

I-Shuo Chen\*

# The Relationship Between Personal Resources and Work Engagement and the Mediating Role of Home Resources/Demands\*\*

## Abstract

Personal resources have been widely investigated in studies on work engagement. They have been mainly viewed as affected by individuals' situated environments and as the most proximal predictor of work engagement. Unlike those studies, we aimed to investigate whether personal resources can be crafted by individuals and whether there are mechanisms embedded in the relationship between personal resources and work engagement. Using a diary study conducted over seven consecutive days with 70 individuals who were either married or living with a partner and who were considering and subsequently underwent cosmetic surgery on their pelvic region during the survey period ( $n = 490$  observations), we investigated differences in the individuals' personal resources (i.e., self-efficacy, self-esteem, and optimism) pre- and postsurgery. We further investigated the relationship between individuals' personal resources after surgery and their work engagement by using home elements (i.e., home resources and home demands) as mediators. The proposed hypotheses are underpinned by the conservation of resources theory (COR theory) and are empirically supported. We claim that individuals' personal resources can be crafted outside the work environment (i.e., nonwork environment) and that such personal resources contribute to work engagement by motivating individuals to develop a nonwork environment (e.g., home) that allows them to successfully control and influence their work environment by increasing/decreasing home resources/demands.

Keywords: personal resources, work engagement, self-efficacy, self-esteem, optimism, cosmetic surgery, home  
(JEL: I12, I31, M1)

## Introduction

The importance of work engagement has led scholars to extensively explore how work engagement may be affected by work engagement (e.g., Mazzetti et al., 2023). Work engagement is a positive, fulfilling, work-related state of mind that is categorised by vigour, dedication, and absorption (Schaufeli & Bakker, 2004).

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\*\* Date submitted: March 23, 2023.

Date accepted after double-blind review: July 10, 2024.

Although much has been done during recent years (e.g., Mazzetti et al., 2023), the role of personal resources in work engagement is not sufficiently clear in the literature. *Personal resources* (e.g., self-esteem, optimism, and self-efficacy; Xanthopoulou et al., 2007) represent positive self-evaluations that are linked to resilience and that reflect individuals' sense of ability to successfully control and affect their environment (Hobfoll et al., 2003). Below, we articulate two issues that may have prevented us from fully understanding the role of personal resources in work engagement.

First, personal resources are viewed to be affected by individuals' living domains (Ten Brummelhuis & Bakker, 2012). This passive view has drawn our attention because individuals may not always be passively affected by their situated environments; rather, they may play an active role in dealing with the environment (Chen & Fellenz, 2020; Chen, 2020). The issue may be traced back to 2007 when the role of those resources in work engagement was explored by being considered a mediator, and job influences were found to affect work engagement via those resources (Xanthopoulou et al., 2007). More than ten years later, in 2023, the developed body of knowledge of personal resources remains the same, although those resources were concluded to benefit the acquisition of resources at work (Bakker et al., 2023). In this light, we aim to investigate whether personal resources may be actively crafted by individuals themselves.

Second, personal resources have been widely concluded to be the most proximal predictor of work engagement (Chen, 2022; Schaufeli & Taris, 2014; Xanthopoulou et al., 2007). In addition to the fact that such conclusions may also be dated back to 2007, as previously addressed, much of the empirical evidence has been based on the work context (e.g., Bakker & Van Wingerden, 2021). However, it is unclear whether and how personal resources crafted in a nonwork domain may affect work engagement. Addressing this insufficiency in the literature is crucial because individuals may craft and mobilise resources in a cross-domain manner (Chen & Fellenz, 2020). Overlooking the cross-domain effect of personal resources on work engagement may limit the understanding of the dynamics of work engagement from the perspective of personal resources.

Home is adopted to represent the nonwork domain in this research, as the impact of individuals' home lives on their work lives has been extensively documented and was concluded to be the most influential nonwork domain affecting employees' work (e.g., Chen & Fellenz, 2020). It conceptually incorporates a broader range of individuals' private activities, interactions, and relationships, which encompass the traditional nuclear family, nonblood relationships, and many other facets of individuals' private lives in which they are involved on nearly a daily basis (Chen & Fellenz, 2020; Ten et al., 2012). We argue that personal resources crafted in a nonwork domain may not directly affect individuals at work, as they do not share the same characteristics; instead, they may initially affect their nonwork

lives. Based on the conservation of resources theory (Hobfoll, 1998), we propose that personal resources crafted in the nonwork domain may enable individuals to address home demands and motivate them to shape home resources, thereby enabling them to have sufficient resources to use at work. *Home demands* are the various aspects of the home that need ongoing physical or mental effort, whereas *home resources* are similar aspects that benefit goal achievement, decrease home demands, help individuals personally grow and develop, and increase available physiological and psychological resources (Chen & Fellenz, 2020). Our investigation hence contributes to the work-home interface literature in that existing work-family theories have been developed from the perspective of individual passiveness (e.g., work-family enrichment and conflict; Greenhaus & Beutell, 1985; Greenhaus & Powell, 2006).

This study has novel practical implications. We studied individuals undergoing cosmetic surgery on their pelvic region, as such surgery is relatively new in the industry, and the potential proactivity of this category of individuals in their living domains has yet to be extensively investigated in either the work engagement or body image literature since the surgery outcome is normally invisible publicly. Cosmetic surgery is a medically optional (or elective) procedure that is typically performed on parts of the body with the purpose of improving the appearance of a specific physical attribute (Haiken, 1997). Most individuals who elect to undergo cosmetic surgery procedures appear to be psychologically healthy (Honigman et al., 2004). Changes in external physical appearance lead to improvements in psychological well-being, as indicated by improvements in self-confidence and self-esteem (i.e., personal resources; Abdo et al., 2023; Mokhtari et al., 2021; Shah-Desai et al., 2023; Yoon & Kim, 2020).

Similarly, cosmetic surgery has been investigated in the literature on body image (e.g., Wu et al., 2022). While cosmetic surgery has been found to improve individuals' personal resources in their private lives (e.g., personal resources), relatively few studies have investigated whether and how such improvements in personal resources may contribute in a cross-domain manner to supporting individuals' work. This issue is particularly relevant to and essential for cosmetic surgery on body parts that are not publicly visible (e.g., pelvic region), considering that such surgery is costly and that individuals may look for value-added consequences other than physical appearance change. Therefore, we are interested in exploring whether individuals who have undergone cosmetic surgery on their pelvic region experience an increase in their personal resources that contributes to work engagement through the impact on their nonwork environment (e.g., home). This research has timely practical implications for clinics/centres/hospitals that perform such surgeries, and its interdisciplinary findings contribute to the literature on work engagement, the work-home interface, and body image.

## Literature Review and Hypotheses

### Conservation of Resources (COR) Theory

In this study, we adopted COR theory as the theoretical underpinning for our hypotheses. The core of the theory specifies that it is human nature to protect, maintain, and further acquire resources (Hobfoll, 1998). The initial definition of resources in the theory was so general that almost everything individuals value a resource (e.g., energy and objects; Halbesleben et al., 2014). It was further redefined by researchers as anything that is valued by individuals and benefits their goal achievement (Halbesleben et al., 2014). There are several propositions within COR theory (Hobfoll, 1998). Specifically, to gain resources, protect from resource loss, or recover from actual loss of resources, resource investment is needed. With more resources, individuals are better positioned for future resource acquisition (Hobfoll, 1998). However, with fewer resources, individuals become more vulnerable to future resource loss and may tend to conserve their remaining resources (Hobfoll, 1998).

### The Dynamics of Personal Resources: Cosmetic Surgery as a Case

In this research, we focus on three specific personal resources—self-efficacy, self-esteem, and optimism—since they fundamentally constitute individuals' resilience, which has been further conceptualised as a unitary construct that plays a decisive role in individuals' functioning (Lamont et al., 2019). *Self-efficacy* is an individual's sense of belief in their ability to engage in a specific action that is required to reach a desired outcome (Luszczynska & Schwarzer, 2005). *Self-esteem* represents individuals' overall/global evaluations of self-worth or self-value (Awick et al., 2016). *Optimism* represents individuals' beliefs that they will experience good outcomes in life, which then intrinsically motivates them to take action and resolve difficulties (Aspinwall & Taylor, 1997; Millstein et al., 2019).

