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Crafting Your Employability: How Job Crafting Relates to Sustainable Employability Under the Self-Determination Theory and Role Theory

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Abstract

Amid increasing job complexity and evolving career demands, understanding how employees can proactively sustain their employability has become a critical concern for organizations. Although prior research highlights the importance of job crafting for employability, the motivational mechanisms through which this relationship unfolds—and the contextual conditions under which it is strengthened or weakened—remain insufficiently understood. Drawing on self-determination theory and role theory, this study examines how job crafting influences sustainable employability through the mediating role of self-determination and the moderating role of role ambiguity. Using a two-wave, time-lagged survey design, data were collected from 989 employees across diverse industries in Türkiye. Job crafting and role ambiguity were measured at Time 1, while self-determination and sustainable employability were assessed one month later. The proposed relationships were tested using confirmatory factor analysis and conditional process analysis. The results show that job crafting is positively associated with both self-determination and sustainable employability. Self-determination partially mediates the relationship between job crafting and sustainable employability, indicating that proactive job redesign enhances employability by fostering autonomous motivation. Moreover, role ambiguity weakens the positive effects of job crafting on both self-determination and sustainable employability, highlighting the importance of role clarity as a boundary condition. This study advances the job crafting and sustainable employability literature by identifying self-determination as a key motivational mechanism and by demonstrating how role ambiguity constrains the benefits of proactive work behavior. By integrating self-determination theory with role theory, the findings offer nuanced insights into how employee agency and contextual clarity jointly support sustainable employability in dynamic work environments.

Keywords: job crafting; self-determination; role ambiguity; sustainable employability

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1. Introduction

In today's rapidly changing work environment—characterized by digital transformation, evolving job demands, and increasing sustainability pressures—sustainable employability has emerged as a central concern for both organizations and employees. Sustainable employability refers to employees' ongoing ability and willingness to remain productive, adaptable, and motivated throughout their working lives, despite changing tasks, technologies, and organizational structures [1–3]. Unlike traditional employability concepts that emphasize current skills or labor-market mobility, sustainable employability emphasizes

long-term adaptability, learning, and well-being, highlighting the importance of sustaining human capital over time [4].

Although organizations increasingly invest in formal human resource interventions to enhance sustainable employability, such as training, career development systems, and supportive HR practices, these approaches often rely on top-down designs that underestimate employees' active role in shaping their own work experiences. In this context, job crafting—defined as employees' self-initiated modifications of task boundaries, relational interactions, and cognitive perceptions to better align work with personal strengths, values, and needs—has gained prominence as an employee-driven form of sustainable work design [5,6]. By enabling employees to adapt their jobs proactively, job crafting represents a micro-level mechanism through which sustainability principles may be enacted in everyday work practices.

Research on job crafting has expanded substantially over the past decade, establishing it as a key domain within employee-driven job design [7,8]. Empirical studies have demonstrated its relevance for outcomes such as work engagement, performance, well-being, safety innovation, and job embeddedness [9–14]. Conceptually, job crafting has also been linked to employability by fostering learning, adaptability, and developmental behaviors [15]. However, despite these advances, sustainable employability remains an underexplored outcome of job crafting, with only a limited number of studies directly examining this relationship [16].

Moreover, existing research has primarily examined job crafting within the Job Demands–Resources (JD–R) framework, emphasizing how employees optimize demands and resources to improve short-term functioning [17–19]. While this perspective has yielded valuable insights, it provides a limited understanding of the motivational processes that sustain employability over time. In particular, empirical research grounded in self-determination theory (SDT)—which emphasizes the fulfillment of basic psychological needs as a foundation for sustained motivation and development—remains comparatively scarce in the job crafting literature [20,21].

Self-determination theory posits that individuals are inherently motivated to grow, learn, and integrate their experiences when their needs for autonomy, competence, and relatedness are satisfied [20,22]. Within work contexts, these needs are understood as malleable motivational states that fluctuate in response to job characteristics and proactive behaviors [23]. Because job crafting explicitly involves reshaping work to better fit personal needs, strengths, and values, it constitutes a theoretically relevant antecedent of self-determination. Through this motivational pathway, job crafting may contribute not only to immediate well-being but also to employees' perceived capacity to remain employable in the long term. Accordingly, this study conceptualizes sustainable employability as a perceived, motivationally sustained adaptive capacity, reflecting employees' current appraisal of their long-term resilience, learning orientation, and career sustainability.

In addition to motivational mechanisms, the effectiveness of job crafting may depend on contextual conditions that shape how employees interpret and enact their roles. Role theory provides a complementary lens for understanding such boundary conditions by emphasizing the importance of role expectations, clarity, and situational cues in guiding behavior [24,25]. A central construct within this framework is role ambiguity, defined as uncertainty regarding role responsibilities, performance criteria, or expectations [26]. Role ambiguity has consistently been associated with reduced motivation, satisfaction, and performance [27–29], suggesting that unclear role structures may constrain employees' ability to translate proactive behaviors into positive outcomes. Despite growing calls to examine contextual moderators of job crafting effects [8,30], the role of role ambiguity in shaping the job crafting–employability relationship remains insufficiently explored.

To address these gaps, the present study develops and tests an integrated mediation–moderation model that combines self-determination theory and role theory to explain how and when job crafting enhances sustainable employability. Specifically, we propose that self-determination mediates the relationship between job crafting and sustainable employability, while role ambiguity moderates this process by qualifying the extent to which proactive job redesign translates into motivational and employability benefits. Rather than attempting to uncover a novel motivational pathway, this study builds on established self-determination mechanisms and extends them to the sustainability domain by examining sustainable employability as a long-term, motivationally grounded outcome.

By positioning job crafting as a micro-level sustainability mechanism that complements broader organizational sustainability and green HR initiatives, this study contributes to the literature in three key ways. First, it clarifies how employee-driven job redesign supports sustainable employability through motivational processes, thereby extending SDT-based explanations of proactive work behavior. Second, it integrates role ambiguity as a contextual boundary condition, highlighting when job crafting is more or less effective in sustaining employability over time. Third, by focusing on perceived sustainable employability rather than immediate performance outcomes, the study aligns individual-level motivation with sustainability-oriented work design, offering insights relevant to organizations seeking to foster resilient, adaptable, and future-ready workforces.

