young adult carers (YACs) through an innovative, gamified platform. This platform, developed in collaboration with various stakeholders, aims to strengthen YACs' self-care and help them to better manage the challenges of their caring roles. In order to understand the needs of the target group, various participatory methods such as workshops, photo voices and online surveys were used. These approaches made it possible to analyse the life situation of the YACs in detail and design the platform accordingly. Initial results show that the platform is able to improve the quality of life of YACs by providing personalised support and networking opportunities. Despite these successes, it remains a challenge to create flexible care and support services, especially in rural and structurally weak regions. The further development of the Kraft co-pilot platform and the establishment of additional support structures will be crucial to ensuring the long-term success of the project and closing further gaps in care.

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