Ample empirical and clinical studies document that individuals, both male and female, across all age ranges are concerned with their physical appearance (e.g., Hazzard et al., 2022) and that physical appearance seems to have a certain impact on individuals' psychological states (e.g., Soulliard et al., 2019), such as self-efficacy (e.g., Ouyang et al., 2020), self-esteem (e.g., Holzer et al., 2020), and optimism (e.g., Schou et al., 2005). For example, in a study involving 696 female college students, Oh (2003) revealed significant correlations between concern about physical appearance and both self-efficacy and self-esteem. After surveying 161 women newly diagnosed with breast cancer and 949 healthy women, Schou et al. (2005) concluded that concern with physical appearance is correlated with optimism. Furthermore, in a survey involving 211 men and 226 women (aged 18–86 years), Davison and McCabe (2005) found that concern with physical appearance predicts individuals' self-esteem for all age groups. In an analysis of related studies, Schwartz and Brownell (2004) showed that concern with physical appearance affects individ-

uals' self-efficacy. A study by You et al. (2016) with 3,658 Korean adolescents demonstrated that concern with physical appearance has a strong effect on self-esteem. Based on a survey of 603 college students, Cash et al. (2004) found that concern with physical appearance is a predictor of optimism. Furthermore, existing studies have indicated that individuals seeking cosmetic surgery have obvious physical and psychological expectations for the outcome of the procedure (e.g., Di Gesto et al., 2022; Honigman et al., 2004). In other words, those individuals may need additional personal resources, and any change in physical appearance due to cosmetic surgery may conceivably affect the level of an individual's resources.

Based on COR theory and empirical evidence, we argue that individuals' personal resources, such as self-efficacy, self-esteem, and optimism, can be affected by the outcome of cosmetic surgery procedures, as such procedures involve changes in the physical appearance of the body part (e.g., pelvic region) undergoing surgery. Consequently, individuals' personal resources may be crafted in the nonwork domain (e.g., in cosmetic surgery clinics/centres/hospitals). Thus, we posit that individuals who elect to undergo cosmetic surgery on their pelvic region experience significantly different levels of personal resources (e.g., self-efficacy, self-esteem, and optimism) before and after the cosmetic surgery procedure. Based on the above, we propose the following hypothesis.

*Hypothesis 1 (H1): Individuals' personal resources are significantly different before and after a cosmetic surgery procedure on the pelvic region.*

## Personal Resources and Work Engagement

Work engagement is categorised by three factors: vigour, dedication, and absorption. *Vigour* is "high levels of energy and mental resilience while working, willingness to invest effort in work, and persistence in the face of difficulties"; *dedication* reflects "a strong psychological involvement in employees' work, combined with a strong identification with their work and encompassed feelings of significance, enthusiasm, inspiration, pride, and challenge"; and *absorption* represents "being happily engrossed in work, whereby time passes quickly and one has difficulties detaching". Existing studies claim that vigour and dedication are the primary components of work engagement (e.g., Chen & Fellenz, 2020).

Based on COR theory (Hobfoll, 1998), we claim that personal resources positively predict work engagement. Personal resources enable individuals to have resources available to engage in their work. Indeed, existing studies have shown that personal resources are the most influential predictor of work engagement (e.g., Chen, 2022; Mazzetti et al., 2023; Schaufeli & Taris, 2014). Other studies have also revealed ample supportive findings for the positive effect of these three personal resources on work engagement (e.g., Acosta-Gonzaga, 2023; Nagoji & Mackasare, 2023; Wang & Dapat, 2023). Based on the above, we propose the following hypothesis.

*Hypothesis 2 (H2): Controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before a cosmetic surgery procedure, individuals' personal resources after the cosmetic surgery procedure are positively associated with their work engagement.*

### Personal Resources, Home Demands, and Home Resources

Considering COR theory (Hobfoll, 1998), we posit that personal resources contribute to increasing home resources and facilitating the reduction of home demands. Existing studies have also revealed that with personal resources such as self-efficacy, individuals tend to believe that they can effectively address problems in their situated domain, perceive self-control, and are flexible, thereby being intrinsically motivated to take action and commit to such decisions (Airila et al., 2014; Mastenbroek et al., 2014). It is thus conceivable that personal resources enable individuals to have resources available to proactively explore ways to address home demands. Empirical studies have also shown that self-efficacy benefits the reduction of perceived family stress (e.g., Smoktunowicz & Cieślak, 2017). Similarly, these resources motivate individuals to craft more resources in the home domain since they have sufficient resources to invest in obtaining further resources for disposal (Chen & Fellenz, 2020).

Empirical studies have revealed that self-esteem benefits family performance (e.g., Li et al., 2022), implying that self-esteem enables individuals to deal with resources and demands in the home domain. Indeed, self-esteem influences how individuals think, feel, perceive, or even behave (Brando-Garrido et al., 2020). Individuals with self-esteem are confident in their ability to face challenges and are intrinsically motivated to maximise their successes (Rose, 2021). Hence, when encountering demands at home, individuals may trust their capability and be intrinsically motivated to address and resolve those demands. In addition, these individuals are likely intrinsically motivated to maximise successes in their home roles (e.g., endeavouring to be the best partner), which in turn contributes to creating a home environment that optimises their home resources.

Other studies have shown that optimism enables individuals to manage home-life stressors and increases their resources in the home domain (e.g., mental resources; Reizer et al., 2022). Indeed, individuals with optimism have faith/expectations of success when they confront difficulties or challenges, and such faith/expectation does not have to be supported by actual capability (e.g., Avey et al., 2008). In this light, when individuals with optimism encounter demands at home, they are likely to believe that they can successfully address those demands and thus be willing to take practical action to do so (Avey et al., 2008). Similarly, those individuals will also intend to realise a positive life in the future (Reker, 1997), thereby being intrinsically motivated to obtain other resources for their use in their living domains

(e.g., social resources; Taylor et al., 2012). In light of the above, we propose the following hypotheses.

*Hypothesis 3 (H3): Controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before a cosmetic surgery procedure and personal resources after the cosmetic surgery procedure are positively associated with home resources.*

*Hypothesis 4 (H4): Controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before a cosmetic surgery procedure and personal resources after the cosmetic surgery procedure are negatively associated with home demands.*

### Moderating Role of Home Influences

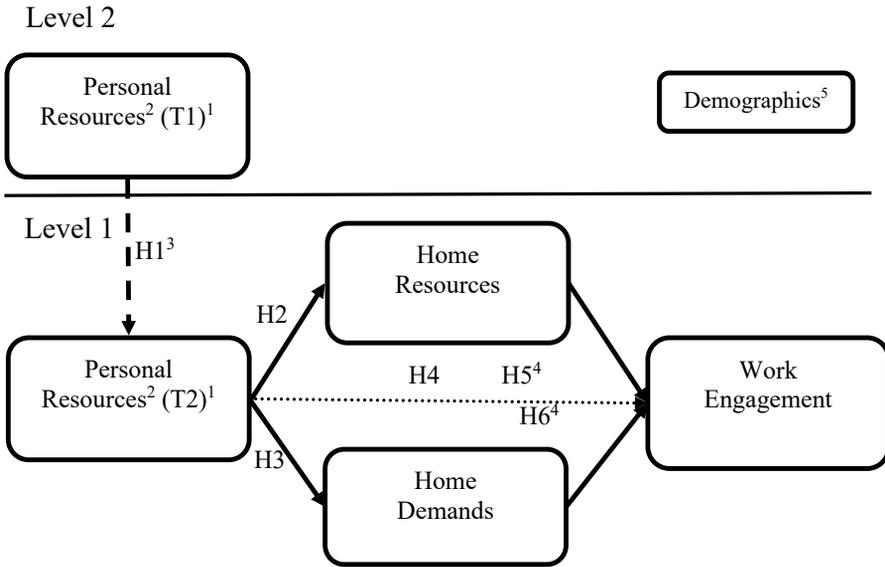
To date, no known studies have investigated whether and how personal resources crafted in a nonwork domain influence work engagement. Considering COR theory (Hobfoll, 1998), we posit that home elements (i.e., home demands and home resources) serve as mediators of the relationships between personal resources (e.g., self-efficacy, self-esteem, and optimism) and work engagement. Specifically, personal resources enable individuals to have sufficient resources to deal with home demands and invest in gaining more resources in the home domain, thereby enabling those individuals to have resources available to engage in their work.