2. Background and Hypotheses Development

2.1. Job Crafting and Sustainable Employability

Job crafting represents a form of proactive work behavior through which employees intentionally modify aspects of their tasks, relationships, and cognitive perceptions to better align their work with personal strengths, values, and developmental goals [5,31]. Rather than passively adapting to predefined job designs, employees who engage in job crafting actively shape how work is performed and experienced, thereby enhancing meaning, ownership, and engagement in their roles [32,33].

From a sustainability perspective, job crafting is particularly relevant because it enables employees to remain adaptive in the face of changing job demands and career trajectories. Prior research suggests that job crafting complements top-down job design initiatives by allowing individuals to continuously recalibrate their work in response to evolving organizational and personal conditions [15]. Through these self-initiated adjustments, employees can preserve functional fit, sustain motivation, and maintain productive capacity over time—core elements of sustainable employability [1,2].

Empirical studies provide growing support for the link between job crafting and employability-related outcomes. Job crafting has been shown to promote adaptability, continuous learning, and proactive skill development—capabilities that are essential for sustaining employability in dynamic work environments [34,35]. Moreover, job crafting facilitates the accumulation of personal and job-related resources by enabling employees to manage demands, expand competencies, and create development opportunities within their current roles [17,36].

In this study, sustainable employability is conceptualized as a perceived, motivationally sustained adaptive capacity, reflecting employees' confidence in their ability and willingness to remain productive, adaptable, and employable over time. From this perspective, job crafting strengthens sustainable employability by reinforcing employees' ongoing investment in development and their readiness to cope with future job demands [15,37]. Consistent with this logic and emerging empirical evidence [8,16], this study proposes:

H1: *Job crafting positively relates to sustainable employability.*

2.2. Job Crafting and Self-Determination

Self-determination reflects a motivational state characterized by individuals' perceived autonomy, competence, and relatedness in pursuing meaningful goals and exercising personal agency [20,23]. Within self-determination theory, individuals are viewed as inherently growth-oriented and proactive, with motivation fluctuating in response to work experiences and contextual affordances [22,38].

Job crafting provides a behavioral context that is highly conducive to self-determination. By allowing employees to shape how tasks are performed, how relationships are managed, and how work is interpreted, job crafting enhances autonomy, strengthens competence through skill use and development, and fosters relatedness by reshaping social interactions [5,31]. Empirical research supports this view, showing that employees who engage in job crafting report higher intrinsic motivation, work engagement, and life satisfaction [35,39].

When employees experience agency in planning and executing their work, they are more likely to internalize work goals as self-endorsed and experience stronger self-determination [7,21]. Accordingly, job crafting can be understood as a proactive pathway through which employees activate and sustain motivational resources. Despite this theoretical alignment, empirical research explicitly examining the job crafting–self-determination link remains limited. Addressing this gap, the present study proposes:

H2: *Job crafting positively relates to self-determination.*

2.3. Self-Determination and Sustainable Employability

Self-determination plays a central role in sustaining employability by shaping how individuals regulate motivation, learning, and career-related behaviors over time. Autonomous motivation enhances agency, persistence, and adaptive engagement, enabling employees to respond constructively to changing work conditions [20,23].

Prior research indicates that self-determination fosters proactive orientations relevant to employability, including skill development, career self-management, and confidence in maintaining employability [40–42]. Recent studies further suggest that self-determination strengthens intrinsic motivation for learning and competence development—capabilities essential for employability in dynamic labor markets [43].

Self-determination also facilitates adaptive appraisal and sense-making processes, enabling employees to interpret role changes and job demands as opportunities for growth rather than threats [44,45]. This adaptive mindset supports resilience, learning orientation, and sustained engagement while reducing exhaustion and disengagement [46]. Accordingly, drawing on self-determination theory and empirical evidence, this study proposes:

H3: *Self-determination positively relates to sustainable employability.*

2.4. The Mediating Role of Self-Determination

Integrating the preceding arguments, this study proposes self-determination as the motivational mechanism through which job crafting contributes to sustainable employability. Job crafting enables employees to actively satisfy psychological needs for autonomy, competence, and relatedness, thereby fostering a self-determined motivational state [20,21,47].

This motivational state transmits the developmental benefits of job crafting toward employability outcomes by activating behaviors such as continuous learning, adaptability, and proactive engagement with change [48,49]. In addition, self-determination enhances cognitive and behavioral flexibility, enabling employees to anticipate change and sustain effective functioning in dynamic environments [40,50].

Taken together, these arguments suggest that job crafting influences sustainable employability primarily through its capacity to generate self-determined motivation. Accordingly, this study proposes:

H4: *Job crafting is indirectly related to sustainable employability through self-determination.*

2.5. The Moderating Role of Role Ambiguity

Although job crafting can activate motivational and developmental processes, its effectiveness depends on contextual clarity. Role theory suggests that employees rely on clear role expectations and performance standards to guide behavior and evaluate the appropriateness of their actions [26,51]. Role ambiguity arises when such information is unclear or inconsistent, creating uncertainty about behavioral expectations.

Extensive research demonstrates that role ambiguity undermines motivation, increases stress, and weakens effective functioning by reducing predictability and perceived control [52–56]. Under high role ambiguity, employees may hesitate to engage fully in job crafting or experience diminished motivational returns due to uncertainty regarding the legitimacy or consequences of self-initiated changes [57].

Moreover, role ambiguity may constrain the employability benefits of job crafting by misaligning crafting efforts with organizational expectations, thereby weakening perceptions of adaptability and long-term career sustainability [58–60]. Accordingly, role ambiguity is expected to function as a boundary condition that weakens the effects of job crafting:

H5: *Role ambiguity weakens the positive relationship between job crafting and self-determination.*

H6: *Role ambiguity weakens the positive relationship between job crafting and sustainable employability.*

2.6. Conceptual Model

Figure 1 presents the proposed conditional process model examining how job crafting contributes to sustainable employability through the mediating role of self-determination and the moderating role of role ambiguity. Drawing on self-determination theory, the model conceptualizes job crafting as a proactive work behavior that enhances sustainable employability by activating self-determined motivation. At the same time, grounded in role theory, role ambiguity is modeled as a contextual boundary condition that weakens the strength of both the direct relationship between job crafting and sustainable employability and the indirect pathway operating through self-determination. Together, the model illustrates how individual-level motivational processes and role-based contextual clarity jointly shape employees' capacity to sustain employability over time.

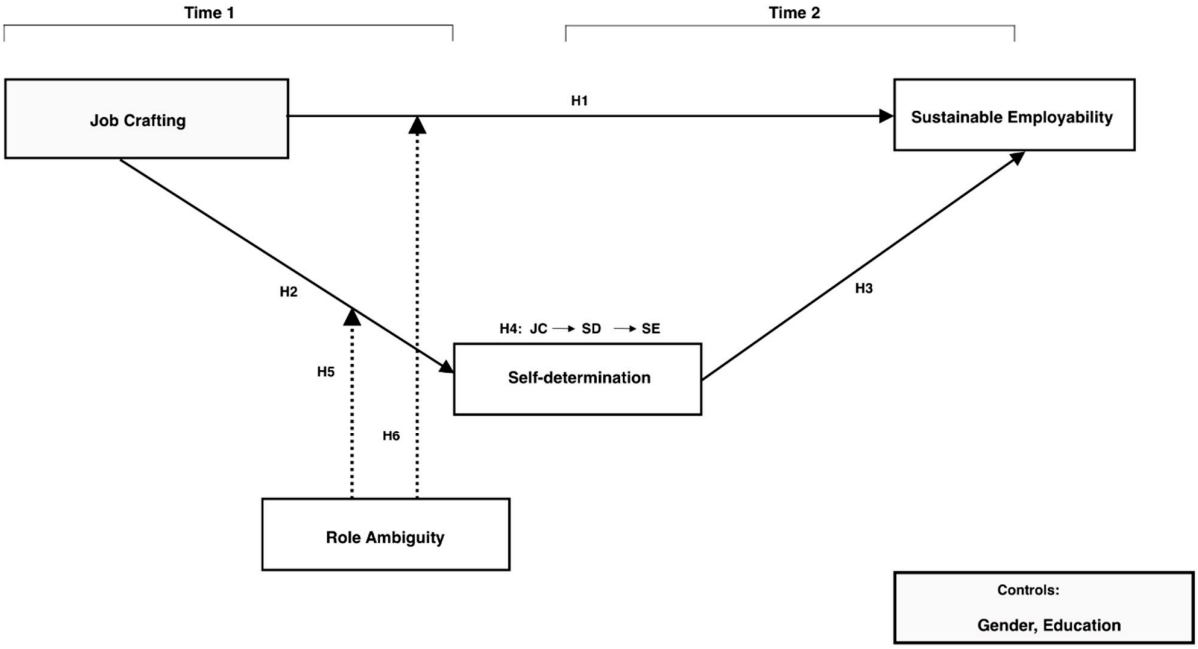


Figure 1. Integrated research model. Source: Authors developed.

3. Method and Study Design

3.1. Sampling and Data Collection Procedures

This study employed a quantitative survey design to collect data from full-time employees working in organizations across Türkiye. To avoid overrepresentation of a single sector and to enhance the contextual diversity of the sample, employees from multiple industries were invited to participate. This approach allows the findings to be interpreted across varied occupational and organizational settings rather than being restricted to a single career path or industry context.

Organizations were identified through publicly available online business directories and professional platforms. Initial contact was made with organizational representatives to explain the purpose and scope of the study and to request participation approval. Following approval, data collection procedures varied by geographic location. For organizations located in Istanbul and Ankara, questionnaires were distributed on-site using a paper-based survey administered to employees selected at random. For organizations located outside these two metropolitan areas, management representatives were asked to randomly distribute the survey link to at least four full-time employees via email.

To be eligible for participation, respondents were required to be at least 18 years old, employed on a full-time basis, and not self-employed. Prior to participation, respondents were informed about the academic purpose of the study and assured that there were no right or wrong answers [61,62]. Participation was voluntary, and confidentiality and anonymity were emphasized to reduce evaluation apprehension. The questionnaire was pretested to ensure clarity and comprehensibility, and all items were measured using a 7-point Likert scale.

Consistent with Dillman's [63] tailored design method and prior organizational research employing time-lagged survey designs [19,64,65], data were collected in two waves separated by a one-month interval. At Time 1 (T1), measures of job crafting and role ambiguity were administered. At Time 2 (T2), measures of self-determination and sustainable employability were collected. This temporal separation was implemented to reduce the likelihood of common method bias by limiting respondents' ability to rely on prior responses when completing subsequent survey waves [66–68].

To ensure data consistency across waves, respondents who did not complete the first survey were not permitted to participate in the second wave. In total, 1130 questionnaires were distributed through on-site administration and electronic delivery. At T1, 1001 usable responses were obtained. At T2, 989 responses were successfully matched to T1 data using a unique identifier code, resulting in a final sample of 989 respondents and an overall response rate of 87.52%.

The final sample represented a broad range of industries, including manufacturing (18.91%), healthcare (18.60%), services (10.21%), banking (10.01%), retail and trade (9.50%), public administration (8.99%), transportation and logistics (6.98%), agriculture (5.57%), real estate and construction (5.36%), and other sectors (5.76%). Detailed demographic characteristics of the respondents are reported in Table 1.

Table 1. Sample characteristics.

Demographic Details (n = 989)	Category	Frequency	Proportion (%)
Gender	Male	524	52.98
	Female	465	47.02
Educational level	High school diploma	201	20.32
	Bachelor degree	559	56.52
	Master degree	226	22.86
	Doctoral degree	3	0.30
Marital status	Married	523	52.88
	Single	440	44.49
	Prefer not to say	26	2.63
Professional characteristics	Banking	99	10.01
	Retailing/trade	95	9.61
	Public administration	89	8.99
	Manufacturing	187	18.91
	Real estate/construction	53	5.36
	Service	101	10.21
	Transportation/logistics	69	6.98
	Healthcare	184	18.60
	Agriculture	55	5.57
	Others	57	5.76

Source: Authors' compilation.