Individuals transit across multiple living domains, such as the work and home domains, almost daily, and they mobilise their available resources in a cross-disciplinary manner when they see fit (Chen & Fellenz, 2020; Chen, 2020; Clark, 2000). Existing studies based on COR theory propose that individuals are strategic in how they determine the investment and use of their available resources from one domain to another (Halbesleben et al., 2014). When resources in one domain (e.g., home) are useful in another domain, such as the work domain, they may decide to use those resources in the latter domain (Halbesleben et al., 2014). However, home demands deplete individuals' available resources. According to COR theory (Hobfoll, 1998), individuals may tend to conserve their remaining resources by reducing their level of engagement at work due to home demands. A recent study also revealed the beneficial role of home resources and the detrimental role of home demands in work engagement (Chen, 2024). Therefore, we develop the following hypotheses. Based on the proposed hypotheses, the conceptual model is provided in Figure 1.

*Hypothesis 5 (H5): Controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before a cosmetic surgery procedure, individuals' home resources mediate the relationship between personal resources after the cosmetic surgery procedure and work engagement.*

*Hypothesis 6 (H6): Controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before a cosmetic surgery procedure, individuals' home demands mediate the relationship between personal resources after the cosmetic surgery procedure and work engagement.*

**Figure 1. The Conceptual Model**



Note. <sup>1</sup>T1 = pre-cosmetic surgery procedure; T2 = post-cosmetic surgery procedure.

<sup>2</sup>Personal resources include self-efficacy, self-esteem, and optimism.

<sup>3</sup>The bold dotted line represents the first hypothesis, in which personal resources at T1 and T2 are treated as if they are at the same level during the analysis. Personal resources at T1 will be treated as a higher-level factor and as a control variable for the subsequent examinations of the hypotheses.

<sup>4</sup>The thin dotted line represents the two partial mediating hypotheses (i.e., H5 and H6).

<sup>5</sup>Demographics include age, sex, marital status, and occupation.

## Methodology

### Participants and Procedure

The sample employed in the present research consisted of individuals who were undergoing cosmetic surgery on their pelvic region (body parts that are not publicly visible) in various cosmetic clinics/centres in China, as well as the partners of these individuals. The types of cosmetic surgery procedures included in our sample were mainly aimed at enhancing aesthetic appearance rather than dealing with motor impairments such as hip surgery. As part of the standard operating procedure, cosmetic surgeons typically explain the specific, relevant surgical details to (poten-

tial) individuals who are considering having cosmetic surgery on a particular body part(s) that they want to improve but who have not yet made a final decision. Surgeons also inquire about whether (potential) individuals require additional time to decide, typically a week after the surgical details are explained. Finally, surgeons schedule a date to perform the surgery, generally at the end of the period, for further consideration, and this appointment can be cancelled at any time. Upon completing a surgery, cosmetic surgeons immediately and strictly schedule an appointment with the individual to remove stitches/change dressings before the individual returns home, typically one or two weeks after the surgery. Notably, the survey has been proven not to require the individuals to stay home until they are fully recovered; rather, individuals are able to go to work the next day since the wound is small (B. G. Aesthetic & R. F. Laser Center, 2015).

In light of the above, the survey comprised two phases. For the first phase (i.e., before the cosmetic surgery procedure), we employed convenience sampling in the cosmetic clinics/centres with verbal permission from the manager. The (potential) individuals and their partners each received a set of daily questionnaires designed to evaluate the (potential) individuals' personal resources (T1 in the hypothetical model) and to collect the (potential) individual's demographic information on the date on which he or she met with a surgeon for a consultation about the surgery. The participants were encouraged to complete the questionnaires daily during the period for further consideration (i.e., 7 days) and to return the completed sets of questionnaires on the date assigned for the surgery only if the (potential) individual decided to have and showed up for the surgery. During this phase, both the (potential) individuals and their partners separately evaluated the (potential) individuals' personal resources. In the subsequent analysis, each individual's personal resources are represented by the average of the individual's self-evaluation and his or her partner's evaluation.

The second phase (i.e., after the cosmetic surgery procedure) included the participants who decided to have the surgery, came in for the surgery on the appointed date and returned their and their partners' completed daily questionnaires for the 7-day period on the date of the surgery. These individuals and their partners received an identical set of daily questionnaires to evaluate the individuals' personal resources (T2 in the hypothetical model) for an additional 7 days after the surgery. The participants were encouraged to complete the survey using the same method that they used during the previous week. The individuals' partners also received two additional sets of daily questionnaires that were designed to evaluate home resources, home demands, and individuals' work engagement. The individuals' partners were encouraged to complete the questionnaires after work and after home interactions (e.g., chatting). The individuals were encouraged to return their completed questionnaires and their partners' completed questionnaires during the first appointment to remove stitches/change dressings. The survey was completely

voluntary, and a small research code was included at the bottom of the questionnaires for matching purposes.

In this research, we used quantitative and emotional home demands to operationalise home demands. The rationale for adopting both demands was that they have been widely shown to jeopardise individuals' mental and physical energies at home (e.g., Dibaji et al., 2017; Kesselring et al., 2001; Li et al., 2013). They have also been viewed to conceptually mirror quantitative and emotional job demands (Peeters et al., 2005). Similarly, we used home social support and home autonomy to operationalise home resources. The rationale for adopting both social support and autonomy was that they had been found to support individuals' motivations in their living domains, such as the work and home domains (e.g., Bakker et al., 2007; Demerouti, 2012; Demerouti et al., 2020).

In total, 258 pairs of participants were invited to participate at multiple time points, and 101 agreed to participate (for a response rate of 39%). At the end of the first phase, 84 pairs of participants submitted questionnaires and were included in the second phase (response rate of 83%). At the end of the second phase, 70 pairs of participants submitted questionnaires and were included in the analysis (response rate of 82%). The overall response rate was 68% for the 101 initial pairs of participants. Of the 70 individuals included in the analysis, 45 (64.3%) were male, and 25 (35.7%) were female. Most of the individuals were between 31 and 40 years old (37.1%) or between 41 and 50 years old (27.1%). An equal proportion of the individuals were between 21 and 30 years of age and 51 years of age or older ( $n = 10$ , 14.3%). Only 5 of the individuals were aged >20 years or younger (7.1%). Forty-five (64.3%) of the individuals were married, while 25 (35.7%) were not married (couple). Of the individuals, 25 reported an occupation in business (35.7%), 20 did not identify an occupation (i.e., others) (28.6%), 12 were in service occupations (17.1%), 11 were manufacturing occupations (15.7%), and only two reported industrial occupations (2.9%).

## Measures

The survey items used in this research are summarised in the appendix. The *personal resources* that were measured included self-efficacy, self-esteem, and optimism. *Self-efficacy* was evaluated using the general self-efficacy scale (Schwarzer & Jerusalem, 1995). To adapt the scale for use in this research, we revised the items where necessary. For example, we revised the original item "If I am in trouble, I can usually think of a solution" to "Today, when I was in trouble, I usually thought of a solution". For the items that the individuals' partners completed, we replaced "I" with "my partner" or "he or she" for each item. For example, we revised the original item to "Today, when my partner was in trouble, he or she usually thought of a solution". All the measurement items were scored using a 5-point Likert scale

ranging from 1 (*not at all true*) to 5 (*exactly true*), and the scale exhibited high reliability (averaged  $\alpha_{T1} = .82$ ; averaged  $\alpha_{T2} = .86$ ).

*Self-esteem* was measured using the Rosenberg self-esteem scale (RSE; Rosenberg, 1979). To adapt the scale for use in this research, we revised the items where necessary. For example, we revised the original item “I take a positive attitude toward myself” to “Today, I took a positive attitude toward myself”. For the items completed by the individuals’ partners, we replaced “I” with “my partner”, “he or she”, or “him/herself” for each item. For example, we revised the original item to “Today, my partner took a positive attitude toward him/herself”. All the measurement items were scored using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), and the scale exhibited high reliability (averaged  $\alpha_{T1} = .84$ ; averaged  $\alpha_{T2} = .89$ ).