3.2. Survey Instruments

All survey instruments were administered in Turkish, the official language of Türkiye. Established measurement scales with demonstrated validity and reliability in organizational research were employed to operationalize the study constructs. Following standard translation procedures, the original English versions of the instruments were translated into Turkish and subsequently back-translated to ensure semantic equivalence, in accordance with Brislin's [69] guidelines. Consistent with prior cross-cultural survey research [70,71], discrepancies were resolved through consensus among bilingual experts. All items were measured using a 7-point Likert scale ranging from 1 ("strongly disagree") to 7 ("strongly agree").

3.2.1. Job Crafting

Job crafting was measured using the 20-item scale developed by Tims et al. [72], which captures employees' proactive efforts to modify task characteristics, social interactions, and developmental aspects of their work. This scale is widely used in job crafting research and aligns with the study's conceptualization of job crafting as a self-initiated, proactive work behavior. A sample item is: "I try to develop myself professionally."

3.2.2. Self-Determination

Self-determination was operationalized using a three-item measure adapted from Spreitzer's [73] psychological empowerment scale, focusing specifically on the autonomy-related dimension. Although originally developed to assess empowerment, this subscale has been widely employed as an indicator of self-determined motivation in organizational settings, capturing employees' perceived discretion, independence, and volitional control at work. This operationalization is consistent with the study's theoretical framing of self-determination as a malleable motivational state rather than a stable personality trait. A sample item is: "I have considerable opportunity for independence and freedom in how I do my job."

3.2.3. Role Ambiguity

Role ambiguity was measured using a six-item scale adapted from Rizzo et al. [26], a foundational instrument in role theory research. The scale assesses the extent to which employees perceive uncertainty regarding job responsibilities, expectations, and performance criteria. Items were reverse-coded where appropriate so that higher scores indicate higher levels of perceived role ambiguity. A sample item is: "There are clearly planned goals and objectives in my job."

3.2.4. Sustainable Employability

Sustainable employability was measured using a ten-item scale adapted from Akkermans et al. [74] and Oude Hengel et al. [75]. In line with the study's theoretical framework, this construct was operationalized as employees' perceived capacity to remain productive, adaptable, and employable over time, rather than as immediate job mobility or turnover intention. Accordingly, items capture perceptions of competence development, adaptability, and long-term career sustainability. A sample item is: "I feel capable of continuing to develop myself in my work."

3.3. Common Method Bias and Robustness Checks

Given the use of self-reported survey data, several procedural and statistical remedies were employed to mitigate the potential influence of common method bias (CMB), following established methodological recommendations [66]. As a primary ex-ante remedy, the study adopted a two-wave time-lagged data collection design, introducing temporal separation between the measurement of predictor and moderator variables (job crafting and role ambiguity at Time 1) and mediator and outcome variables (self-determination and sustainable employability at Time 2), with a one-month interval. Temporal separation reduces respondents' reliance on prior responses and weakens consistency motifs, thereby lowering the risk of common method variance. In addition, respondents were assured of anonymity and confidentiality, informed that there were no right or wrong answers, and encouraged to respond honestly [76]. Well-validated and clearly worded measurement scales were used to further minimize ambiguity and evaluation apprehension.

As ex-post diagnostics, Harman's single-factor test was conducted, revealing that four factors with eigenvalues greater than one emerged, with the largest factor accounting

for 19.19% of the total variance—well below the commonly cited 50% threshold [66]. In addition, a marker-variable technique was applied using a theoretically unrelated item ("I am always courteous, even to people who are disagreeable") to capture general response tendencies [77]. After controlling for the marker variable, the substantive correlations among the focal constructs remained largely unchanged. Taken together, these procedural and statistical checks suggest that common method bias is unlikely to substantially affect the study's findings; however, consistent with best practice, these results are interpreted as indicative rather than conclusive. Finally, education level and gender were included as control variables for robustness purposes [78–80], and the hypothesized relationships remained stable.

3.4. Data Analysis

The data were analyzed using SPSS version 27.0 and Hayes' PROCESS macro, following a structured, hypothesis-driven analytical strategy [81,82]. Preliminary analyses included descriptive statistics, frequency distributions, and Pearson correlation coefficients to examine the relationships among the study variables. Skewness and kurtosis values were inspected to assess distributional properties, and all items fell within acceptable ranges, supporting the use of parametric analyses. Confirmatory factor analysis (CFA) was conducted to evaluate the reliability and construct validity of the measurement model prior to hypothesis testing.

Hypotheses concerning direct, mediating, and moderating relationships were tested using Hayes' PROCESS macro [81]. Specifically, PROCESS Model 4 was employed to examine the direct effects of job crafting on sustainable employability and the mediating role of self-determination, with indirect effects assessed using a bootstrapping procedure with 5000 resamples and 95% confidence intervals. PROCESS Model 8 was subsequently applied to test the moderating role of role ambiguity on both the direct and indirect paths. Consistent with recommended practice, effects were considered statistically significant when the corresponding confidence intervals did not include zero [83,84]. This analytical approach enables a rigorous examination of the proposed conditional process model while remaining appropriate for the cross-sectional, time-lagged research design.

4. Analysis and Results

4.1. Measurement Model Evaluation

A confirmatory factor analysis (CFA) was conducted to assess the reliability and validity of the measurement model prior to hypothesis testing [85]. The model demonstrated an acceptable fit to the data, with fit indices exceeding recommended thresholds: χ^2/df (CMIN/DF) = 2.229, Comparative Fit Index (CFI) = 0.938, Tucker–Lewis Index (TLI) = 0.926, Normed Fit Index (NFI) = 0.932, and Root Mean Square Error of Approximation (RMSEA) = 0.057 [86]. Internal consistency was evaluated using composite reliability (CR) and Cronbach's alpha, with CR values ranging from 0.919 to 0.962, exceeding the recommended minimum of 0.70 [87,88]. Convergent validity was supported as all items loaded significantly on their respective constructs ($p < 0.001$), with standardized factor loadings ranging from 0.635 to 0.925, and average variance extracted (AVE) values exceeding the 0.50 threshold (ranging from 0.525 to 0.825) [89,90]. As shown in Table 2, these results indicate adequate reliability and convergent validity of the measurement scales.

Table 2. Items, reliabilities, and confirmatory factor analysis results.

Variable Items	Loading	α	AVE	CR	Normal Distribution	
					Kurtosis	Skewness
Job crafting (JC)		0.957	0.525	0.957		
JC1	0.717				−0.708	0.247
JC2	0.752				−0.563	−0.285
JC3	0.656				−0.972	0.958
JC4	0.737				−0.487	−0.090
JC5	0.669				−0.741	0.562
JC6	0.669				−0.875	0.901
JC7	0.643				−1.459	1.474
JC8	0.635				−0.509	−0.132
JC9	0.702				−0.678	0.275
JC10	0.736				−1.128	1.913
JC11	0.760				−0.814	0.430
JC12	0.721				−1.065	1.489
JC13	0.742				−0.973	0.993
JC14	0.788				−0.790	0.292
JC15	0.761				−0.571	0.019
JC16	0.788				−0.691	0.337
JC17	0.749				−0.672	0.119
JC18	0.742				−0.823	0.424
JC19	0.746				−0.904	0.646
JC20	0.750				−0.678	0.067
Self-determination (SD)		0.945	0.852	0.945		
SD1	0.920				−0.724	0.276
SD2	0.925				−0.674	0.306
SD3	0.924				−0.690	0.385
Role ambiguity (RA)		0.919	0.696	0.919		
RA1	0.886				−0.645	0.194
RA2	0.903				−0.629	0.178
RA3	0.823				−0.569	−0.170
RA4	0.720				−0.836	0.449
RA5	0.827				−0.610	−0.123
Sustainable employability (SE)		0.961	0.715	0.962		
SE1	0.806				−0.566	−0.454
SE2	0.827				−0.554	−0.561
SE3	0.864				−0.713	0.293

Table 2. *Cont.*

Variable Items	Loading	α	AVE	CR	Normal Distribution	
					Kurtosis	Skewness
SE4	0.894				−0.524	−0.157
SE5	0.816				−0.306	−0.527
SE6	0.849				−0.646	0.208
SE7	0.846				−0.544	−0.374
SE8	0.809				−0.245	−0.544
SE9	0.872				−0.444	−0.565
SE10	0.866				−0.545	−0.189
Goodness of fit results: CMIN/DF = 2.229, RMSEA = 0.057, GFI = 0.912, CFI = 0.938, NFI = 0.932, TLI = 0.926						

Note: α = Cronbach's alpha, normed CMIN/DF = chi-square, RMSEA = root mean square error of approximation, GFI = goodness of fit index, CFI = comparative fit index, NFI = normed fit index, Tucker–Lewis index = TLI. Source: Authors' compilation.

Discriminant validity was assessed using the Fornell–Larcker criterion [89], whereby the square root of the AVE for each construct exceeded its correlations with other constructs, supporting construct distinctiveness (Table 3). To further examine potential multicollinearity concerns arising from moderate inter-construct correlations, variance inflation factor (VIF) values were inspected and found to be below the conservative threshold of 3.3 [91]. In addition, skewness and kurtosis values were examined as distributional diagnostics, with all items falling within recommended ranges, supporting the use of parametric estimation techniques [92,93]. Taken together, these results suggest that the measurement model demonstrates satisfactory reliability, validity, and suitability for subsequent hypothesis testing.

Table 3. Mean, standard deviations, correlations, and discriminant validity.

Constructs	M	Std.	JC	SD	RA	SE	Education	Gender
JC	5.613	0.847	**(0.725)**					
SD	5.280	1.211	0.643 **	**(0.923)**				
RA	5.428	1.044	0.585 **	0.693 **	**(0.834)**			
SE	5.587	0.938	0.555 **	0.613 **	0.602 **	**(0.845)**		
Education	-	-	0.073	0.078	0.046	0.036	-	
Gender	-	-	−0.091	−0.091	−0.029	−0.029	−0.042	-

Note: JC = job crafting; SD = self-determination; RA = role ambiguity; SE = sustainable employability. Numbers in bold are the square root of AVEs; ** = correlation is significant at 0.01, two-tailed. Source: Authors' compilation.

4.2. Structural Model and Hypothesis Testing (Direct Effects and Mediation)

The direct relationships and mediating mechanisms were examined using Hayes' PROCESS macro (Model 4), with results reported in Table 4. The findings indicate that job crafting was positively associated with self-determination (β = 0.919, $p < 0.001$), supporting Hypothesis 2. In addition, job crafting exhibited a positive relationship with sustainable employability (β = 0.558, $p < 0.001$), supporting Hypothesis 1. Self-determination was also positively related to sustainable employability (β = 0.299, $p < 0.001$), providing support for Hypothesis 3. Collectively, these results suggest that job crafting is positively linked to both motivational states and perceived sustainable employability.

Table 4. Direct and mediation results.

Predictor	Model 1: Self Determination					Model 2: Sustainable Employability				
Relationships	**β**	**S.E.**	**t-Value**	***p*-Value**	**95% CI**	**β**	**S.E.**	**t-Value**	***p*-Value**	**95% CI**
Constant	0.121	0.147	0.820	ns	[−0.168,0.409]	0.875	0.086	10.132	***	[0.706,1.045]
JC	0.919	0.025	35.461	***	[0.868,0.970]	0.558	0.019	28.079	***	[0.518,0.596]
SD						0.299	0.014	21.589	***	[0.273,0.327]
R^2	0.413					0.660				
JC → SD → SE	0.275	0.018	-	-	[0.242,0.311]					

Note: JC = job crafting; SE = sustainable employability, S.E. = standard error, CI = confidence interval, *** = *p*-value < 0.001, ns = non-significant. Source: Authors' compilation.

The mediating role of self-determination was subsequently tested using a bootstrapping procedure with 5000 resamples and 95% confidence intervals, following established recommendations [70,94]. The indirect effect of job crafting on sustainable employability through self-determination was significant (β = 0.275, S.E. = 0.018), with a 95% confidence interval of [0.242, 0.311], supporting Hypothesis 4. The total effect of job crafting on sustainable employability was also significant (β = 0.833, 95% CI [0.799, 0.866]). When self-determination was included in the model, the direct effect of job crafting on sustainable employability remained significant, indicating a partial mediation pattern. These findings suggest that self-determination functions as a motivational mechanism through which job crafting contributes to sustainable employability, while job crafting also retains a direct association with employability outcomes.