*Optimism* was evaluated using the revised life orientation test (Revised LOT; Scheier et al., 1994). To adapt the scale for use in this research, we revised the items where necessary. For example, we revised the original item “In uncertain times, I usually expect the best” to “Today, in uncertain times, I usually expected the best”. For each item completed by the individuals’ partners, we replaced “I” with “my partner”. For example, we revised the original item to “Today, in uncertain times, my partner usually expected the best”. All the measurement items were scored using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), and the scale exhibited high reliability (averaged  $\alpha_{T1} = .85$ ; averaged  $\alpha_{T2} = .86$ ).

The *home demands* measured included quantitative home demands and emotional home demands. *Quantitative home demands* were evaluated using the scale developed by Montgomery et al. (2003). To adapt the scale for use in this research, we revised the items where necessary. For example, we revised the original item “Do you find that you are busy at home?” to “Was your partner busy at home today?” All the measurement items were scored using a 5-point Likert scale ranging from 1 (*never*) to 5 (*always*), and the scale exhibited high reliability (averaged  $\alpha = .86$ ). *Emotional home demands* were measured using the scale developed by the authors for quantitative home demands. To adapt the scale for use in this research, we revised the items where necessary. For example, we revised the original item “How often do emotional issues arise at home?” to “How often did emotional issues arise at home for your partner today?” All the measurement items were scored using a 5-point Likert scale ranging from 1 (*never*) to 5 (*always*), and the scale exhibited high reliability (averaged  $\alpha = .83$ ).

The *home resources* that were measured included home social support and home autonomy. *Home social support* was assessed using the scale developed by Peeters et al. (1995). To adapt the scale for use in this research, we revised the items where necessary. For example, we revised the original item “My colleague/manager pays attention to my feelings and problems” to “Today, I paid attention to my partner’s feelings and problems”. All the measurement items were scored using a 5-point

scale ranging from 1 (*never*) to 5 (*always*), and the scale exhibited high reliability (averaged  $\alpha = .88$ ). *Home autonomy* was measured using the scale developed by Bakker et al. (2004). To adapt the scale for use in this research, we revised the items where necessary. For example, we revised the original item “Do you have control over how your work is carried out?” to “Did your partner have control over how home duties were carried out today?” All the measurement items were scored using a 5-point scale ranging from 1 (*never*) to 5 (*always*), and the scale exhibited high reliability (averaged  $\alpha = .85$ ).

*Work engagement* was appraised using the daily version of the Utrecht Work Engagement Scale (UWES) (Breevaart et al., 2012), which contains three dimensions (i.e., vigour, dedication, and absorption). *Vigour* was evaluated using three items (e.g., At my work, I feel that I am bursting with energy). *Dedication* was also measured using three items (e.g., I am enthusiastic about my job). Absorption was excluded from this study because it was found to be an irrelevant aspect of engagement after 30 in-depth interviews were conducted by Schaufeli et al. (2001). Additionally, many existing studies have suggested excluding the *absorption* subscale when evaluating work engagement (e.g., González-Romá et al., 2006). To adapt the scale for use in this research, we revised the items where necessary. For example, we revised the original item for daily *vigour* from “Today, I felt that I was bursting with energy” to “Today, my partner felt that he or she was bursting with energy”. All the measurement items were scored using a 5-point scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*), and the scale exhibited high reliability (averaged  $\alpha = .87$ ).

The *control variables* were sex, age, marital status, and occupation. These variables were included because previous studies have demonstrated that they impact the evaluation of work engagement (e.g., Heller & Watson, 2005; Seppälä et al., 2009). These control variables were applied to minimise any potential bias resulting from demographic differences in the predictor and outcome variables.

## Data Analysis and Results

### Preliminary Analyses

Because of the nature of this study, the data in this research were multilevel, with repeated daily measurements nested within individuals. This led to a 2-level model in which repeated measurements were at the first level ( $N = 490$  observations), and the individual respondents were at the second level ( $N = 70$  participants). Maas and Hox (2005) claimed that the minimal sample size at the second level should be 30 cases to perform robust estimations of fixed effects in multilevel modelling, suggesting that the sample size of the present study at the second level ( $n = 70$ ) was favourable for the estimations. Optimal design software (Spybrook et al., 2008) was used to analyse the statistical power of the 2-level model. The results revealed a value exceeding .80, suggesting appropriate statistical power for the analysis. We

used HLM software to test the proposed hypotheses. Variables at the first level were centred on the respective person mean, whereas variables at the second level were centred on the sample mean (Xanthopoulou et al., 2008).

The intraclass correlation coefficient ( $\rho$ ) based on the intercept-only model supported the adoption of multilevel modelling in this research. The results indicated that the multilevel structure of the data must be considered (daily self-efficacy:  $\rho = .13$ ; thereby, 87% of the variation contributes to within-person variations; daily self-esteem:  $\rho = .07$ ; thereby, 93% of the variation contributes to within-person variations; daily optimism:  $\rho = .08$ ; thereby, 92% of the variation contributes to within-person variations; daily home social support:  $\rho = .22$ ; thereby, 78% of the variation contributes to within-person variations; daily home autonomy:  $\rho = .12$ ; thereby, 88% of the variation contributes to within-person variations; daily quantitative home demands:  $\rho = .18$ ; thereby, 82% of the variation contributes to within-person variations; emotional home demands:  $\rho = .17$ ; thereby, 83% of the variation contributes to within-person variations; and daily work engagement:  $\rho = .27$ ; thereby, 73% of the variation contributes to within-person variations).

**Table 1. Pearson Correlation Analysis Results for All Measures**

Variables	Mean (sd)	1	2	3	4	5	6	7	8	9	10
PEFB	2.64 (.62)	-									
PSEB	2.32 (.92)	.61**	-								
POPB	2.81 (.71)	.18**	.36**	-							
PEFA	3.29 (.72)	-.17**	-.14**	.01	-						
PSEA	3.22 (.77)	-.04	.11*	.01	.54**	-					
POPA	3.23 (.75)	-.18**	-.04	-.08	.47**	.59**	-				
PRHR1	3.30 (1.06)	-.21**	-.03	-.05	.16**	.27**	.36**	-			
PRHR2	3.37 (1.02)	-.14*	-.10*	-.17**	.29**	.33**	.36**	.49**	-		
PRHD1	2.85 (.88)	.05	-.02	.10*	-.13**	-.13**	-.13**	-.18**	-.09*	-	
PRHD2	2.87 (.95)	.14**	-.10*	.04	-.26**	-.17**	-.10*	-.14**	-.17**	.39**	-
PRWE	3.31 (1.16)	-.17**	-.04	-.08	.20**	.32**	.31**	.33**	.42**	-.29**	-.23**

**Note.** \*:  $p < .05$ ; \*\*:  $p < .01$  ( $n = 490$  observations,  $n = 70$  participants).

The means, standard deviations, and correlations between the measures are summarised in Table 1. We also conducted independent sample *t*-tests for the individuals' and their partners' ratings of the individuals' personal resources pre- and post-surgery to examine whether there were differences between these ratings. The results (as noted in Table 2) revealed that before surgery, individuals' and their partners' ratings of two personal resources (daily self-esteem,  $t = 6.92$ ,  $p < .001$ ; daily

optimism,  $t = 11.39, p < .001$ ) were significantly different. Only the individuals' and their partners' ratings of daily self-efficacy were not significantly different ( $t = -.134, p < .001$ ). The results suggest that it is more appropriate to assess individuals' personal resources in subsequent analyses by using the average of individuals and their partners' evaluations than by relying only on individuals' self-reported data, as the former contributes to reducing any potential biases in the research results caused by self-reports. After surgery, although the ratings of two personal resources (i.e., daily self-efficacy,  $t = -.70, p > .05$ ; daily optimism,  $t = -1.12, p > .05$ ) were not significantly different, the individuals' and their partners' ratings of daily self-esteem remained significantly different ( $t = -6.85, p < .001$ ). These results also support the notion that assessing individuals' personal resources based on the average of their and their partners' evaluations is more appropriate for subsequent analysis than relying solely on individuals' self-reported evaluations.