4.3. Moderation and Conditional Process Analysis (Role Ambiguity)

The moderating effects of role ambiguity were examined using Hayes' PROCESS macro (Model 8), with all predictor variables mean-centered prior to analysis to reduce multicollinearity [81]. Education and gender were included as control variables. As reported in Table 5 (Model 1), job crafting was positively associated with self-determination (β = 0.373, t = 9.914, 95% CI [0.299, 0.447]). The interaction term between job crafting and role ambiguity was also significant (β = 0.181, t = 8.967, 95% CI [0.141, 0.220]), indicating that role ambiguity moderates the relationship between job crafting and self-determination. Simple slope analyses [95] revealed that the positive relationship between job crafting and self-determination was significantly weaker at high levels of role ambiguity (β = 0.151, t = 3.388, 95% CI [0.064, 0.239]) and significantly stronger at low levels of role ambiguity (β = 0.549, t = 12.836, 95% CI [0.465, 0.633]). These results indicate that role clarity strengthens the motivational benefits of job crafting, supporting Hypothesis 5 (Figure 2).

Table 5. Moderation results.

Paths	**β**	**S.E.**	**t-Value**	***p*-Value**	**95% CI**	
					Lower	**Upper**
Model 1: Mediator construct model (Self-determination)						
Constant	5.154	0.024	213.172	***	5.107	5.202
JC → SD	0.373	0.038	9.914	***	0.299	0.447
RA → SD	0.586	0.031	19.160		0.526	0.646
JC × RA → SD	0.181	0.020	8.967	***	0.141	0.220
Education → SD	0.027	0.009	0.319	ns	−0.018	0.025
Gender → SD	−0.010	0.011	−0.820	ns	−0.019	0.015

Table 5. *Cont.*

Paths	β	S.E.	t-Value	*p*-Value	95% CI	
					Lower	Upper
The conditional direct effect of JC on SD at different levels of RA						
−1SD (Low)	0.549	0.043	12.836	***	0.465	0.633
+1SD (High)	0.151	0.045	3.388	***	0.064	0.239
R^2 = 0.527 ***						
Model 2: Outcome construct model (Sustainable employability)						
Constant	4.590	0.074	62.391	***	4.991	5.222
JC → SE	0.295	0.023	12.910	***	0.254	0.377
SD → SE	0.181	0.014	12.899	***	0.389	0.483
RA → SE	0.391	0.019	19.698	***	0.294	0.395
JC × RA → SE	0.062	0.012	5.071	***	0.094	0.187
Education → SE	0.039	0.013	1.101	ns	−0.006	0.024
Gender → SE	0.025	0.009	0.915	ns	−0.003	0.019
The conditional direct effect of JC on SE at different levels of RA						
−1SD (Low)	0.219	0.026	13.442	***	0.303	0.407
+1SD (High)	0.450	0.026	8.278	***	0.167	0.271
The conditional indirect effects of JC on SE through SD at the different levels of RA						
	0.099	0.015			0.073	0.130
	0.027	0.010			0.167	0.271
Index of moderated mediation						
	0.033	0.055			0.023	0.044

Note: JC = job crafting; SD = self-determination; RA = role ambiguity; SE = sustainable employability, S.E. = standard error, CI = confidence interval, *** = *p*-value < 0.001, ns = non-significant. Source: Authors' compilation.

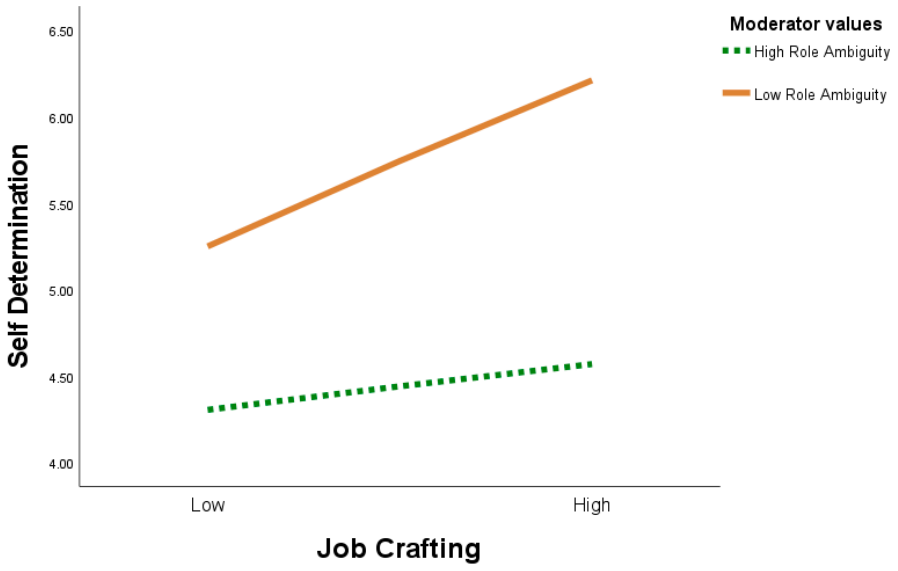


Figure 2. Interaction of job crafting with role ambiguity on self-determination. Source: Authors' compilation.

The moderating role of role ambiguity on the relationship between job crafting and sustainable employability was examined in Model 2 (Table 5). Job crafting was positively related to sustainable employability (β = 0.295, t = 12.910, 95% CI [0.254, 0.377]), and the interaction between job crafting and role ambiguity was significant (β = 0.062, t = 5.071, 95% CI [0.094, 0.187]), indicating a moderation effect. Simple slope analyses showed that the positive association between job crafting and sustainable employability was more pronounced for employees experiencing low role ambiguity (β = 0.219, t = 13.442, 95% CI [0.303, 0.407]), whereas the relationship, although still positive, was significantly weaker under conditions of high role ambiguity (β = 0.450, t = 8.278, 95% CI [0.167, 0.271]) (Figure 3). Together, these findings suggest that high role ambiguity constrains the extent to which job crafting translates into sustainable employability, providing support for Hypothesis 6.