**Table 2. Independent Sample t Tests for Patients' and Their Partners' Ratings of Patients' Personal Resources**

Respondents	N	Personal Resources		Independent Sample t Test	
		Mean	sd	F	t
		Daily Self-Efficacy (Presurgery)			
Patients	490	2.60	.87	1.48	-.134
Partners	490	2.68	.85		
		Daily Self-Esteem (Presurgery)			
Patients	490	2.55	.94	5.78	6.92***
Partners	490	2.09	1.10		
		Daily Optimism (Presurgery)			
Patients	490	3.14	.87	11.14	11.39***
Partners	490	2.49	.92		
		Daily Self-Efficacy (Postsurgery)			
Patients	490	3.27	.87	5.88	-.70
Partners	490	3.31	.94		
		Daily Self-Esteem (Postsurgery)			
Patients	490	3.01	.93	34.11	-6.85***
Partners	490	3.43	1.02		
		Daily Optimism (Postsurgery)			
	490	.93		.01	-1.12
	490	.89			

Note. \*\*\*:  $p < .001$  ( $N = 490$  observations,  $N = 70$  participants).

PEFB = Patient's daily self-efficacy (presurgery); PSEB = Patient's daily self-esteem (presurgery); POPB = Patient's daily optimism (presurgery); PEFA = Patient's daily self-efficacy (postsurgery); PSEA = Patient's daily self-esteem (postsurgery); POPA = Patient's daily optimism (postsurgery); PRHR1 = Partner-rated home social support for the patient; PRHD2 = Partner-rated home autonomy for the patient; PRHD1 =

Partner-rated daily quantitative home demands for the patient; PRHD2 = Partner-rated daily emotional home demands for the patient; and PRWE = Partner-rated daily work engagement for the patient.

### Hypothesis Testing

The first hypothesis states that there is a significant difference in individuals' personal resources (e.g., self-efficacy, self-esteem, and optimism) before and after undergoing a cosmetic surgery procedure on their pelvic region. The results (as summarised in Table 3), which are based on paired-sample *t*-tests, support Hypothesis 1 since all the personal resources were significantly different before and after the cosmetic surgery procedure (daily self-efficacy:  $t = -13.98$ ,  $p < .001$ ; daily self-esteem:  $t = -17.67$ ,  $p < .001$ ; and daily optimism:  $t = -8.59$ ,  $p < .001$ ). Additionally, individuals' personal resources were significantly higher after surgery than before surgery.

**Table 3. Paired-Sample *t* Tests for Daily Personal Resources (Pre- and Post-Surgery)**

Personal Resources (Pre – Postsurgery)	N	Paired-Sample <i>t</i> -Test			Confidence Interval (95%) (Lower, Upper)
		Mean	sd.	<i>t</i>	
Patients' Daily Self-Efficacy (Pre – Postsurgery)	490	-.65	1.02	-13.98***	(-.74, -.56)
Patients' Daily Self-Esteem (Pre – Postsurgery)	490	-.90	1.13	-17.67***	(-.90, -.80)
Patients' Daily Optimism (Pre – Postsurgery)	490	-.41	1.07	-8.59***	(-.51, -.32)

Note. \*\*\*:  $p < .001$  ( $N = 490$  observations,  $N = 70$  participants).

The second hypothesis states that when controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before the cosmetic surgery procedure, individuals' personal resources after the cosmetic surgery procedure are positively associated with work engagement. The results support Hypothesis 2 since, after controlling for sex, age, marital status, occupation, and personal resources before the cosmetic surgery procedure, personal resources after the cosmetic surgery procedure were positively associated with daily work engagement (daily self-efficacy:  $t = 1.12$ ,  $p < .05$ ; daily self-esteem:  $t = 2.83$ ,  $p < .01$ ; and daily optimism:  $t = 3.43$ ,  $p < .001$ ; see Table 8, Model 2). Model 2 fit the data best, as the value for the variance ( $-2 LL = 1499.37$ ; see Table 8) was significantly lower than that in the previous models.

The third hypothesis posits that when controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before the cosmetic surgery procedure, individuals' personal resources after the cosmetic surgery procedure are positively associated with home resources. The results support Hypothesis 3 since, after controlling for sex, age, marital status, occupation, and personal resources before the cosmetic surgery procedure, personal resources after the cosmetic surgery procedure

were positively associated with home social support (daily self-efficacy:  $t = 1.33, p < .05$ ; daily self-esteem:  $t = 1.60, p < .05$ ; and daily optimism:  $t = 4.67, p < .001$ ; see Table 4, Model 2); and home autonomy (daily self-efficacy:  $t = 1.59, p < .05$ ; daily self-esteem:  $t = 2.79, p < .01$ ; and daily optimism:  $t = 4.47, p < .001$ ; see Table 5, Model 2). For each home resource, Model 2 fit the data best, as the value for the variance (home social support:  $-2 LL = 1413.59$ ; see Table 4; home autonomy:  $-2 LL = 1334.99$ ; see Table 5) was significantly lower than that in the previous models.

**Table 4. Multilevel Estimates for Models Predicting Home Resources (Home Social Support): Personal Resources as Predictors**

Model Variables	Null			1			2		
	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t
Intercept	3.30	.04	75.50***	3.30	.04	81.42***	3.30	.04	81.42***
Sex				-.19	.09	-2.19*	-.20	.09	-2.19*
Age				-.05	.05	-1.14	-.05	.05	-1.14
Marital Status				.01	.08	.03	.01	.08	.03
Occupation				.02	.02	.90	.02	.02	.90
Daily Self-efficacy (Pre)				-.11	.26	-.42	-.11	.26	-.42
Daily Self-esteem (Pre)				-.09	.18	-.52	-.09	.18	-.52
Daily Optimism (Pre)				.01	.18	.02	.01	.18	.02
Daily Self-efficacy (Post)							.10	.07	1.33*
Daily Self-esteem (Post)							.15	.09	1.60*
Daily Optimism (Post)							.51	.11	4.67***
		$\chi^2$			$\chi^2$			$\chi^2$	
Level 1 (Daily) Variance	.14			.14			.14		
Level 2 (General) Variance	.04	57.41*		.04	49.46*		.03	56.38***	
-2 LL		1458.14			1471.64			1413.59	
$\Delta$ -2 LL					13.51			58.05**	

Note. \*:  $p < .05$ ; \*\*:  $p < .01$ ; \*\*\*:  $p < .001$  ( $n = 490$  observations,  $N = 70$  participants).

Pre: Presurgery; Post: Postsurgery.

Model 2 presents the direct impact of the independent variable on the mediator (Step 1/Baron & Kenny, 1986).

**Table 5. Multilevel Estimates for Models Predicting Home Resources (Home Autonomy): Personal Resources as Predictors**

Model Variables	Null			1			2		
	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t
Intercept	3.37	.06	59.57***	3.37	.05	63.10***	3.37	.05	63.10***
Sex				-.09	.11	-.81	-.09	.11	-.81
Age				-.07	.07	-1.11	-.07	.07	-1.11
Marital Status				-.11	.11	-1.01	-.11	.11	-1.01
Occupation				.06	.03	1.74	.06	.03	1.74
Daily Self-efficacy (Pre)				.15	.32	.47	.15	.32	.47
Daily Self-esteem (Pre)				-.29	.22	-1.31	-.29	.22	-1.31
Daily Optimism (Pre)				.08	.28	.30	.08	.28	.30
Daily Self-efficacy (Post)							.11	.07	1.59*
Daily Self-esteem (Post)							.21	.08	2.79**
Daily Optimism (Post)							.37	.08	4.47***
		$\chi^2$			$\chi^2$			$\chi^2$	
Level 1 (Daily) Variance	.75			.75			.69		
Level 2 (General) Variance	.10	114.42***		.09	101.97***		.09	125.85***	
-2 LL		1405.90			1417.66			1334.99	
$\Delta$ -2 LL					11.75			82.66***	

Note. \*:  $p < .05$ ; \*\*:  $p < .01$ ; \*\*\*:  $p < .001$  ( $n = 490$  observations,  $N = 70$  participants).

Pre: Presurgery; Post: Postsurgery.

Model 2 presents the direct impact of the independent variable on the mediator (Step 1/ Baron & Kenny, 1986).