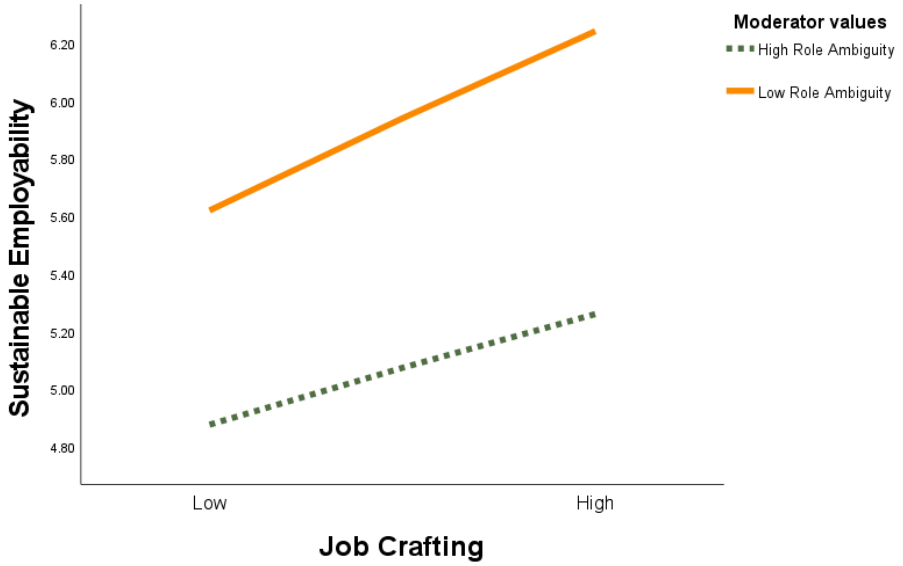


Figure 3. Interaction of job crafting with role ambiguity on sustainable employability. Source: Authors' compilation.

5. Discussion

This study advances understanding of sustainable employability by demonstrating how proactive job redesign behaviors operate as a motivationally grounded, sustainability-oriented mechanism within contemporary work contexts. Drawing on self-determination theory, the findings suggest that job crafting supports sustainable employability not merely by altering task structures, but by enabling employees to sustain adaptive motivation, learning orientation, and perceived career resilience over time. This interpretation aligns with sustainability-oriented perspectives that emphasize employability as a dynamic, psychologically sustained capacity rather than a static or purely skill-based outcome [1,2]. From this standpoint, job crafting functions as a micro-level behavioral strategy through which employees actively maintain alignment between evolving job demands and personal developmental needs.

The results further highlight self-determination as a central motivational mechanism linking job crafting to sustainable employability. Consistent with self-determination theory, job crafting appears to foster employability by satisfying basic psychological needs for autonomy, competence, and relatedness, thereby sustaining intrinsic motivation and proactive engagement across time [20,21]. Importantly, this finding suggests that employability sustainability is not achieved through episodic performance improvements, but through continuous motivational self-regulation that enables individuals to remain adaptive in the face of long-term career uncertainty. Rather than serving as a short-term motivational boost,

self-determination operates as a psychologically stabilizing force that supports continuous learning, adaptive sense-making, and long-term career engagement. In this way, the findings extend prior job crafting research by clarifying how proactive job redesign translates into employability sustainability—through motivational self-regulation rather than solely through resource accumulation or performance enhancement.

Importantly, the study also underscores the contingent nature of these processes by demonstrating the constraining role of role ambiguity. Grounded in role theory, the findings suggest that job crafting is most effective when role expectations are sufficiently clear to legitimize proactive behavior and guide adaptive action [24,26]. While prior research has suggested that uncertainty may sometimes activate proactive coping behaviors, the present results indicate that excessive role ambiguity undermines the motivational benefits of job crafting by increasing cognitive load, reducing perceived autonomy, and weakening behavioral direction. In highly ambiguous role contexts, employees may struggle to translate proactive job redesign into sustained motivation and employability perceptions. Thus, role clarity emerges as a critical contextual condition that enables job crafting to function as a sustainability-enhancing behavior, reinforcing the need to integrate motivational and role-based perspectives when examining employability in dynamic work environments.

Beyond individual-level motivational dynamics, the findings also contribute to sustainability scholarship by situating job crafting within broader organizational sustainability architectures. In particular, the results resonate with emerging research on Green Human Resource Management (Green HRM), which emphasizes the role of HR systems in fostering long-term organizational sustainability through environmentally and socially responsible workforce practices [96]. While Green HRM primarily operates at the organizational level by shaping policies, values, and institutional signals, job crafting represents a complementary micro-level mechanism through which employees enact sustainability principles in their daily work.

From this perspective, sustainable employability emerges as a relational outcome shaped by the alignment between individual proactive job redesign and organizational sustainability-oriented HR systems. When Green HRM practices provide autonomy support, role clarity, and developmental opportunities, job crafting is more likely to translate into sustained self-determination and employability. This micro–macro integration is particularly salient in emerging market contexts such as Türkiye, where formal sustainability systems may be unevenly institutionalized and employee agency plays a critical role in sustaining long-term employability. By explicitly linking individual motivation to organizational sustainability frameworks, this study deepens the theoretical contribution of job crafting research to the sustainability domain and addresses calls for more integrated, multi-level explanations of sustainable work outcomes.

6. Conclusions

6.1. Theoretical Contributions

This study makes several important theoretical contributions to the literature on job crafting, sustainable employability, and workplace sustainability. First, it advances job crafting research by moving beyond its dominant treatment within the Job Demands–Resources (JD–R) framework and repositioning job crafting as a motivationally grounded, sustainability-oriented behavior. While prior studies have largely conceptualized job crafting as a strategy for balancing job demands and resources [8,16,33], the present study integrates self-determination theory and role theory to explain how job crafting sustains employability over time. By doing so, job crafting is reframed not merely as a coping or optimization mechanism, but as a proactive means through which employees continuously align work with psychological needs, motivation, and long-term adaptability.

Second, this study contributes to the sustainable employability literature by clarifying the motivational mechanism through which job crafting exerts its influence. Although emerging research has documented a positive association between job crafting and sustainable employability [8,16], the psychological processes underlying this relationship have remained underexplored. By empirically demonstrating the mediating role of self-determination, this study positions sustainable employability as a perceived, motivationally sustained adaptive capacity characterized by temporal durability, continuous learning orientation, and resilience to evolving job demands, rather than a purely skill-based or structural outcome. This contribution extends self-determination theory by showing how autonomy-supportive behaviors enacted by employees themselves—through job crafting—translate into sustained employability perceptions via need satisfaction and autonomous motivation [10]. Importantly, this framing clarifies that sustainability in employability refers to the capacity to remain motivated and adaptive across time, rather than to immediate career mobility or short-term performance gains.