The fourth hypothesis states that when controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before the cosmetic surgery procedure, individuals' personal resources after the cosmetic surgery procedure are negatively associated with home demands. The results support Hypothesis 4 since, after controlling for sex, age, marital status, occupation, and personal resources before the cosmetic surgery procedure, personal resources after the cosmetic surgery procedure were negatively associated with quantitative home demands (daily self-efficacy:  $t = -.77, p < .05$ ; daily self-esteem:  $t = -.73, p < .05$ ; and daily optimism:  $t = -1.32, p < .05$ ; see Table 6, Model 2); and emotional home demands (daily self-efficacy:  $t = -2.62, p < .01$ ; daily self-esteem:  $t = -1.29, p < .05$ ; and daily optimism:  $t = -1.07, p < .05$ ; see Table 7, Model 2). For each home demand, Model 2 fit the data best, as the value for the variance (quantitative home demands:  $-2 LL = 1231.57$ ; Table 6;

emotional home demands:  $-2 LL = 1322.52$ ; Table 7) was significantly lower than that in the previous models.

**Table 6. Multilevel Estimates for Models Predicting Home Demands (Quantitative Home Demands): Personal Resources as Predictors**

Model Variables	Null			1			2		
	Estimate	SE	T	Estimate	SE	t	Estimate	SE	t
Intercept	2.85	.04	72.40***	2.85	.04	76.13***	2.85	.04	76.13***
Sex				.05	.07	.77	.05	.07	.77
Age				.01	.04	.24	.01	.04	.24
Marital Status				-.06	.07	-.95	-.06	.07	-.95
Occupation				.04	.02	1.78	.04	.02	1.78
Daily Self-efficacy (Pre)				.20	.20	1.02	.20	.20	1.02
Daily Self-esteem (Pre)				-.10	.14	-.72	-.10	.14	-.72
Daily Optimism (Pre)				.22	.17	1.30	.22	.17	1.30
Daily Self-efficacy (Post)							-.05	.07	-.77*
Daily Self-esteem (Post)							-.05	.07	-.73*
Daily Optimism (Post)							-.10	.08	-1.32*
		$\chi^2$			$\chi^2$			$\chi^2$	
Level 1 (Daily) Variance	.68			.68			.59		
Level 2 (General) Variance	.15	68.74*		.15	62.130		.13	62.757**	
-2 LL		1267.26			1285.00			1231.57	
$\Delta$ -2 LL					17.73			53.43***	

Note. \*:  $p < .05$ ; \*\*:  $p < .01$ ; \*\*\*:  $p < .001$  ( $n = 490$  observations,  $N = 70$  participants).

Pre: Presurgery; Post: Postsurgery.

Model 2 presents the direct impact of the independent variable on the mediator (Step 1/Baron & Kenny, 1986).

**Table 7. Multilevel Estimates for Models Predicting Home Demands (Emotional Home Demands): Personal Resources as Predictors**

Model Variables	Null			1			2		
	Estimate	SE	T	Estimate	SE	t	Estimate	SE	t
Intercept	2.87	.05	54.75***	2.87	.05	63.59***	2.87	.05	63.59***
Sex				-.24	.10	-2.38*	-.24	.10	-2.38*
Age				-.02	.04	-.55	-.02	.04	-.55
Marital Status				.02	.10	.21	.02	.10	.21
Occupation				.01	.03	.36	.01	.03	.36
Daily Self-efficacy (Pre)				.13	.37	.34	.13	.37	.34
Daily Self-esteem (Pre)				.30	.23	1.31	.30	.23	1.31
Daily Optimism (Pre)				.02	.20	.08	.02	.20	.08
Daily Self-efficacy (Post)							-.24	.10	-2.62**
Daily Self-esteem (Post)							-.12	.09	-1.29*
Daily Optimism (Post)							-.10	.08	-1.07*
		$\chi^2$			$\chi^2$			$\chi^2$	
Level 1 (Daily) Variance	.74			.74			.70		
Level 2 (General) Variance	.15	112.60***		.15	83.46*		.14	88.19*	
-2 LL		1338.70			1340.09			1322.52	
$\Delta$ -2 LL					1.38			17.57*	

Note. \*:  $p < .05$ ; \*\*:  $p < .01$ ; \*\*\*:  $p < .001$  ( $n = 490$  observations,  $N = 70$  participants).

Pre: Presurgery; Post: Postsurgery.

Model 2 presents the direct impact of the independent variable on the mediator (Step 1/Baron & Kenny, 1986).

**Table 8. Multilevel Estimates for Models Predicting Daily Work Engagement: Personal Resources as Predictors and Home Resources (and Home Demands) as Mediators**

Model	Null			1			2			3 (Home Resources as the mediator)			3 (Home Demands as the mediator)		
	Estimate	SE	t	Estimate	SE	T	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t
Intercept	3.31	.06	55.90***	3.31	.06	58.48***	3.31	.06	58.48***	3.31	.06	58.48***	3.31	.06	58.48***
Sex				-.19	.12	-1.54	-.19	.12	-1.54	-.19	.12	-1.54	-.19	.12	-1.54
Age				-.01	.05	-.13	-.01	.05	-.13	-.01	.05	-.13	-.01	.05	-.13
Marital Status				.01	.13	.02	.01	.13	.02	.01	.13	.02	.01	.13	.02
Occupation				.01	.04	.06	.01	.04	.06	.01	.04	.06	.01	.04	.06
Daily Self-efficacy (Pre)				-.39	.31	-1.24	-.39	.31	-1.24	-.39	.31	-1.24	-.39	.31	-1.24
Daily Self-esteem (Pre)				.09	.20	.43	.09	.20	.43	.09	.20	.43	.09	.20	.43
Daily Optimism (Pre)				-.16	.29	-.54	-.16	.29	-.54	-.16	.29	-.54	-.16	.29	-.54
Daily Self-efficacy (Post)							.12	.10	1.12*	.13	.10	1.31	.06	.11	.54
Daily Self-esteem (Post)							.29	.10	2.83**	.21	.10	2.06*	.26	.10	2.64
Daily Optimism (Post)							.34	.10	3.43***	.16	.10	1.68	.31	.09	3.45
Home Social Support							.13	.05	2.58*						
Home Autonomy							.29	.06	4.45***				-.26	.07	-3.56***
Quantitative Home Demands													-.13	.07	-1.81*
Emotional Home Demands															
Level 1 (Daily) Variance	1.29			1.29			1.13			1.03			1.05		
Level 2 (General) Variance	.47	93.45*		.45	85.37*		.41	97.14**		.38	106.73***		.39	105.02***	
-2 LL		1536.42			1549.06			1499.37			1466.04			1472.44	
Δ-2 LL					12.64			49.68**			33.33**			26.93*	

Note. \*:  $p < .01$ ; \*\*:  $p < .001$  ( $n = 490$  observations,  $n = 70$  participants).

Pre: Presurgery; Post: Postsurgery.

Model 2 presents the direct impact of the independent variable on the dependent variable (Step 2/Baron & Kenny, 1986). Model 3 (with home resources as the mediator) and Model 3 (with home demands as the mediator) present the impact of the independent variable and mediator, respectively, on the dependent variable (Step 3/Baron & Kenny, 1986).

The fifth hypothesis states that when controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before the cosmetic surgery procedure, individuals' home resources partially mediate the relationship between postsurgery personal resources and work engagement. Baron and Kenny's (1986) 3 steps for examining mediation were used in this regard. First, the independent variable (i.e., personal resources postsurgery) must be related to the dependent variable (i.e., daily work engagement). Second, the independent variable (i.e., personal resources postsurgery) must be related to the mediator (i.e., home resources). Third, the first relationship must become nonsignificant (full mediation) or must be significantly weakened (partial mediation) after the mediator is entered into the model. The first condition was met by Hypothesis 4. The second condition was met by Hypothesis 2. The results support the third condition for Hypothesis 4 since, after controlling for sex, age, marital status, occupation, and personal resources before surgery and after entering home resources into the model (see Table 8, Model 3 for home resources), the original significant positive relationships between postsurgery personal resources and daily work engagement were either nonsignificant or significantly weakened. Specifically, the relationships between daily work engagement and both daily self-efficacy ( $t = 1.31, p >.05$ ) and daily optimism ( $t = 1.68, p >.05$ ) became nonsignificant after the mediator (i.e., home resources) was included. The relationship between daily self-esteem and daily work engagement ( $t = 2.06, p <.05$ ) was significantly weakened after the mediator (i.e., home resources) was included. Model 3 for home resources fit the data best, as the value for the variance ( $-2 LL = 1466.04$ ; see Table 8) was significantly lower than that in the previous models. Based on 1,000 bootstrap samples and 95% confidence intervals (CIs), the bootstrapping results support the indirect effect of each home resource on the relationships between postsurgery personal resources and daily work engagement. Specifically, for daily self-efficacy, the indirect effects of home social support/home autonomy reveal CIs between .02/.09 [LL95CI] and .09/.22 [UL95CI]. For daily self-esteem, the CIs were between .02/.09 [LL95CI] and .11/.21 [UL95CI], while for daily optimism, the CIs were between .02/.11 [LL95CI] and .13/.24 [UL95CI]. Overall, the results support Hypothesis 5.