Third, the study advances contextual theorizing in job crafting research by identifying role ambiguity as a critical boundary condition that constrains the motivational and employability-related benefits of job crafting. While prior studies have suggested that uncertainty may activate proactive behaviors [17,97], the present findings demonstrate that excessive role ambiguity undermines the autonomy, clarity, and behavioral legitimacy required for job crafting to generate self-determination and sustainable employability. By integrating role theory, this study highlights that proactive behaviors are not universally beneficial but depend on the clarity of role expectations that enable employees to interpret, enact, and sustain proactive work redesign effectively [58].

Finally, this study contributes to broader sustainability scholarship by theoretically anchoring individual-level job crafting within organizational-level sustainability frameworks such as Green HRM. Consistent with emerging work on sustainable HR systems [96], job crafting is positioned as a micro-level behavioral manifestation of sustainability principles that Green HRM operationalizes at the organizational level. This integration does not treat Green HRM as an auxiliary concept, but as a complementary macro-level mechanism that creates the structural and normative conditions under which job crafting can effectively sustain employability over time. By explicitly linking employee agency, motivation, and employability sustainability with formal HR systems, this study helps bridge the micro–macro divide in sustainability research—a contribution that is particularly salient in emerging market contexts such as Türkiye, where long-term employability depends on the alignment between individual proactivity and evolving organizational sustainability practices.

6.2. Practical Implications

The findings of this study offer several actionable implications for organizations seeking to enhance sustainable employability through employee-centered and sustainability-oriented work design practices. First, the positive role of job crafting in sustaining employability suggests that organizations should move beyond rigid, top-down job design and create environments that legitimize employee-driven role adjustment. Senior managers can support this by embedding job crafting opportunities within performance development systems, such as structured reflection sessions, career conversations, or task flexibility windows that allow employees to realign their roles with evolving strengths and aspirations [98]. From a sustainability perspective, such practices help preserve human capital over time by enabling continuous skill renewal and adaptive job–person fit rather than relying solely on external hiring.

Second, the identification of self-determination as a key motivational mechanism highlights the importance of autonomy-supportive management practices. Line managers

play a critical role in shaping employees' motivational states by granting discretion in task execution, providing competence-enhancing feedback, and fostering relational support. Rather than treating motivation as an individual trait, organizations should view self-determination as a managerial outcome that can be cultivated through daily supervisory interactions [23]. Practically, this implies integrating autonomy-supportive principles into leadership development programs, performance appraisal systems, and continuous learning initiatives. Strengthening employees' autonomous motivation not only sustains employability but also reduces dependence on short-term incentives that may undermine long-term engagement.

Third, the constraining effect of role ambiguity underscores the need to balance autonomy with structural clarity. While encouraging proactive behavior, managers must ensure that role expectations, performance criteria, and decision boundaries are sufficiently clear. HR professionals can address this by designing onboarding processes, role descriptions, and goal-setting systems that provide clear reference points without over-specifying tasks [29]. This balance is particularly critical in sustainability-oriented roles, where ambiguity surrounding environmental or long-term objectives may otherwise undermine employees' capacity to craft their jobs effectively. Clear role signals allow employees to engage in job crafting with confidence while remaining aligned with organizational priorities, thereby preserving both motivation and effectiveness.

Finally, from a sustainability and HR strategy perspective, job crafting can be leveraged as a bottom-up complement to Green HRM practices. While Green HRM focuses on embedding sustainability principles into recruitment, training, performance management, and reward systems, job crafting enables employees to enact these principles in their day-to-day work behaviors. By systematically incorporating employee input into job design, skill development, and career planning processes, organizations can strengthen the alignment between individual proactivity and organizational sustainability goals. In this sense, job crafting serves as a micro-level mechanism through which Green HRM systems translate into sustained employability, resilience, and long-term organizational viability—particularly in dynamic and resource-constrained contexts.

6.3. Limitations and Directions for Future Research

Despite its contributions, this study has several limitations that delineate the scope of the findings and suggest directions for future research. Although a two-wave time-lagged design with a one-month interval was employed to reduce common method bias and introduce temporal separation among the predictor (job crafting), mediator (self-determination), and outcome (sustainable employability), the design does not permit strong causal inference. In this study, self-determination was explicitly conceptualized as a malleable motivational state rather than a stable trait, consistent with self-determination theory, which posits that autonomy, competence, and relatedness fluctuate in response to contextual work experiences such as job crafting [20,23]. From this perspective, a one-month interval is theoretically appropriate for capturing short-term motivational shifts that transmit the effects of proactive job redesign, even though longer time horizons would be required to observe structural career changes. Future research should therefore adopt longer longitudinal, experience-sampling, or experimental designs to examine the temporal stability, causal ordering, and potential reciprocal relationships among these variables more rigorously.

Second, sustainable employability was conceptualized as a perceived, motivationally sustained capacity to remain productive, adaptable, and valuable over time, rather than as an objective or immediately observable career outcome [1]. While this conceptualization aligns with contemporary employability research, the present study relied on self-reported

perceptions rather than long-term career indicators. Given that sustainable employability reflects a relatively enduring capacity, short-term designs are more suited to capturing proximal motivational and cognitive mechanisms that underpin longer-term employability trajectories [4]. Future studies could therefore integrate perceptual measures with multi-wave designs, objective career data, or supervisor evaluations to more fully assess how employability develops and stabilizes across time.

Finally, the study was conducted in Türkiye across multiple industries, which enhances internal robustness but limits cross-cultural generalizability. Job crafting practices, motivational processes, and perceptions of role ambiguity may vary across institutional, cultural, and occupational contexts. Future research is encouraged to replicate the model in different national settings, conduct cross-country comparative studies, or examine additional contextual moderators—such as leadership styles, psychological safety, or organizational support for sustainability—to further clarify how individual proactivity and organizational context jointly shape sustainable employability.

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