The sixth hypothesis states that when controlling for personal resources (e.g., self-efficacy, self-esteem, and optimism) before the cosmetic surgery procedure, individuals' home demands partially mediate the relationship between postsurgery personal resources and work engagement. The same approach was adopted for Hypothesis 5 for Hypothesis 6. The first condition was met by Hypothesis 4, and the second condition was met by Hypothesis 3. The results support the third condition for Hypothesis 6 since, after controlling for sex, age, marital status, occupation, and presurgery personal resources and after entering home demands into the model (see Table 8, Model 3 for home demands), all the original significant positive relationships between postsurgery personal resources and daily work engagement were nonsignificant (daily self-efficacy:  $t = .54, p >.05$ ; daily self-esteem:  $t = 2.64, p$

$>.05$ ; and daily optimism:  $t = 3.45, p >.05$ ). Model 3 for home demands fit the data best, as the value for the variance ( $-2 LL = 1472.44$ ; see Table 8) was significantly lower than that in the previous models. The bootstrapping results also support the indirect effect of each home demand on the relationships between postsurgery personal resources and daily work engagement. Specifically, for daily self-efficacy, the indirect effects of quantitative home demands/emotional home demands reveal CIs between .02/.01 [LL95CI] and .10/.09 [UL95CI]. For daily self-esteem, the CIs were between .02/.01 [LL95CI] and .09/.07 [UL95CI], and for daily optimism, the CIs were between .02/.01 [LL95CI] and .10/.06 [UL95CI]. Overall, the results support Hypothesis 6.

## Discussion on Findings

The aim of this research was to investigate whether personal resources can be crafted in a nonwork domain and whether such crafted personal resources can, in turn, influence work engagement by influencing demands and resources in the nonwork domain. Thus, by studying a group of individuals who underwent cosmetic surgery on their pelvic region, we empirically compared their personal resources before and after the cosmetic surgery procedure. Furthermore, by using the term “home” to represent the nonwork environment, we empirically examined the relationship between individuals’ personal resources after cosmetic surgery and their work engagement by using home elements (e.g., home demands and home resources) as mediators. This research contributes to the literature on work engagement, work-home, and body image in several ways.

## Research Contributions

The results of this study reveal that personal resources before a cosmetic surgery procedure differ from those after the cosmetic surgery procedure. In other words, personal resources can be crafted by individuals themselves in nonwork environments (e.g., in cosmetic clinics/centres). This finding provides new insight that individuals play a more proactive role in shaping their personal resources, in addition to being passively affected by the situated environment, as found by existing studies (e.g., Ten Brummelhuis & Bakker, 2012). Our study of the ability of individuals to access personal resources after cosmetic surgery on the pelvic region also supports the existing findings about the differences in psychological expectations before and after surgery (e.g., Di Gesto et al., 2022; Honigman et al., 2004). However, our findings are novel since we extend these findings by providing evidence that individuals who seek cosmetic surgery on their pelvic region, which is not publicly visible, have psychological expectations regarding the outcome of the surgical procedure and that changes in the physical appearance of these body parts affect their personal resources (e.g., self-efficacy, self-esteem, and optimism). Hence, we contribute to the literature on body image.

Our results also show that personal resources after a cosmetic surgery procedure increase home resources and decrease home demands, thereby supporting COR theory (Hobfoll, 1998). This finding also challenges the conventional view concerning individuals' passiveness, as it demonstrates how crafted personal resources may improve individuals' proactivity by addressing demands and shaping resources in the home domain. Additionally, issues related to cosmetic surgery have been associated mainly with individuals' mental states and personal resources (e.g., Căiță et al., 2023; Koc & Ayyildiz, 2023). Our findings extend the existing knowledge of cosmetic surgery by revealing how such surgery contributes to individuals' proactivity in the home domain, thereby contributing to the literature on body image by bridging it to family studies. Similarly, as far as we are aware, very few, if any, family studies have attempted to investigate the role of the outcome of improved body image in individuals' proactivity at home. Our study thus opens a budding debate from the resources perspective in this regard for future scholarly discussions.

The results of this study also reveal that home elements (i.e., home resources and home demands) mediate the relationship between personal resources after a cosmetic surgery procedure and work engagement. This finding provides new insights into the linkage between personal resources and work engagement by indicating that personal resources may not be the most proximal factor/predictor of work engagement; rather, there are mechanisms embedded in the link that channel the impact of personal resources on work engagement. In this research, we demonstrate that crafted personal resources in the nonwork domain affect work engagement by enabling individuals to minimise home demands and shape home resources, thereby eventually benefiting them from having resources available to engage in work. Our findings are novel in that we did not evaluate personal resources in the work domain, as most of the existing studies on the same or similar issues have done (Xanthopoulou et al., 2007). Instead, we measured these factors in the nonwork domain and investigated how they impact work engagement, which echoes the importance of considering individuals' private lives when studying the issue of work engagement (Chen, 2024). These findings, therefore, extend the existing understanding of the association between personal resources and work engagement from the cross-domain perspective, thereby contributing to the literature on work engagement.

### Research Limitations and Future Research Directions

Some limitations should be noted. First, although the sample size of this study exceeds the suggested number (30 cases for level 2) according to Maas and Hox's (2005) rule of thumb for performing robust estimations of fixed effects in multi-level modelling and although the results obtained from the optimal design software exhibit appropriate statistical power for analysis, we suggest that future studies reexamine this study's research framework using larger samples. Second, we adopted home as representative of the nonwork environment in this research. However,

the nonwork environment is not limited to the home. According to Katz and Kahn (1978), individuals are involved in multiple social systems. Existing studies also propose numerous non-work environments in which individuals are frequently involved when they are not at work (e.g., churches, clubs, leisure activities, and other social communities; (Allis & O'Driscoll, 2008; Chen, 2020; Crittenden, 2023; Culvin, 2023; Pondé & Santana, 2000)). Future research should investigate different non-work environments and the influences derived from those environments to reexamine the research framework used in this study.

Third, we did not empirically investigate how the respondents felt about the outcome of their cosmetic surgery procedures. This may result in concerns regarding the contribution of the cosmetic surgery procedure (i.e., the nonwork environment) to improving personal resources. Specifically, one may argue that the cosmetic surgery procedure *per se* may not contribute to the improvement of personal resources; instead, there may be other daily influences at work (in the second stage of the survey) that we did not investigate. However, if that were the case, we would not have been able to identify the mediations of home elements, which are nonwork based, on the relationships between personal resources and work engagement.

Fourth, Bolger et al. (2003) claimed that little is known about the influences of a diary design on participants' responses. In this research, the respondents completed the questionnaires multiple times. Such an approach may lead to a habitual effect. In other words, the respondents may have completed the survey in a habitual way after a few days. However, if that were the case in the present study, we would not have been able to identify significant within-person fluctuations in the focal measures (Tims et al., 2011). Consequently, habitual effects are important to consider in diary research. However, any influences derived from this effect appear to have been limited and do not appear to have substantially influenced the study results.

Fifth, the sample of this study is somewhat specific, as it involves individuals who have undergone cosmetic surgery on the pelvic region. This specificity raises potential concerns about the generalizability of the findings to the broader population. Individuals who choose to undergo such surgery may possess unique characteristics or motivations that do not necessarily reflect those of the average person undergoing cosmetic surgery. Additionally, there may be concerns about potential self-selection bias, as individuals who elect cosmetic surgery may differ in psychological traits, socioeconomic status, or other demographic variables compared to those who do not (Sarwer et al., 2004; Honigman & Castle, 2006). In light of these concerns, we suggest that future research test our proposed model with more diverse samples, including various types of cosmetic surgery and a wider range of demographic groups, to better determine the extent to which our results can be generalised. Furthermore, we recommend that future research conduct longitudinal studies that

track individuals before and after different types of cosmetic procedures. This approach may offer more robust evidence supporting the broader applicability of our findings (von Soest et al., 2011).

Sixth, the post-surgery observation period in this research is relatively short. While it is understandable that individuals experience improved personal resources after a successful procedure, it is crucial to consider the long-term sustainability of those resources and their impact on our focal measures. Existing studies on body positivity and well-being have revealed that the benefits of cosmetic procedures may not address underlying issues and thus may diminish over time (e.g., Sarwer et al., 2005; Cash et al., 2002). In other words, individuals may initially experience an improvement in personal resources following cosmetic surgery. However, without addressing underlying psychological factors, it is possible that these improvements may normalise and potentially decline over time. Therefore, we suggest that future research include longer follow-up periods to test the endurance of the observed effects and investigate whether the impact of improved personal resources on work engagement is maintained over the long term.

Finally, one may be concerned with the accuracy of partner-rated work engagement since work engagement is a working state of mind that should be rated by the respondents themselves. However, existing studies have shown that third-person ratings of work engagement may be more accurate than self-ratings, as they help prevent the inflation of the rated outcome that may occur as a result of self-reports and have been encouraged for academic use (Xu et al., 2020). However, given that existing studies have considered managers and coworkers as the third person for ratings (Xu et al., 2020), it is not clear whether partner ratings support the same conclusions. Although our approach is novel and the results are in line with COR theory (Hobfoll, 1998), future research should retest our proposed model by using managers, coworkers, or both for third-person evaluations of respondents' work engagement.

### Practical Implications

We provide practical implications for clinics/centres/hospitals that offer these types of cosmetic procedures. Currently, cosmetic surgery is a popular avenue that many people pursue to make themselves beautiful both outside (i.e., physically pretty/good-looking) and inside (i.e., increased psychological well-being). Although existing studies have provided many practical implications regarding cosmetic surgery for individuals (e.g., Abdo et al., 2023; Mokhtari et al., 2021; Shah-Desai et al., 2023; Yoon & Kim, 2020), most, if not all, of those studies are based on evidence related to surgery on body parts that are typically publicly visible. Little attention has been given to cosmetic surgery on body parts that are not publicly visible (e.g., the pelvic region); hence, the practical implications of surgery on these types of body parts are unclear for both cosmetic surgeons and individuals.

We revealed that cosmetic surgery in the pelvic region contributes to increasing individuals' personal resources, such as self-efficacy, self-esteem, and optimism. In addition, an increase in personal resources motivates individuals to manage their home life more effectively by reducing home demands and/or shaping home resources, which in turn allows them to have higher levels of work engagement. We suggest that during the initial consultation stage, cosmetic surgeons inform potential individuals who are considering cosmetic surgery on the pelvic region but who have not yet made a final decision about how the outcome of the surgery may psychologically contribute to both their home and work lives through improved personal resources, in addition to explaining the specific surgical details. Specifically, cosmetic surgeons may inform individuals of the improved self-efficacy, self-esteem, and optimism that surgery can produce, which may support them in taking proactive actions to address home demands and increase home resources such as those studied in this research, thereby enabling them to better engage in work. Doing so will benefit cosmetic surgeons by more effectively motivating potential individuals to make a final decision about the surgery than by explaining only the specific surgical details. Moreover, individuals can gain a better understanding of the value of such cosmetic procedures in terms of contributing to their home and work lives by increasing their personal resources, in addition to improving the physical appearance of the body part targeted for surgery.

## Conclusion

In this research, we investigated 1) whether personal resources are crafted in a nonwork domain and 2) whether there are mechanisms that channel the effect of improved personal resources on work engagement. Underpinned by COR theory, we demonstrated that personal resources can be crafted in private life and that these personal resources contribute to work engagement in a cross-domain manner through the home domain by increasing home resources and decreasing home demands. Our research findings demonstrated that personal resources may not always be the proximal factor of work engagement, which has been widely claimed by studies on work engagement. Our study provides a new direction for future scholars to explore further the association between personal resources and work engagement. Additionally, we present practical implications for clinics/centres/hospitals that offer these surgical procedures by providing cosmetic surgeons with evidence that they can use to motivate potential individuals to reach a decision about surgery. Surgeons can inform potential patients of the value of this type of cosmetic surgery for their home and work life (i.e., feeling more personal resources, enabling them to deal with home influences, thereby contributing to their work engagement), in addition to the benefit derived from altering the physical appearance of the body part undergoing surgery.

## Appendix

### Daily Self-efficacy

Please respond to the following statements about yourself (/your partner) today:

1. Today, I could always manage to solve difficult problems when I tried hard enough.
2. Today, when someone opposed me, I could find the means and ways to get what I want.
3. Today, it was easy for me to stick to my aims and accomplish my goals.
4. Today, I was confident that I could deal efficiently with unexpected events.
5. Today, thanks to my resourcefulness, I knew how to handle unforeseen situations.
6. Today, I could solve most problems when I invested the necessary effort.
7. Today, I could remain calm when facing difficulties because I could rely on my coping abilities.
8. Today, when I was confronted with a problem, I could usually find several solutions.
9. Today, when I was in trouble, I could usually think of a solution.
10. Today, I could usually handle whatever came my way.

\*For the version for the respondents' partner, we replaced "I" with "my partner" or "he or she" for each item where needed.

### Daily Self-esteem

Please respond to the following statements about yourself (/your partner) today:

1. Today, on the whole, I was satisfied with myself.
2. Today, at times I thought I was no good at all.
3. Today, I felt that I had a number of good qualities.
4. Today, I was able to do things as well as most other people.
5. Today, I felt I did not have much to be proud of.
6. Today, I certainly felt useless at times.
7. Today, I felt that I'm a person of worth, at least on an equal plane with others.
8. Today, I wished I could have more respect for myself.
9. Today, all in all, I was inclined to feel that I was a failure.
10. Today, I took a positive attitude toward myself.

\*For the version for the respondents' partner, we replaced "I" with "my partner" or "he or she" for each item where needed.

### Daily Optimism

Please respond to the following statements about yourself (/your partner) today:

1. Today, in uncertain times, I usually expected the best.
2. Today, it was easy for me to relax.
3. Today, if something could have gone wrong for me, it did.
4. Today, I was always optimistic about my future.
5. Today, I enjoyed my friends a lot.
6. Today, It was important for me to keep busy.
7. Today, I hardly ever expected things to go my way.
8. Today, I didn't get upset too easily.
9. Today, I rarely counted on good things happening to me.
10. Today, overall, I expected more good things to happen to me than bad.

\*For the version for the respondents' partner, we replaced "I" with "my partner" or "he or she" for each item where needed.

### Daily Work Engagement

Please respond to the following statements about yourself (/your partner) today:

1. Today, my partner felt bursting with energy.
2. Today, my partner felt strong and vigorous at his or her job.
3. Today, when my partner got up this morning, he or she felt like going to work.
4. Today, my partner was enthusiastic about his or her job.
5. Today, my partner's job inspired my partner.
6. Today, my partner was proud of the work that he or she does.

### Daily Quantitative Home Demands

Please respond to the following statements for your partner:

1. Was your partner busy at home today?
2. Did your partner have to do many things in a hurry when he or she was at home today?
3. Did your partner have to carry out many tasks at home today?

### Daily Emotional Home Demands

Please respond to the following statements for your partner:

1. How often did emotional issues arise at home for your partner today?
2. How often did your partner's housework confront him or her with things that touched him or her personally today?
3. How often did your partner become frustrated about things concerning his or her home life today?

### Daily Home Social Support

Please respond to the following statements about you for your partner:

1. Today, I paid attention to my partner's feelings and problems.
2. Today, when necessary, I helped my partner with a certain home task.
3. Today, when necessary, I gave my partner advice on how to handle things at home.
4. Today, I showed that I appreciate the way my partner did his or her home duties.

### Daily Home Autonomy

Please respond to the following statements for your partner:

1. Today, my partner could decide him or herself how he or she would execute his or her work.
2. Today, at home, my partner had the freedom to decide how he or she did his or her work.
3. Today, my partner's home duty allowed him or her to make many decisions on his or her own.

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